Project Mars Data Centre – 12 Mars Road, Lane Cove West

Environmental Impact Statement

Prepared for
Goodman Property Services (Aust.) Pty Ltd
March 2026

URBIS

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Jacqueline Parker
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Project Code	P0056472
Report Number	Formal lodgement

Acknowledgement of Country

Urbis acknowledges the Traditional Custodians of the lands we operate on.

We recognise that First Nations sovereignty was never ceded and respect First Nations peoples continuing connection to these lands, waterways and ecosystems for over 60,000 years.

We pay our respects to First Nations Elders, past and present.

The river is the symbol of the Dreaming and the journey of life. The circles and lines represent people meeting and connections across time and space. When we are working in different places, we can still be connected and work towards the same goal.

Title: Sacred River Dreaming
Artist Hayley Pigram
Darug Nation
Sydney, NSW

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Project Details			
Project name	Project Mars Data Centre – 12 Mars Road, Lane Cove West		
Application number	SSD-82052708		
Address	12 Mars Road, Lane Cove West		
Applicant details			
Applicant name	Goodman Property Services (Aust) Pty		
Applicant address	The Hayesbery, 1 – 11 Hayes Road, Rosebery, NSW		
Environment Impact Statement (EIS) prepared by			
Name	Jacqueline Parker	Vijay Prabhu	Zachary Quintal
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Declaration			
Name	Jacqueline Parker		
Qualification	Master of Urban Development and Design (UNSW), Bachelor of Planning (UNSW)		
Registration number	68278		
Organisation registered with	Planning Institute of Australia		

The undersigned declares that this EIS:

- has been prepared in accordance with Part 8 Division 5 of the *Environmental Planning and Assessment Regulation 2021*.
- contains all available information relevant to the environmental assessment of the development, activity or infrastructure to which the EIS relates.
- does not contain information that is false or mis-leading;
- addresses the Planning Secretary's environmental assessment requirements (SEARs) for the project.
- identifies and addresses the relevant statutory requirements for the project, including any relevant matters for consideration in environmental planning instruments.
- has been prepared having regard to the Department's *State Significant Development Guidelines - Preparing an Environmental Impact Statement*.
- contains a simple and easy to understand summary of the project as a whole, having regard to the economic, environmental and social impacts of the project and the principles of ecologically sustainable development.
- contains a consolidated description of the project in a single chapter of the EIS;
- contains an accurate summary of the findings of any community engagement; and
- contains an accurate summary of the detailed technical assessment of the impacts of the project as a whole.

Signature

Jacqueline Parker (REAP)
17 March 2026

Glossary and Abbreviations

Reference	Description
ACHAR	Aboriginal Cultural Heritage Assessment Report
ACM	Asbestos Containing Material
AEP	Annual Exceedance Probability
AHD	Australia Height Datum
AHIMS	Aboriginal Heritage Information Management System
AIA	Arboricultural Impact Assessment
ANEF	Australian Noise Exposure Forecast
AQIA	Air Quality Impact Assessment
ARI	Average Recurrence Interval
ASS	Acid Sulphate Soils
BAM	Biodiversity Assessment Method
BC Act	Biodiversity Conservation Act 2016
BC Reg	Biodiversity Conservation Regulation 2017
BCA	Building Code of Australia
BDAR	Biodiversity Development Assessment Report
CBD	Central Business District
CEEC	Critically Endangered Ecological Community
CDA	Concept Development Application
CEMP	Construction Environmental Management Plan
CMP	Construction Management Plan
COPC	Contaminants of Potential Concern
CPCP	Cumberland Plain Conservation Plan
CTMP	Construction Traffic Environmental Plan
CWC	Connecting with Country
DCP	Development Control Plan
DP	Deposited Plan
DPHI	New South Wales Department of Planning, Housing and Infrastructure
DSI	Detailed Site Investigation

Reference	Description
EDC	Estimated Development Cost
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act 1979
EPA Regulation	Environmental Planning and Assessment Regulation 2021
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EIS	Environmental Impact Statement
EPA	New South Wales Environment Protection Authority
EPI	Environmental Planning Instrument
ESCP	Erosion and Sediment Control Plan
ESD	Ecologically Sustainable Development
GANSW	Government Architect New South Wales
GFA	Gross Floor Area
GTP	Green Travel Plan
HIPAP	Hazardous Industry Planning Advisory Paper
HIS	Heritage Impact Statement
LAeq	A frequency-weighted Equivalent Continuous Sound Level
LEC	Land Environment Court New South Wales
LEP	Local Environmental Plan
LGA	Local Government Area
LSPS	Local Strategic Planning Statement
MNES	Matters of National Environmental Significance
MUSIC	Model for Urban Stormwater Improvement Conceptualisation
NML	Noise Management Level
NRAR	Natural Resource Access Regulator
NSW	New South Wales
NVIA	Noise and Vibration Impact Assessment
OEMP	Operational Environmental Management Plan
R&H SEPP	State Environmental Planning Policy (Resilience and Hazards) 2021
PAD	Potential Archaeological Deposit
PBP	Planning for Bushfire Protection

Reference	Description
PCT	Plant Community Type
PMF	Probable Maximum Flood
POM	Plan of Management
PSI	Preliminary Site Investigation
Planning Systems SEPP	State Environmental Planning Policy (Planning Systems) 2021
SAII	Serious and Irreversible Impacts
SARs	Commonwealth Supplementary Assessment Requirements
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SIA	Social Impact Assessment
SIDRA	Signalised & Unsignalised Intersection Design and Research Aid
Site	Lot 22 in DP732062
SSD	State Significant Development
SSDA	State Significant Development Application
T&I SEPP	State Environmental Planning Policy (Transport and Infrastructure) 2021
TfNSW	Transport for New South Wales
TIA	Traffic Impact Assessment
UXO	Unexploded Ordnance
VIA	Visual Impact Assessment
VIS	Vegetation Integrity Score
WSAP	Western Sydney Aerotropolis Plan
WSAPP	Western Sydney Aerotropolis Precinct Plan
WCM	Water Cycle Management
WMP	Waste Management Plan
WSUD	Water Sensitive Urban Design
WWTP	Wastewater Treatment Plant

Summary

Overview

This Environmental Impact Statement (**EIS**) has been prepared by Urbis Ltd (**Urbis**) on behalf of Goodman Property Services (Aust) Pty Ltd (**the applicant**). The EIS is submitted to the NSW Department of Planning, Housing and Infrastructure (**DPHI**) in support of a State Significant Development Application (**SSDA**) for the site at 12 Mars Road, Lane Cove West (**the site**).

The site is located on Dharug Country, and we acknowledge the Cammeraygal people, their elders past and present and their deep and continuing connection to their land.

The SSDA seeks consent for the following:

- Site preparation works including demolition, bulk excavation and removal of existing structures on the site, tree and vegetation clearing and bulk earthworks.
- Construction, fit-out and operation of a three-storey data centre building with a total gross floor area of approximately 21,832m^2 comprising:
  - 24 parking spaces
  - 2 loading dock spaces
  - 2 levels of technical data hall floor space
  - 3 level office and amenities building
- Provision of required utilities including:
  - diesel storage tanks
  - water tanks
  - substations on site
- Vehicle and pedestrian access provided via Mars Road
- Associated landscaping and site servicing

The intended outcomes of the project are to:

- Deliver a state-of-the-art development to meet the current market demand for data storage facilities
- Leverage the site's strategic location to support the provision of high technology industry in the Lane Cove West Industrial Area
- Deliver critically needed data storage space in a highly suitable and accessible location
- Achieve a high quality and sustainable development that responds to the site's context and positively contributes to the locality.

The proposed development is located outside of the City of Sydney and has a total power consumption of greater than 15 megawatts. The project is therefore classified as a State Significant Development (**SSD**) under Schedule 1, Clause 25(1) of the *State Environmental Planning Policy (Planning Systems) 2021*.

This report has been prepared to address the Secretary's Environmental Assessment Requirements (**SEARs**) issued for the proposed development (SSD-82052708). This EIS concludes that the proposed development is both suitable and warrants approval subject to the implementation of planned mitigation and management measures identified throughout.

An aerial photograph of the site detailing the development footprints is provided at **Figure 1**.

Figure 1 Aerial Photograph

Source: Urbis, 2025

Community and Stakeholder Engagement

Community and stakeholder engagement has been undertaken by Urbis and the Project Team in the preparation of the SSDA. This includes direct engagement and consultation with:

- Registered Aboriginal Parties;
- Adjoining landowners and occupants;
- Lane Cove Council and Councillors;
- Lane Cove West Public School
- Government, agency and utility stakeholders.

The outcomes of the community and stakeholder engagement are discussed in detail at Section 5 and Appendix E of this EIS.

Strategic Justification

The EIS has assessed the project against the requirements of the SEARs (Appendix A), and the relevant planning instruments and policies (Section 4 and Appendix C).

The key issues identified within the SEARs have been assessed in Section 6 of the EIS. This assessment has been informed by specialist reports which include recommendations and mitigation measures. The assessment of key issues includes the mitigation measures which can be adopted to ensure the project does not result in any significant impacts. These mitigation measures are included at Appendix F.

The project is a positive development outcome for the site and surrounding area for the reasons outlined in Table 1.

Table 1 Summary of Development Outcomes

Matter	Response
Design Quality / Better Placed	The project has been designed to achieve a high-quality design through high standard architectural, urban and landscape design and sustainability measures to reduce energy consumption. By adopting the objectives of the Better Placed policy, the development responds to priorities and objectives set out in the Policy which are aimed to create well-designed built environments for NSW.
The project is consistent with strategic planning policies	▪ Greater Sydney Region Plan: A Metropolis of Three Cities ▪ Our Greater Sydney 2056: North District Plan ▪ Lane Cove Local Strategic Planning Statement 2020 ▪ GANSW Better Placed 2017.
The project is consistent with State and local development controls	The development is permissible with consent and meets the relevant statutory requirements of the relevant environmental planning instruments, including; ▪ *State Environmental Planning Policy (Planning Systems) 2021* (**Planning Systems SEPP**); ▪ *State Environmental Planning Policy (Transport and Infrastructure) 2021* (**T&I SEPP**); ▪ *State Environmental Planning Policy (Resilience and Hazards) 2021* (**R&H SEPP**); ▪ *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (**B&C SEPP**); ▪ *State Environmental Planning Policy (Industry and Employment) 2021* (**I&E SEPP**); ▪ *State Environmental Planning Policy (Sustainable Buildings) 2022* **(SB SEPP)** ▪ *Lane Cove Local Environmental Plan 2009 (**LCLEP**)*
The project minimises impacts on the natural environment	The proposal aligns with the principles of ecologically sustainable development (ESD) as required by Clause 194 of the Regulations. It adheres to the precautionary principle by ensuring that no serious or irreversible environmental damage has been identified that cannot be mitigated. Therefore, the data centre development is consistent with this principle. In terms of intergenerational equity, the proposal considers the needs of future generations by providing local employment opportunities during both the construction and operation phases. It also utilises an underused industrial site and offers critical digital infrastructure to support the social and economic growth of Sydney. In relation to biological diversity and ecological integrity, the development will not significantly impact the surrounding land's biological and ecological integrity. The planting of native and endemic vegetation on the site will further support local ecology and biodiversity.
The project minimises impacts on the built environment	**Built form:** The design of the built form is well considered and responds to the operational and spatial requirements of the proposed land use (i.e. a data centre) as well as the surrounding industrial uses to the north and west of the site. A range of high-quality materials and finishes are proposed to articulate the building and provide visual interest within the site and complement the character and appearance of the Lane Cove West Industrial Area. **Visual impacts:** The visual impacts of the proposed development range from nil to low. This takes into consideration the existing visual context and baseline factors, level of visual effects and additional weighting factors and the height exceedance of the proposed development. On this basis, the visual impacts of the proposed development are considered acceptable. **Trees and landscaping:** The proposed tree removal is required to facilitate the proposed development. Significant new and additional tree planting will be provided along all site boundaries. The majority of existing trees within the north-eastern corner, along the eastern boundary and southern part of the site have been retained.

Matter	Response
	Air quality: the air quality impacts of the proposed construction and operational phases have been assessed. During construction the proposed development is considered acceptable from an air quality perspective. During operation, exceedances would only occur during an emergency scenario for NO_2. The actual likelihood of an exceedance of air quality occurring during an emergency scenario is considered highly unlikely. **Noise and vibration:** the noise and vibration impact of the proposed construction and operational phases have been assessed. During construction, exceedances of NMLs are expected at the nearest sensitive receivers. The impacts are only when noisy works are undertaken close to site boundaries. The exceedances are acceptable with the implementation of construction noise mitigation measures. Feasible and reasonable construction vibration mitigation measures will be implemented to manage vibration impacts to surrounding receivers when works are being undertaken near site boundaries. During operation, the proposed development will comply with established noise criteria.
The project has positive social impacts	Employment, training and education opportunities will arise from the construction and operation of the development. The provision of data storage capacity close to services and demand will also contribute a positive social impact. Opportunity for the local community to contribute to the decision-making process will also arise.
The project has positive economic impacts	The proposed development, with an Estimated Development Cost (EDC) of $798,311,081.34 excluding GST is expected to generate significant economic benefits. During the construction phase, it will create 200 full-time equivalent jobs. Once operational, the data centre will provide 26 ongoing jobs, including roles in engineering operations and general data centre operations. The proposed development represents a substantial financial investment for Goodman that will contribute to local employment and economic growth. The development will provide secure data storage for numerous businesses, which is critical to their future operations and wider economic growth.
The site is suitable for the project	The site is highly suitable for the proposed development for the following reasons: • The site is zoned E4 General Industrial. Data Centres are permitted with consent in the E4 zone. • The site is located within the Lane Cove West industrial area, which is an established industrial precinct. • The site comprises brownfield land, which is not currently optimised to its development potential. • The site is located in close proximity to other data centre locations, and close to businesses and services requiring data storage. This ensures minimal latency in the accessibility of data.
The project is in the public interest	The proposal is in the public interest for the following reasons: • The proposal is consistent with relevant State and local strategic plans and complies with the relevant State and local planning controls. • No adverse environmental, social or economic impacts will result from the proposal. • The proposal will provide 200 full time equivalent construction jobs and 26 jobs during the operation of the development. • The proposed data centre will address a growing requirement for data storage infrastructure within northern Sydney. The proposal will comprise a contemporary data centre facility that support local businesses and support cybersecurity.

The EIS demonstrates that the project has significant merit and should be approved subject to the implementation of the mitigation measures described in this report and supporting documents.

1. Introduction

This Environmental Impact Statement (**EIS**) has been prepared by Urbis Ltd (**Urbis**) on behalf of Goodman Property Services (Aust) Pty Ltd (**the applicant**). The EIS is submitted to the NSW Department of Planning, Housing and Infrastructure (**DPHI**) in support of a State Significant Development Application (**SSDA**) for the site at 12 Mars Road, Lane Cove West (**the site**).

The site is located on Dharug Country, and we acknowledge the Cammeraygal people, their elders past and present, and their deep and continuing connection to their land. In preparing this EIS we acknowledge the importance of a Country-centred approach to the design, guided by Aboriginal people, who know that if we care for Country, Country will care for us.

1.1. Applicant Details

The applicant details for the proposed development are listed in the Table 2.

Table 2 Applicant Details

Proponent	**Goodman Property Services (Aust) Pty Ltd**
Postal Address	The Hayesbery, 1-11 Hayes Road, Rosebery NSW 2018
ABN	40 088 981 793
Nominated Contact	Guy Smith, Head of Planning

1.2. The Project

This EIS is submitted to the Department of Planning, Housing and Infrastructure (**DPHI**) on behalf of the Goodman Property Services (Aust.) Pty Ltd (herein referred to as Goodman) and in support of an application for a proposed data centre (SSD-82052708) at 12 Mars Road, Lane Cove West.

Goodman intend to redevelop the site for an 81 MW data centre facility that responds to the market demand from hyperscale operators for data and cloud storage facilities.

Situating the data centre on this site will leverage its location and positioning within a well-established industrial area, set back from sensitive receivers, and enable Goodman to deliver critical data storage space in a highly suitable and accessible location.

The State Significant Development Application seeks consent for:

- Site preparation works including demolition, bulk excavation and removal of existing structures on the site, tree and vegetation clearing and bulk earthworks.
- Construction, fit-out and operation of a three-storey data centre building with a total gross floor area of approximately 21,832m^2 comprising:
  - 24 parking spaces
  - 2 loading dock spaces
  - 2 levels of technical data hall floor space
  - 3 level office and amenities building
- Provision of required utilities including:
  - diesel storage tanks
  - water tanks
  - substations on site
- Vehicle and pedestrian access provided via Mars Road

- Associated landscaping and site servicing

This report has been prepared to address the Secretary's Environmental Assessment Requirements (**SEARs**) and accompanying cover letter issued for the Project Mars Data Centre (SSD-82052708) dated 10 April 2025.

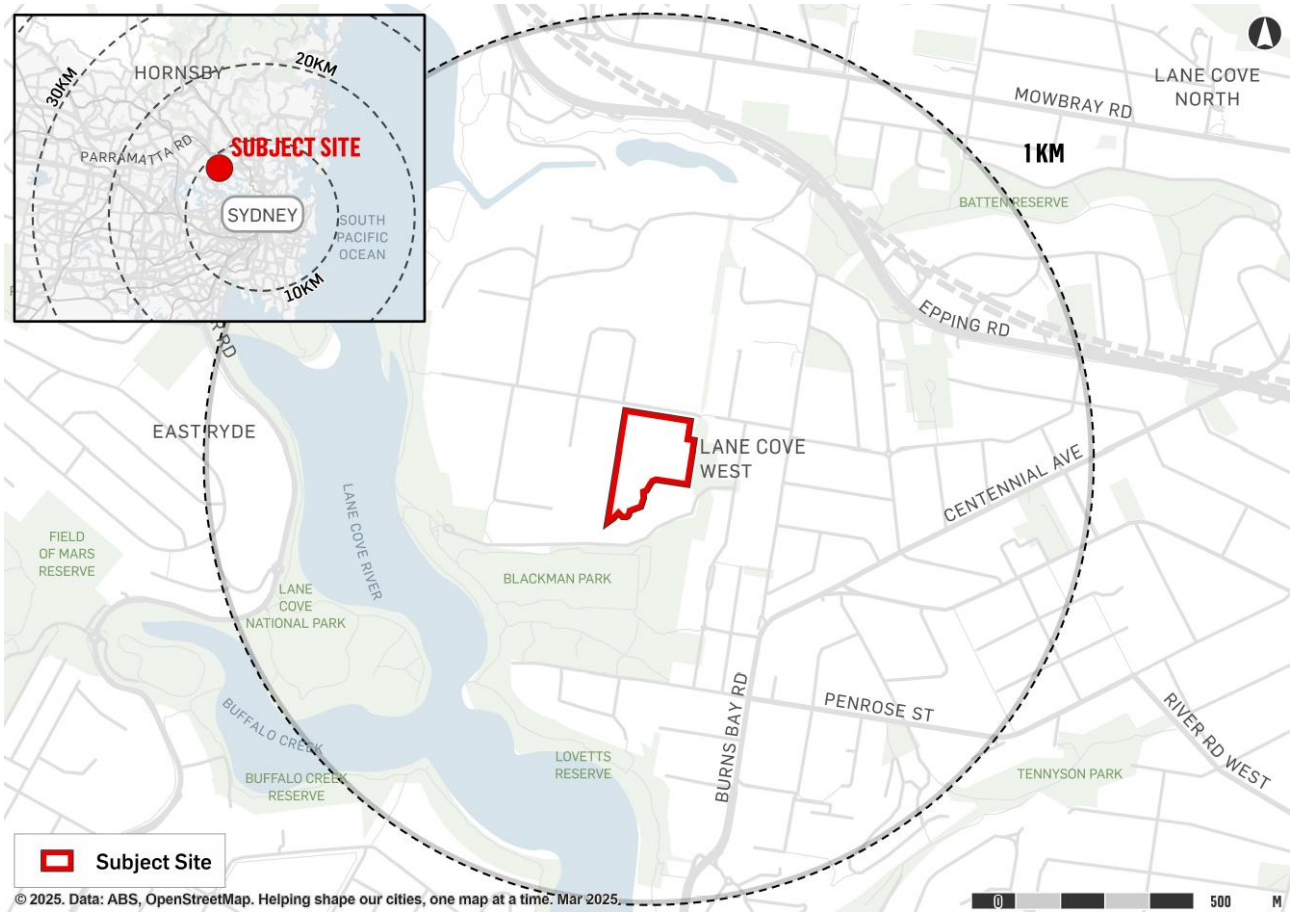
The Environmental Impact Statement (**EIS**) and the supporting technical assessment reports, including the Noise and Vibration Assessment and the Air Quality assessment, have been undertaken based on a fully operational data centre to measure the worst-case impacts to surrounding sensitive receivers.

The key objectives for the proposed development are to:

- Deliver a state-of-the-art development to meet the current market demand for data storage facilities.
- Leverage the site's strategic location to support the provision of high technology industry in the Lane Cove West Industrial Area.
- Deliver critically needed data storage space in a highly suitable and accessible location.
- Achieve a high quality and sustainable development that responds to the site's context and positively contributes to the locality.

A map of the site in its regional setting is provided as Figure 2.

Figure 2 Regional Context



Source: Urbis, 2025

1.3. Project Background

1.3.1. Project Story

The site has been in industrial use for approximately 70 years. Various development applications have been approved for use / fit-out and alterations and additions to the industrial buildings including signage installation.

The proposal comprises the comprehensive redevelopment of the site for a new data centre facility. Feedback has been sought from various agencies which has informed the proposal. A summary of discussions with key agencies prior to lodgement of the SSDA is provided in Table 3.

Table 3 Agency Engagement

Agency	Date	Comments/Feedback
Jemena	11 October 2024	On Friday 11 October 2024, a Before You Dig Australia enquiry was lodged. Correspondence was received from Jemena identifying that a high-pressure asset was located within the vicinity of the site. Further detail on Jemena engagement is provided in the Pipeline Hazard Analysis at Appendix RR.
Department of Planning, Housing and Infrastructure (DPHI)	3 April 2025	A scoping meeting was held with DPHI on the 3rd of April 2025 to discuss the proposed development including key assessment issues, engagement strategy and project timeframe. Key areas of interest involved potential impacts during construction and operation including traffic, noise and air quality. Visual amenity impacts to surrounding residential areas and Blackman Park users was also raised. Feedback on the provision of certain viewpoints was received and incorporated into the project. Further detail on DPHI engagement is located in the Engagement Report at Appendix E.
Lane Cove Council	10 April 2025	On the 10th of April 2025 a meeting was held between two representatives from Goodman and one representative from lane Cove Council. Council identified a number of relevant development standards and impact assessments required to be considered and undertaken in the EIS. Further detail on Council engagement is in the Engagement Report at Appendix E.
Environment Protection Authority (EPA)	8 April and 23 April 2025	On Tuesday, 8 April 2025 Goodman emailed the EPA to notify them that an SSD application is being prepared for a Data Centre at 12 Mars Road. On Wednesday, 23 April, the EPA provided a detailed list of matters to be addressed in the SSDA including: ▪ Environmental impacts of the project ▪ Environmental Protection Licence (EPL) Licensing and Approval Requirements ▪ Construction Works ▪ Air issues ▪ Noise and Vibration ▪ Waste, chemicals and hazardous materials and radiation ▪ Water ▪ Groundwater ▪ Soils ▪ Contamination ▪ Climate Change.

Agency	Date	Comments/Feedback
Transport for NSW (TfNSW)	8 April and 10 April 2025	On Tuesday, 8 April 2025 Goodman emailed TfNSW to notify them that an SSD application is being prepared for a Data Centre at 12 Mars Road, Lane Cove West. On Thursday, 10 April 2025 TfNSW responded by email. The email noted that TfNSW reviewed the documentation and confirmed that there were no additional assessment requirements beyond the standard SEARs requirements.
Sydney Water	8 April 2025	On Tuesday, 8 April 2025 Goodman emailed TfNSW to notify them that an SSD application is being prepared for a Data Centre at 12 Mars Road. Goodman has ongoing fortnightly meetings with Sydney Water to discuss a planning agreement. A Section 73 application is to be submitted to Sydney Water following lodgement of the SSDA. Refer to Engagement Report at Appendix E.
Ausgrid	8 April 2025	On Tuesday, 8 April 2025 Goodman emailed Ausgrid to notify them that an SSD application is being prepared for a Data Centre at 12 Mars Road. Goodman has received comments from Ausgrid on the HV design and a draft connection agreement. Goodman has ongoing fortnightly meetings with Ausgrid to discuss design detail and connection agreement matters. Refer to Engagement Report at Appendix E.
Fire and Rescue NSW (FRNSW)	8 April and 28 April 2025	On Tuesday, 8 April 2025 Goodman emailed Fire & Rescue NSW to notify them that an SSD application is being prepared for a Data Centre at 12 Mars Road. On Monday, 28 April 2025 responded by email and informed Goodman that FRNSW engage directly with DPHI on pre-approval matters and do not provide specific feedback to proponents at this stage. If required, FRNSW will review and comment on the finalised proposal via the DPHI Major Projects Portal.
Heritage NSW	8 April 2025	On Tuesday, 8 April 2025 Goodman emailed Heritage NSW to notify them that an SSD application is being prepared for a Data Centre at 12 Mars Road, Lane Cove West. Details of the consultation that was carried out with Heritage NSW is provided in the ACHAR.
Lane Cove Council	8 September 2025	On Monday 8 September, a briefing meeting was held where Goodman presented to Lane Cove Council to provide Councillors with the opportunity to be informed with further details about the project, ask questions of the project team and provide feedback.

The technical reports and design of the development seek to comprehensively address the SEARs and respond to the Applicant's discussions with Council.

1.3.2. Restrictions and covenants

A Survey has been undertaken for the site (Appendix I), see Figure 3. This identified the following easements that apply to the site:

- (A) Lease to Ausgrid of substation premises No. 5233 together with a right of way 7 wide (B) and easement for electricity purposes 2 wide (C) (vide T133215)
- (D) Easement to drain water 3 wide (vide P814044).

Figure 3 Survey Plan – Lot 22 in DP732062

1.4. Project Team

This project has been informed by studies undertaken by an extensive consultant team. This EIS should be read in conjunction with the detailed consultant reports listed in Table 4.

Table 4 Technical Documents

Document Title	Consultant	Appendix
SEARs Assessment Table	Urbis	A
Architectural Plans	HDR	B
Statutory Compliance Table	Urbis	C
Cost Summary Report	Linesight	D
Community Engagement Tabe and Engagement Report	Urbis	E
Mitigation Measures Table	Urbis	F
Owner's Consent	N/A	G
Architectural Design Report	HDR	H

Document Title	Consultant	Appendix
Survey Plan	LPS	I
Landscape Plans	Oculus	J
Landscape Report	Oculus	K
Building Code of Australia Compliance Report	MBC Group	L
Accessibility Report	MBC Group	M
Visual Impact Assessment	Urbis	N
Transport and Accessibility Impact Assessment	Ason Group	O
ESD Report	HDR	P
NABERS Embodied Emissions Materials Form	Linesight	Q
NABERS Agreement to Rate	HDR	R
Biodiversity Development Assessment Report	SLR Consulting	S
Air Quality Impact Assessment	SLR Consulting	T
Noise and Vibration Impact Assessment	SLR Consulting	U
Ground and Water Conditions Assessment	PSM	V
Salinity Management Plan	PSM	W
Integrated Water Management Plan	BG&E Engineering	X
Civil Engineering Package	BG&E Engineering	Y
Flood Impact Risk Assessment	BG&E Engineering	Z
Preliminary Site Investigation	Senversa	AA
Detailed Site Investigation	Senversa	BB
Remedial Action Plan	Senversa	CC
Waste Management Plan	SLR Consulting	DD
Hazardous Materials Survey	RiskCon	EE
Dangerous Goods Report	RiskCon	FF
Resilience and Hazards SEPP Assessment	RiskCon	GG
Aboriginal Cultural Heritage Report (ACHAR)	Artefact	HH
Net Zero Commitment Letter	HDR	II
Social Impact Assessmenthis	Urbis	JJ
Infrastructure Requirements Report	HDR	KK
NABERS Commitment Letter	HDR	LL

Document Title	Consultant	Appendix
Arborist Report	Civica	MM
Fire Safety Concept Strategy	Core Engineering Group	NN
Clause 4.6 Variation Request	Urbis	OO
Connecting with Country Report	TIKAEQ	PP
Groundwater Monitoring Letter	PSM	QQ
Pipeline Hazard Analysis	RiskCon	RR
Geotechnical Assessment	PSM	SS
Urban Heat Island Memo	HDR	TT

2. Strategic Context

This section of the EIS describes the key features of the site and its relationship to its local context. It also discusses how the project aligns with relevant strategic planning policy. It identifies other projects that should be considered in assessing the cumulative impacts of the project and outlines the potential feasible alternatives explored by the applicant.

2.1. Key Features of Site and Locality

The site is located at 12 Mars Road, Lane Cove West within the Lane Cove local government area (**LGA**). The site is legally described as Lot 22 in Deposited Plan 732062 and is owned by Goodman. It is bound by Mars Road to the north, Blackman Park to the south and an industrial site to the west. East of the site is a bushland reserve. Industrial development characterises development further to the north and west, whilst residential and recreational land, along with bushland, is located further to the east and south.

The site is located in the Lane Cove West Industrial Area which is a key economic and employment precinct in the Lane Cove LGA. The Lane Cove West Industrial Area contains a range of land uses including Cochlear, Storage King, Lane Cove Gymnastics Club, Novis Healthcare and an Airtrunk Data Centre.

The location of the site is illustrated in Figure 4. The key features of the site are described in Table 5. Photographs of the current site condition are provided in Figure 5.

Figure 4 Local Context Map

Source: Urbis, 2025

Table 5 Site and Locality Description

Characteristic	Description
Key Site Features	
Country	Darug Country
Address	12 Mars Road, Lane Cove West
Legal Description (Title Particulars)	Lot 22 in DP732062
Zoning	E4 General Industrial
Number of existing lots	1
Existing Use / Structures	Four warehouse buildings including hardstand, car parking and landscaping.
Land Configuration	The site has a primary frontage to Mars Road of approx. 205 metres and a depth of approx. 160 metres. The site slopes significantly from north-west to the south-east of the site.
Adjacent land uses North	The site is bound by Mars Road to the north. A series of industrial buildings are located on the opposite side of Mars Road
Adjacent land uses East	There is a significant landscape setback that separates the site from low-density residential development. Further east of the site are low-density residential dwellings.
Adjacent land uses South	There is a significant landscape buffer to the south of the site. Beyond the site is the Lane Cove Council Depot providing storage for Council vehicles. Further south is the Blackman Park Grounds.
Adjacent land uses West	To the west of the site is the Lane Cove West Industrial Area.
Regional Context	The site is located in the Lane Cove West Industrial Area. A range of industrial uses are located to the north and west of the site. It is within close proximity of Epping Road and the M2 Motorway. This provides access to the Sydney CBD and northern Sydney.
Infrastructure and Services	There is an existing ground substation within the site boundary. There are also a series of Ausgrid assets along Mars Road which include cables that enter the site boundary to serve the substation. Existing Telstra and NBN assets are also located on the site and are accessed via pits on Mars Road. The site is currently serviced by existing 225mm sewer mains at the south and west site boundaries. An existing concrete-encased 1500mm sewer main also runs underneath a portion of the site to the east and is a key constraint to development.
Site Access	Vehicular access to the site is available via Mars Road.
Flooding/Overland Flow	The site is not located within a floodplain and is not flood affected due to its location and elevation.
Vegetation	A total of 222 trees is located on the site. The borders of the site, particularly to the south and east, are heavily vegetated.
Heritage	The site is not a listed heritage item and is not located within a heritage conservation area. There are no heritage items or heritage conservation areas in the immediate proximity of the site. The nearest heritage items include: ▪ Lane Cove House (local heritage item) – located approximately 400m to the south west of the site across Blackman Park and south of Penrose Street

Characteristic	Description
	▪ The Oaks (local heritage item) at 1 Wood Street– located approximately400m to the south east of the site on the corner of Wood and Penrose Streets ▪ Field of Mars Cemetery and Field of Mars Wildlife Reserve (local heritage items) – located approximately 1.73km west of the site ▪ Boobajool Reserve (open space) (local heritage item) – approximately 1.07km north west of the site ▪ Sugarloaf Point (open space) (local heritage item) – approximately 775m west of the site ▪ Land at Princes Street / High Street – approximately 1.3km to the south of the site ▪ St Ignatus College, headland (local heritage item) – approximately 1.6km to the south of the site ▪ 334 Burns Bay Road (state heritage item) – located approximately 1.22km to the south of the site.
Aboriginal Archaeology	The site is not identified on the Aboriginal Heritage Information Management System (AHIMS). Notwithstanding, an Aboriginal Cultural Heritage Assessment Report has been prepared to support this SSDA (**Appendix FF**). A Potential Archaeological Deposit (PAD) area has been identified by Artefact on a portion of the site to the south due to the undisturbed nature of the land.
Bushfire	Land to the south of the site (on the southern side of Lloyd Rees Drive) is identified as Vegetation Buffer and Vegetation Category 2 land. At its closest point, the site is approximately 120m from this land. Vegetation Buffer and Vegetation Category 2 land is also located approximately 250m to the west of the site. The site and the land immediately adjoining it is not identified as Category 1, 2 or 3 bushfire prone land and does not reside within the associated vegetation buffer area.
Riparian Land	The site does not comprise Riparian Land. However, an area of designated Riparian Land is located immediately east of the site.
Acid Sulfate Soils	The site is not located within an area identified as containing Acid Sulfate Soils. However, land immediately south of the site is designated as Class 5 Acid Sulfate Soils. An area containing Class 2 Acid Sulfate Soils is also located to the south of the site.
Contamination	A Preliminary Site Investigation (PSI) has been undertaken for the site. The historical environmental site investigation carried out as part of the PSI identified the potential for contamination on the site due to 2 large underground storage tanks (USTs), several smaller flammable liquid storage depots and asbestos material on the site. A Detailed Site Investigation (DSI) has been undertaken for the site. The DSI found concentrations of the contaminants of potential concern (CoPC) in soil were below the adopted human health guidelines, with the exception of asbestos AF/FA in soil at one location. However, bonded asbestos was reported to be present in fill across the site. Groundwater was considered to have been reasonably characterised in this assessment and was not considered to be contaminated. Some heavy metals were analysed in groundwater at what were considered to be background concentrations. A Remedial Action Plan (RAP) has been prepared for the site. It concludes that with the implementation of the mitigation measures identified in Section 6.10 that the site can be made suitable for the intended commercial/industrial use and that the risks to the environment can be appropriately protected during remediation works.
Sensitive Receivers	• Blackman Park to the south of the site. • The closest residential properties are located 50m to the east of the site. • Lane Cove West Public School is located approximately 160m to the north east of the site.

Figure 5 Site Locality and Photographs

Picture 1 Site viewed from Mars Road

Source: Google Maps, 2025

Picture 2 Site viewed from Mars Road

Source: Goodman, 2025

Picture 3 Rear building on the site viewed from the north

Source: Goodman, 2025

Picture 4 View of the eastern half of the site from the car park

Source: Goodman, 2025

2.2. Other development in the area

The site is located in the Lane Cove West Industrial Area, which is characterised by a variety of industrial buildings including warehouse and distribution centres, and other similar uses.

Approved and likely future major projects which may be relevant in the cumulative impact assessment of the proposal are summarised in Table 6. The potential cumulative impacts of the projects are addressed in Section 6 of the EIS in accordance with the DPHI *Assessing Cumulative Impacts* guidelines.

Table 6 Nearby Projects / Development

Site	DA Reference No.	Development Description	Project Stage	Decision Date
Road 1 Data Centre – 1-5 Khartoum Road, Macquarie Park	SSD-80814238	Construction and 24/7 operation of a data centre with power capacity of 34.3 megawatts and maximum building height of 72.8m (10 storeys)	Under assessment	TBC
1 Sirius Road and 1 Apollo Place, Lane Cove West	SSD-67407231	Demolition of existing buildings and construction and operation of a 45-megawatt data centre	Approved	9 October 2025
1 Sirius Road, Lane Cove West	SSD-9741	Construction and 24-hour operation of a Data Centre, comprising: ▪ a four-storey industrial building for use as a data storage facility ▪ ancillary office space across two levels ▪ supporting infrastructure and services. The application has been modified 3 times.	Approved	MOD-3 - 13 June 2024.
6-8 Julius Avenue, North Ryde	SSD-80018208	Construction and 24/7 operation of a data centre with a power consumption of up to 170 megawatts, comprising a six-storey building, office space, diesel storage, back-up generators, car parking and a sub-transmission switching station, and a new road.	Response to Submissions	TBC

2.3. Agreements with Other Parties

There are no planning agreements associated with the proposed development.

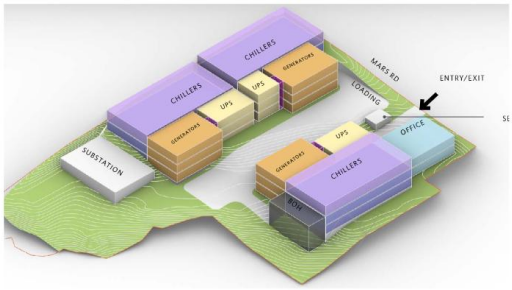
2.4. Feasible Alternatives

Clause 192(1)(c) of the *Environmental Planning and Assessment Regulation 2021* (**the Regulation**) requires an analysis of any feasible alternatives to the proposed development, including the consequences of not carrying out the development.

Goodman identified 5 project alternatives which were considered in respect to the proposed data centre. Each of these options is listed and discussed in the following table.

Table 7 Project Alternatives

Option	Discussion
Option 1 Do Nothing	A 'do-nothing' approach was considered; however, it was identified as a non-viable option as it would require the retention and continued operation of the buildings on the site that no longer meet the requirements of the market. The existing warehouse configuration comprises smaller tenancies which are older stock and are no longer meeting tenant requirements. Ongoing use of the site for the current purpose is not a viable operational decision and redevelopment of the site is required.
Option 2 - Alternative Location	Other locations were investigated by Goodman as possible sites for data centre development, noting that the sites considered are within Goodman's existing portfolio. A number of other Goodman-owned sites on the north shore either have approval or live applications for data centre facilities or are not zoned for data centre purposes. Further, some sites were also not suitable as

Option	Discussion
	they are not able to be easily and adequately serviced by the critical utility infrastructure including power and water.
Option 3 – Alternative Design	A range of design options were explored as part of the design process as outlined in the Architectural Design Report (**Appendix H**) prepared by HDR. In summary, these options were dismissed as they would not facilitate the delivery of the operational requirements of the data centre and would result in an unacceptable design outcome. The alternative design options considered include: <u>Option A</u> ▪ Centralised access is provided for both the loading dock and parking area. ▪ The substation is located at the southern end of the site. ▪ An office block is located along Mars Road and is connected to one of the data hall blocks. <u>Option B</u> ▪ Built form involves three attached data hall blocks. ▪ The substation is located at Mars Road. ▪ The office block is located at the southern part of the site. Option A  Option B 
Option 4 – The proposal	The proposed development will address a demand for data storage in the Sydney basin. There is a growing requirement for local data storage as technology increasingly transitions to cloud storage. The site is centrally located within Greater Sydney and is easily accessible to the CBD and other major and regional centres. The delivery of the proposed data centre will provide Australian companies and organisations with the opportunity to store their data locally and thereby minimise cybersecurity risks. Increased provisioning for local data infrastructure will provide faster, more secure connections for organisations. The proposed development will provide a new secure location for the storage of data in a central and easily accessible setting, allow for increased speed of digital access for clients, and provide an additional location for the backup and redundance of data stored elsewhere across NSW. The design and siting of the proposed development was resolved through considered and comprehensive analysis of the site opportunities and specific context. The building massing has been focussed on the centre of the site and near the western boundary away from more sensitive receivers. A variation to the maximum building height control is proposed to satisfy the operational requirements of the data centre and fully optimise the development potential of the site. The proposed height variations will enable generous landscaped setbacks to be provided to the south, east and north of the site, which will incorporate a range of vegetation and planting. The greatest height variations are proposed within the centre of the site to minimise visual and overshadowing impacts on adjoining land. High quality landscaping will be provided within the site, including along the Mars Road frontage, in the south and along the eastern boundary. The proposed landscaping will screen and soften the appearance of the proposed development and positively contribute to the character of the surrounding streetscape as well as the wider area around the Lane Cove River to the south. No

Option	Discussion
	building works are proposed within an area identified as a Potential Archaeological Deposit in the south of the site. The proposal was identified as being the most suitable option to achieve the project objectives for the following reasons: ▪ It is strategically located in the Lane Cove West Industrial Area, and within the lower north shore of Sydney close to business centres, medical and educational facilities with a high demand for data storage with low latency connections. ▪ The proposal is compatible with the character of the surrounding area including the adjoining industrial uses. ▪ The proposal comprises the most functional design for the site that will facilitate the efficient operation of the data centre and provides a sensitive response to E2 Environmental Conservation zoned land and residential uses to the east and south. ▪ It is anticipated that the proposal will result in minimal impacts to the environment through the implementation of suitable mitigation measures as detailed elsewhere within this report ▪ The proposal will fully realise the development potential of the site and maximises efficiencies associated with its proximity to existing transport infrastructure. ▪ The proposal will utilise a range of materials and finishes that will provide visual interest to the street but will be recessive in appearance when viewed from the south and east. ▪ Overall, the proposed development achieves the operational requirements of future data centre tenants whilst presenting a high quality design outcome that provides a significantly improved outcome as compared to the other options.

2.5. Strategic Planning Alignment

The proposed development is aligned with the State, district and local strategic plans and policies applying to the site as outlined in Table 8.

Table 8 Strategic Planning Consistency

Plan	Detail
Greater Sydney Region Plan – A Metropolis of Three Cities	The *Greater Sydney Region Plan* (**Region Plan**) provides the overarching strategic plan for growth and change in Sydney. It is a 20-year plan with a 40-year vision that seeks to transform Greater Sydney into a metropolis of three cities - the Western Parkland City, Central River City and Eastern Harbour City. It identifies key challenges facing Sydney including increasing the population to eight million by 2056, 817,000 new jobs and a requirement of 725,000 new homes by 2036. The Region Plan includes objectives and strategies for infrastructure and collaboration, liveability, productivity and sustainability. The following matters are relevant to the proposed development: **Objective 22: Investment and business activity in centres** The site is located within the Lane Cove West Industrial Area. The proposal will provide a significant influx of investment within the industrial park and provide integral technology infrastructure that supports the industrial and business activity within the region. Since the Covid-19 pandemic the demand for data centres has accelerated as businesses and employees embrace remote working and therefore require their data to be stored in a cloud environment. **Objective 23: Industrial and urban services land is planned, retained and managed** The Lane Cove West Industrial Area plays a key role in supplying both industrial and urban services land supply. The strategically located site allows for the long-term projected demands for business data storage facilities. Its location within a well-established industrial area means that sensitive receivers and non-compatible land uses are located at a distance and are adequately separated or screened from the site.
Our Greater Sydney 2056: North District Plan	The *North District Plan* (**District Plan**) is a 20-year plan to manage growth in the context of economic, social and environmental matters to implement the objectives of the Greater Sydney Region Plan. The intent of the District Plan is to inform local strategic planning statements and

Plan	Detail
	local environmental plans, guiding the planning and support for growth and change across the district. The District Plan contains strategic directions, planning priorities and actions that seek to implement the objectives and strategies within the Region Plan at the district-level. The Structure Plan identifies the key centres, economic and employment locations, land release and urban renewal areas and existing and future transport infrastructure to deliver growth aspirations. Planning Priority 11 of the plan is “retaining and managing industrial and urban services land”. This priority highlights the importance of safe-guarding industrial lands in the north as there is a limited supply. The priority also provides space for emerging future industries. The establishment of a new high-technology development in the Lane Cove West Industrial Area seeks to satisfy this priority on the site and safeguard the industrial use of the site through the introduction of a fast-growing and high-demand industry.
Local Strategic Planning Statement	The Lane Cove Local Strategic Planning Statement was introduced in March 2020 and outlines the 20 year planning vision for the LGA. It identifies a series of planning priorities **Planning Priority 7** in the Statement is to “facilitate location of a diverse range of retail, commercial and industrial businesses in Lane Cove”. Lane Cove West Industrial Area is one of two key industrial areas in the Lane Cove LGA. The protection of these employment lands is identified as a priority for Council, so as to prevent these lands from rezoning to other uses. The redevelopment of the site for the purpose of a Data Centre is in line with this planning priority as it introduces a high-technology industrial use into the precinct that upholds the objectives of the industrial zoning and furthers a diversity of industrial uses. It also ensures that the industrial area continues to foster employment opportunities.
Better Placed	In August 2017, the Government Architect for NSW (**GANSW**) released *Better Placed* which seeks to establish priorities and objectives that shape design to create well-designed built environments. It presents a collection of priorities and objectives that aspire to shape design that addresses key challenges and directions and creates good design outcomes for NSW. The proposed development is consistent with the Better Placed objectives as follows: • Objectives 1 – **Better Fit** – The proposal has been designed to fit with, and enhance, the overall quality of the Lane Cove West Industrial Area (E4) in which it is located. – In developing the proposal, the design team investigated in detail the distinctive character of the site and local context. These investigations included both natural and built features, social, economic and environmental conditions. – The proposed design responds intelligently and sensitively to these factors and makes a positive contribution to the streetscape, neighbourhood and neighbouring sites, in scale and height. – The overall bulk and scale of the proposal has been broken down to create a finer grained architectural response across three separate buildings that address and activates the primary street frontage and minimises impacts such as overshadowing. – The inclusion of green site edges around the site will contribute to the quality and amenity of the immediate context and public domain, including the interface with the adjacent bushland. • Objective 2 – **Better Performance** – The proposal aligns closely with the Better Placed policy’s “Better Performance” objective, emphasizing sustainability, adaptability, and durability. By carefully and holistically integrating these principles, the facility balances long-term viability and durability with lowered environmental impact. – Sustainable features like efficient energy systems and resource management reduce operational costs and carbon footprint. – Floor plates have been designed to be adaptable, with a regular and large span structural grid allowing the potential for future floorplate reconfiguration and adaption. – The proposal has been designed to be highly durable and resilient through the selection of long lasting and easily maintained building materials (both in ground and above ground), and through the specification of appropriate plant and equipment.

Plan	Detail
	– The civil and site works have been designed to achieve a high degree of environmental resiliency with a focus on flooding and storm water mitigation as well as minimising impact on site. • Objective 3 – **Better for Community** – The proposal provides an essential social and community infrastructure asset that facilitates (digitally) the core ideas of social and community connection and inclusivity. – The proposal will create employment opportunities. – Through the careful and deliberate location of the office building at the front, facing Mars Road, the proposal will help to activate and uplift the quality of the adjoining street. – The proposed landscape treatments along Mars Road will likewise enhance the streetscape and public domain, and soften the overall scale of the development • Objective 4 – **Better for People** – The proposal has been designed with a clear focus on comfort and safety, both operationally and within the workplace. – Site access (both vehicular and pedestrian) is clear and direct, with intentional separation between the movement of people and goods / services. – The office elements have been designed to provide high quality working accommodation. This includes excellent access to daylight and outlook, access to outside (via uppermost level external terrace), and clear internal wayfinding and movement. EOT facilities have been provided and will contribute to the quality of the occupant and user experience. The building entrance is easily accessible. – The office location will also contribute to the passive surveillance of Mars Road, which will assist with broader community safety and security. – Within the data halls and supporting facilities, circulation and access is direct and of generous width, designed with efficiency, visibility and safety as core priorities. • Objective 5 – **Better Working** – All aspects of the proposal have been designed to be highly functional, efficient and fit for purpose. These principles are embedded at both the site level (movement, access, servicing) through to the planning of internal spaces (both office areas and data halls) and then also to the design of building services and ESD initiatives. – Whilst the design of the facility has been strongly informed by these core considerations of functional and efficient design, these drivers have been carefully balanced against the other six better placed principles. This ensures that the proposal can contribute to its place and local community in ways beyond that of a typical data centre 'box' that has been engineered for functionality alone. • Objective 6 – **Better Value** – The proposal for a significant and high quality data centre with joined commercial space will provide clear employment and economic benefit, both during the construction of the facility and over its operational lifetime. – Value will also be realised through the overall quality of the proposal - through the manner in which the proposal engages and activates the public realm and contributes architecturally to its immediate and local context. • Objective 7 – **Better Look and Feel** – The office building façade to Mars Road is deeply articulated, visually engaging and environmentally performative – The proposal adopts a fine grain architectural language that distinctly expresses the three individual building components. This approach to massing reduces the perceived scale of the development and introduces a porosity and modulation to the overall development when observed from the bounding streets and public domain. – The overall volume of the development has been set well back from primary frontages (over and above the requirements of the DCP), with new landscape zones introduced to soften and enhance the quality of the adjoining streetscape and interface with neighbouring bushland. – Material selections and detailing are of high quality, to promote the high-tech precinct. – The office building facade deeply articulated primary frontage that is environmentally performative as well as visually engaging By adopting the objectives of the Better Placed policy, the development responds to the key challenges and directions for NSW.

2.6. Justification Summary

The project is considered to be aligned with the overall strategic context for these reasons:

- The project has considered the key site characteristics through a detailed analysis of the relevant constraints. The industrial nature of the surrounding area as well as the site's access to infrastructure has also been considered and deemed suitable for the purpose of the proposed development.
- The project has considered the wider locality and the cumulative impacts of other projects in accordance with DPHI's Cumulative Impact Assessment Guidelines for State Significant Projects.
- The project has considered a series of feasible alternatives and how these would meet the objectives of the development, this includes the consequences of not carrying out the development. The analysis has found that the other alternatives are not appropriate and that the proposed development comprises the optimal development outcome for the site.
- The project is aligned with the relevant State and local strategic planning policies as it will deliver critical data centre infrastructure that will support the future growth of greater Sydney as well as support the retention of industrial lands.

3. Project Description

This section of the EIS summarises the key numeric components of the proposed development and describes the site preparation, construction and operational phases in further detail.

This SSDA seeks approval for a data centre development with ancillary offices and supporting infrastructure, parking and landscaping, which is consistent with the development described in the SEARs request.

3.1. Project Overview

The key components of the proposed development are summarised in Section 6. A copy of the architectural concept drawings is provided as Appendix B.

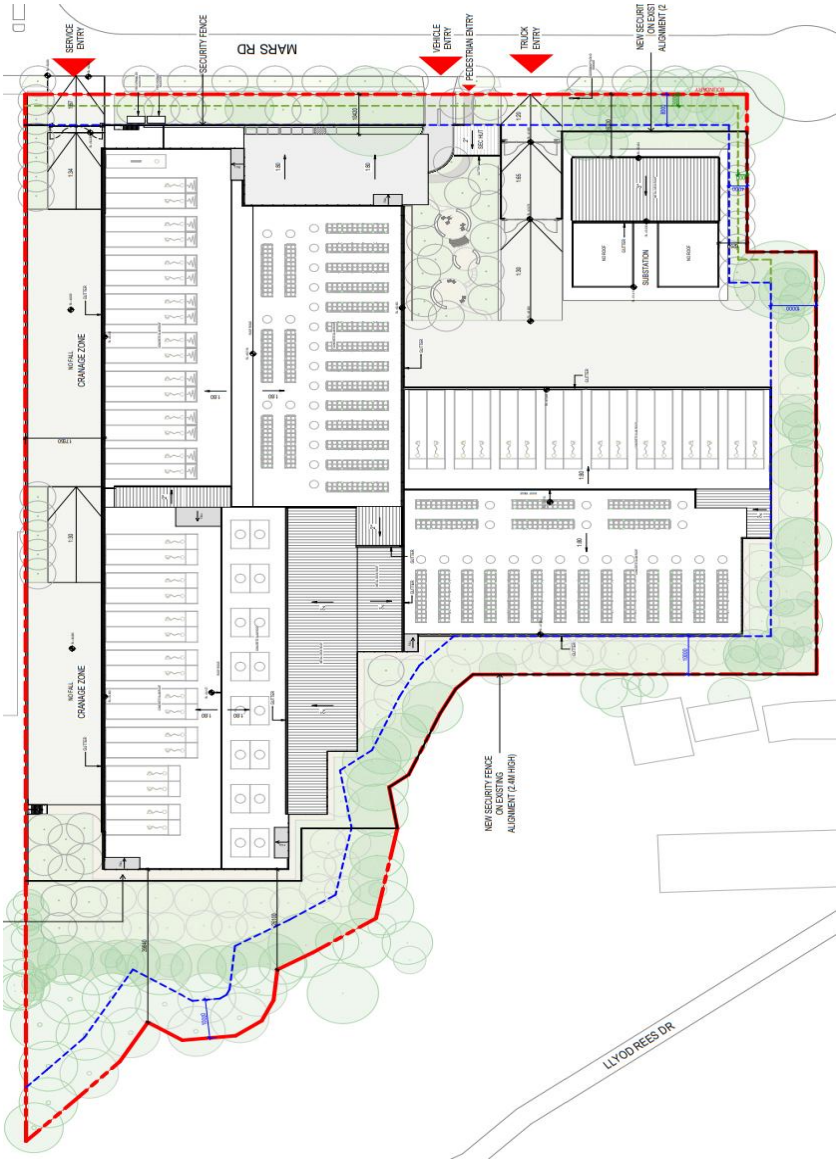
Table 9 Project Summary

Project Element	Summary
Project Summary	This SSDA seeks approval for development comprising: ▪ Site preparation works including demolition, bulk excavation and removal of existing structures on the site, tree and vegetation clearing and bulk earthworks. ▪ Construction, fit-out and operation of a three-storey data centre building with a total gross floor area of approximately 21,832m^2 comprising: o 24 parking spaces (including one accessible space) o 2 loading dock spaces o 2 levels of technical data hall floor space o 3 level office and amenities building ▪ Provision of required utilities including: o diesel storage tanks o water tanks o substations on site ▪ Vehicle and pedestrian access provided via Mars Road ▪ Associated landscaping and site servicing ▪ 24 hours a day, 7 days a week operation The core components of the data centre will comprise computing and processing infrastructure; network infrastructure (e.g. switches, routers and cables) and support infrastructure (including backup generators, cooling systems and emergency power sources).
Site/Project Area	Site area: 33,559m^2
Proposed uses	Data Centre (including ancillary offices).
Earthworks/Cut and Fill	▪ Cut: 67,410m^3 ▪ Fill: 19,150m^3
Remediation	A remedial Action Plan (RAP) has been prepared for the site, and it comprised the following key components: ▪ In-situ containment of contaminated soils ▪ Use of suitable site soils or imported media in open landscaping areas ▪ Passive management under a long-term environmental management plan.
Landscaping	Landscaping will be provided around the northern, eastern and southern boundaries of the site.
Tree removal	90 trees are proposed to be removed in order to facilitate the development and create the most efficient and functional site layout. 132 trees are proposed to be retained, and 104 replacement trees are proposed.

Project Element	Summary
Gross Floor Area (GFA)	21,832m^2
Floor Space Ratio (FSR)	0.65:1
Maximum height	28.3m
Setbacks	The building is setback: ▪ Northern boundary: 8m ▪ Southern boundary: 10m to 39.8m ▪ Eastern boundary: 6.3m to 10m ▪ Western boundary: 17.6m
Vehicular Access	▪ Light vehicles will enter and exit the site via a dedicated driveway from Mars Road on the eastern side of the site. Vehicles will then turn right and go underneath the office building and through a vehicle security trap, to the staff car parking area. ▪ Trucks will enter the site via one of two dedicated driveways from Mars Road – one central to the site for operational vehicles and one on the western boundary for site servicing.
Pedestrian Access	Pedestrian access to the site will be provided from Mars Road. A security gate will be located at the site entrance to ensure that access to the site is only available for authorised personnel.
Parking	24 at-grade parking spaces including 1 accessible car parking space are proposed.
Bicycle Parking	12 bicycle parking spaces
Landscaping	▪ Deep soil: 8,391m^2 (25% of the site) ▪ Tree canopy cover: 9,290m^2 (24.7% of the site)
Estimated cost of development	$798,311,081.34 excluding GST
Jobs	▪ Construction – 200 (full time equivalent) ▪ Operation – 26

An extract of the ultimate proposed site plan is included in **Figure 6**. The proposed site layout is described in further detail in **Section 3**.

Figure 6 Site Layout



Source: HDR, 2025

3.1.1. Estimated Development Cost

The Estimated Development Cost (EDC) of the proposed development has been calculated by Linesight in accordance with the Environmental Planning and Assessment Regulation 2021 (EP&A) and is estimated to be $798,311,081.34 excluding GST. An Estimated Development Cost prepared by Linesight is provided at Appendix D.

The EDC report includes an analysis of the estimated full-time equivalent jobs that are expected to be created by the proposed development. This analysis has been based on the direct employment impact and has not considered external contributory influences. It anticipates that a total of 200 full time equivalent jobs will be provided during the construction phase.

An estimate of operational employment numbers has been made based on the operative requirements of the proposed data centre. The EDC Report anticipates that the development will create 26 operational jobs. This has been calculated as follows:

- Data centre engineering operations:
- Data centre operations:
- Total data centre engineering and operations staff.

3.2. Connecting with Country

The proposal seeks to provide a sensitive response to 'Country' that embeds indigenous cultural knowledge, values and principles meaningfully into the proposed development. The site is located within the traditional lands of the Cammeraygal people.

Discussions with Indigenous Knowledge Holders connected to the local area as well as a Walk on Country and Connecting with Country workshop were undertaken to understand the cultural values, historical relationships, and living knowledge associated with the nearby Lane Cove River (Turrumburra) and surrounding landscapes.

The proposed development is based on the following key designing with country principles:

- Connection – Turrumburra has long been a place of sustenance and gathering for the Cammeraygal people. Stone fish traps, carefully constructed along the river, channelled seasonal mullet migrations guided by ecological markers such as the bloom of the golden wattle. Middens of shell, charcoal and bone remain as evidence of millennia of cultural practice, knowledge-sharing and stewardship of Country.

  The proposed data centre draws a modern parallel: gathering, storing, and directing flows of information, attuned to contemporary patterns of connection and exchange. Like the fish traps, it is a purposeful structure that responds to its environment, integrating sustainability and cultural awareness as fundamental principles of its design.

- Water and movement – Drawing inspiration from the ripples of the Lane Cove River, the office façade captures the layered movement of water across its surface. The flow of data is echoed in the building's form, where textured wave elements and glazed panels weave together in a rhythm of light and shadow. The wave forms feature a rippled, tactile finish, while the glazed areas reflect the sky, much like a still pond on a calm day. This design approach softens and breaks down the overall massing, introducing a more human-scaled, responsive element to the building's street presence.

  The office building's playful form and composition, with the waves rippling across the front and the clearly stratified approach to each level has been designed and crafted to reflect its use and its prominent location anchoring the north west corner of the site.

  The same concept is utilised on the data halls, where the concrete panels are broken down into slimmer panels at key elevational points, to mimic wind-driven ripples.

- Biophilic response – Responding to the existing dense tree canopy to the south and east of the site, the new built form is setback significantly, compared to the existing site conditions, allowing space for the regeneration of endemic bushland.

  At the street frontage, the office building lifts lightly off the ground and carves away to honour the presence of the mature lemon scented gum tree. Behind the canopy, the façade opens up, drawing the tree's light, movement and shadow into the heart of the interior, weaving a stronger connection between nature and the workplace.

  The building features extensive glazing to the north for daylight, amenity and outlook. The depth of the facade is driven by performative requirements in addition to aesthetic ones and has been carefully sized to optimise daylight and solar heat load, and to modulate outlook.

- Materiality – The built form draws from the natural palette of the surrounding bushland. The light grey bark of the gum trees, the silvery-green tones of endemic foliage, and the warm, flecked browns of the Sydney Golden Wattle provide a strong foundation for the material selection.

  The office façade is deeply articulated with expressed horizontal and vertical shading elements, creating a visually engaging and playful surface that offsets the calm, functional expression of the data halls behind. The primary material proposed for the office is a textured, gumleaf-coloured, powdercoated aluminium with concealed fixings — a durable, low-maintenance system that responds to the environmental conditions of the site.

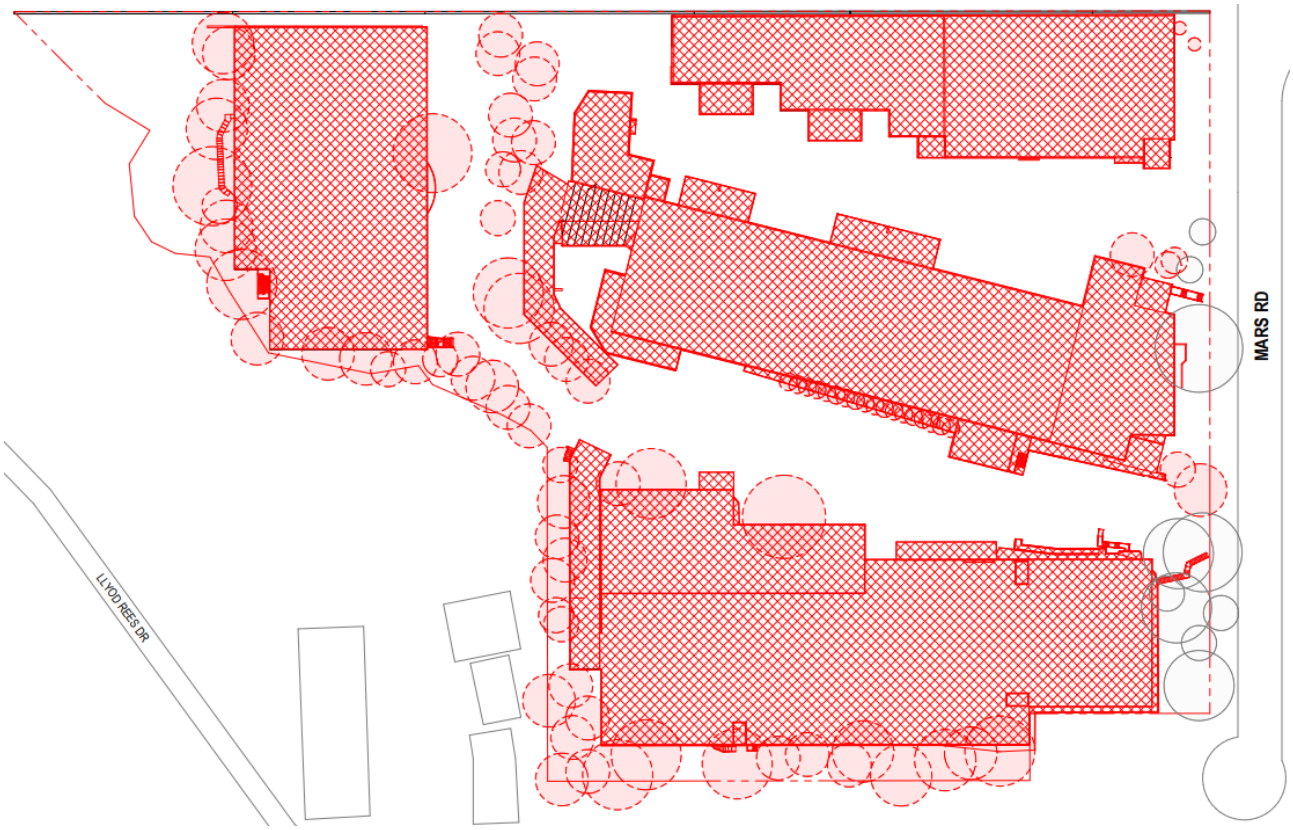
  In contrast, the data halls are deliberately composed as simple, recessive forms, allowing the office building to capture the eye while the surrounding tree canopy becomes a living screen across much of the development.

3.3. Site Preparation Activities

3.3.1. Demolition

Demolition of the existing buildings and all hardstand structures on site will be undertaken to the extent of the detailed Architectural Plans provided at Appendix B and as shown in Figure 7.

Figure 7 Demolition Plan



Source: HDR, 2025

3.3.2. Tree Removal

90 trees will be removed to facilitate the proposed development. All trees to be removed are either located within the footprint of the proposed data centre or within major root encroachment areas.

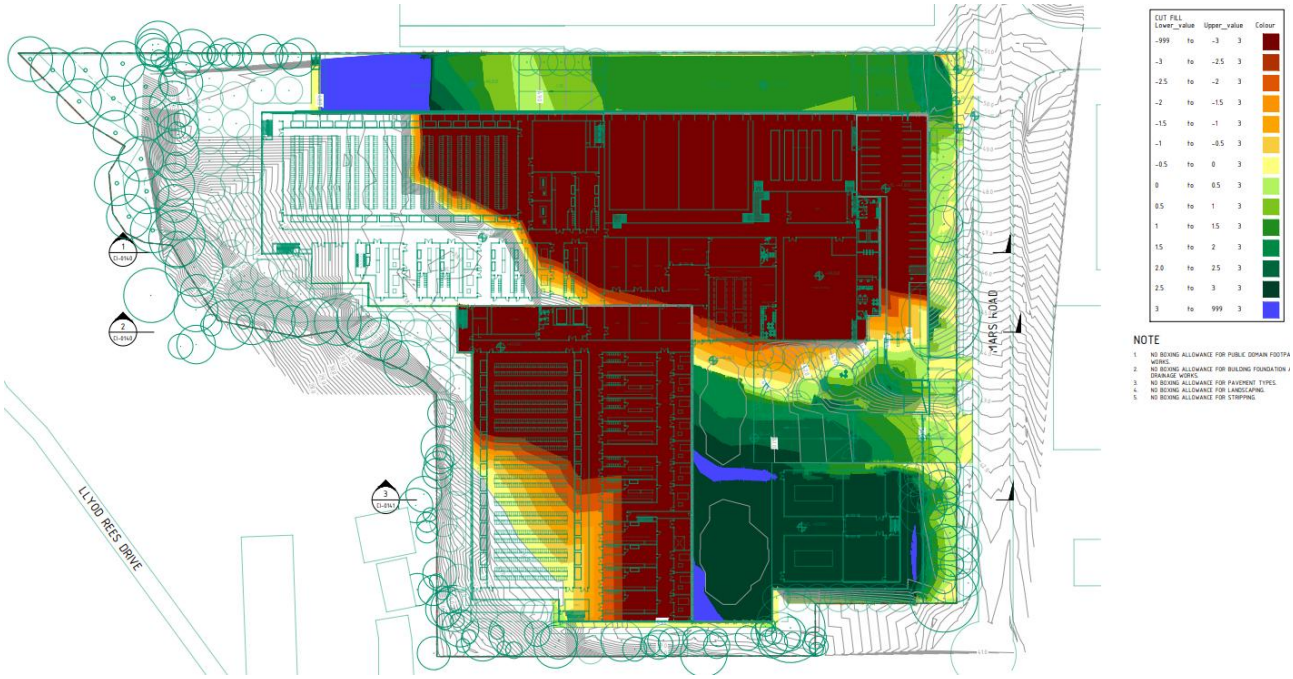
A total of 132 existing trees will be retained. Tree protection measures will be implemented during the construction of the proposed development. 104 replacement trees will be provided.

3.3.3. Earthworks

Bulk earthworks are proposed to establish the building pads and suitable site levels for the development given the sloping topography of the site. A total of 19,150m^3 of fill is proposed.

Excavation ('cut') will occur in through the middle part of the site to the eastern boundary. A total of 67,410m^3 cut is proposed. Cut will be generally to a depth of 3m. This results in a total balance of -48,266m^2 and cut requiring to be exported from site. Figure 8 comprises an extract of the proposed cut and fill plan contained within the Civil Engineering Drawings at Appendix Y.

Figure 8 Cut and Fill Plan



Source: BG&E, 2025

3.4. Building Design

3.4.1. Built Form and Massing

The proposal is broken down into the following key components:

Data Centre

The three data hall buildings rise to a maximum height of 28.3 metres, accommodating five strategically segmented halls across several levels. This vertical arrangement enhances spatial efficiency, provides a logical flow of operations, and supports ease of access, maintenance, and future scalability.

The T-shaped configuration allows for a staged delivery approach while breaking down the overall scale of the building. The design responds sensitively to the site's natural topography, with the massing placed where the land falls away, effectively reducing the visual impact along Mars Road. Cut and fill strategies have been carefully balanced to conceal much of the building mass while respecting existing site conditions and integrating with the retained structures

Office building

The office component actively addresses Mars Road, with the majority of the façade orientated towards the public domain. The office is elevated to align workplace levels with the surrounding ground plane, enabling end-of-trip (EOT) facilities to be efficiently located at the main entry level on the lower ground floor.

The building's elevation also makes effective use of the site's natural topography to screen car parking areas from view and to preserve the mature lemon-scented gum tree at the northern boundary.

Landscape

The proposed landscape design merges green infrastructure with urban development, focusing on extensive landscaping and deep soil areas within setbacks. Swales in the outdoor staff breakout mimic natural waterways. Indigenous species selected to enhance biodiversity, creating habitats for native fauna. The Mars Data Centre provides refuge for small fauna in its landscape, with setbacks on Mars Road frontages as well as eastern and southern boundary, with planting in the Green Buffer.

Substation

Electrical transformers and switch rooms will transmit power to the data centre in the ultimate development scenario. The layouts, height and massing of these facilities are shown indicatively on the accompanying architectural plans and will be subject to refinement following further engagement with the relevant energy agencies. A final design will be agreed with these agencies and DPHI prior to the determination of the SSDA.

The extent and height of the substations / switching rooms are shown conservatively to ensure a robust assessment of the proposal. The plans therefore demonstrate the indicative extent of the future substation and switching rooms.

3.4.2. Façade

The building's façades have been carefully designed to create a hierarchy of visibility across the site. The key elevations — including the office frontage addressing Mars Road and prominent portions of the eastern façade overlooking the parklands and neighbouring residential buildings — have been given particular design emphasis. These more visible façades extend beyond purely functional requirements, incorporating architectural articulation and material expression that respond to the broader context. Their design has been informed through consultation with the Connection with Country team at TIKAEQ, ensuring that cultural narratives and environmental sensitivities are meaningfully embedded in the built form.

The overall building composition is organised through a predominantly horizontal functional stratification. The data halls and technical spaces form the dominant massing element, establishing the primary architectural expression. Above, the rooftop plant and generator spaces are consolidated within a screened "crown," designed to discreetly conceal services from key view corridors along Mars Road, the adjacent parklands, and neighbouring properties to the east and across the valley at the south. In contrast, the office building introduces a more articulated and human-scaled frontage to Mars Road, creating a welcoming and active public interface, bringing texture, rhythm, and connection to the public realm.

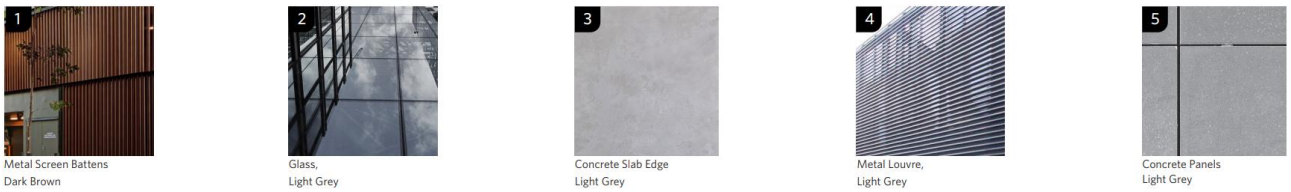
Figure 9 Façade concept view from Mars Road

Source: HDR, 2025

3.4.2.1. Materials and Finishes

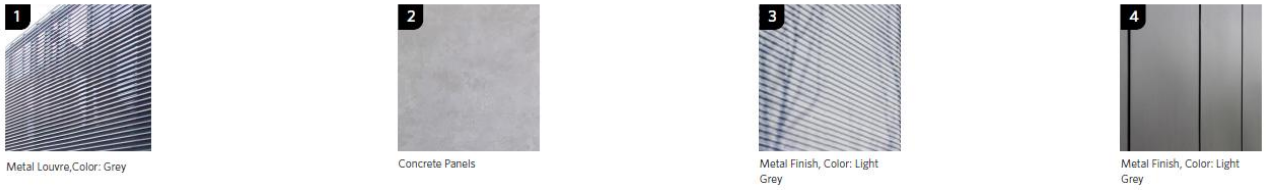
The proposed materiality for the data centre has been developed for both functionality and contemporary aesthetic. The choice of durable, yet visually sensitive materials and finishes for the data hall exteriors results in a simple yet modern design that comfortably settles within the site's topography and surrounding vegetation. The primary material for the office is a textured gum-leafed coloured powder coated aluminium that responds to the environmental conditions of the site.

Figure 10 Proposed Materials and Finishes



Picture 5 Materials and finishes visible from Mars Road

Source: HDR, 2025



Picture 6 Materials and finishes visible from east and west elevations

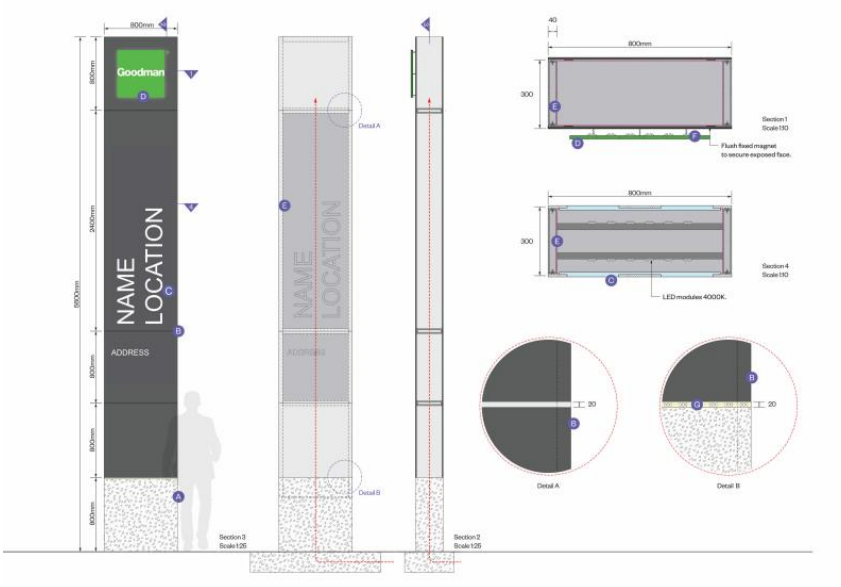
Source: HDR, 2025

3.4.3. Signage

The proposal includes building identification signage located at the site entrance. This will comprise a signage totem that is 5600mm x 800mm x 300mm. It will be made of aluminium and backlit LED lighting with the Goodman logo and building name.

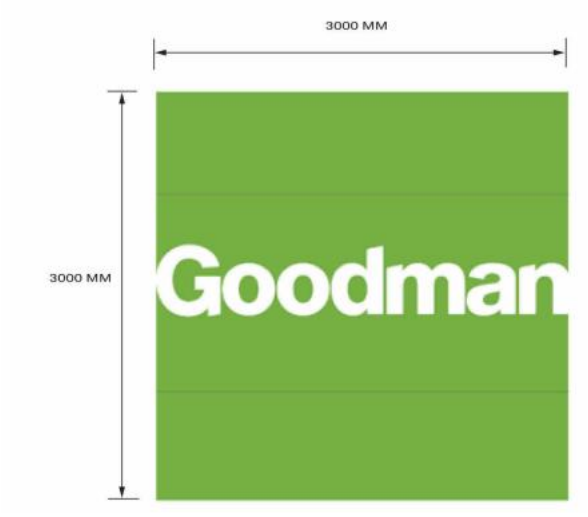
The proposal also includes incorporate business identification signage located on the eastern façade of the building. It will be 3000mm x 3000mm. It will be fabricated aluminium with a translucent vinyl film attached to it and will comprise LED lighting.

Figure 11 Proposed building identification signage – S1 Site ID



Source: HDR, 2025

Figure 12 Proposed business identification signage – S5 Lightbox



Source: HDR, 2025

3.4.4. Sustainability

A range of energy efficiency measures will be provided within the data centre to enhance its environmental performance. These include but are not limited to:

- The incorporation of renewable energy generation in-site through photovoltaic (PV) electricity generation systems and the allocation of plant space for future installation of battery storage systems.
- High efficiency air cooling system with adiabatic assist and free cooling.
- High efficiency chilled water-cooled system.
- High efficiency electrical drives to be used on the various systems.
- Envelope design that uses insulation, high performance selective glazing and external shading on appropriate elevations.
- The provision of LED lighting across the development along with motion sensor controls for occupied spaces.
- The installation of higher efficiency rated appliances and equipment.

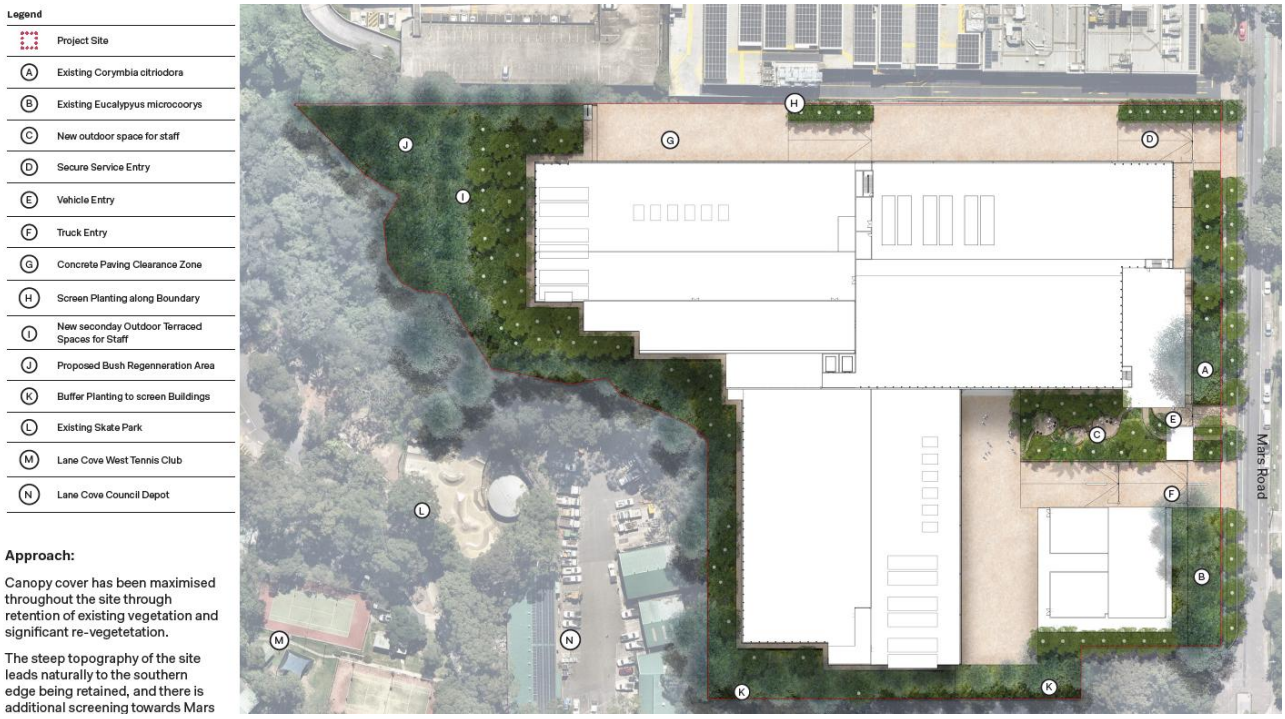
3.4.5. Landscaping

A comprehensive landscaping strategy has been prepared for the site as detailed in the Landscape Report (Appendix K) and Landscape Plans (Appendix J) prepared by Oculus. The key components of the proposed site landscaping include:

- The project achieves a deep soil area of 8,417.5m^2 (25.1% of the site) which exceeds the minimum requirement of 20% in the Lane Cove DCP. This includes a landscaped buffer strip between the driveway and side boundary which will contain a mix of screen and groundcover planting.
- A total of 132 trees is to be retained along the site's borders, with the most retained canopy located in the southern proposed Bush Regeneration Area. New planting involving 104 trees is proposed across the site, expanding on existing canopy. A total canopy cover of 9,290m^2 (24.7% of the site) is achieved in the proposed development outcome.
- Tree planting species includes Angophora costata, Eucalyptus haemastoma and Eucalyptus mannifera, which comprise local indigenous species supporting the local ecological environment in the adjacent bushland areas.
- An outdoor amenity space is provided adjacent to the proposed office that is landscaped and provides seating for staff.

- Landscaped buffers are proposed adjacent to residential uses and C2 zoned land, with additional native planting in these areas to integrate with the adjacent bushland.
- A Bushland Regeneration Area is located to the south-western corner of the site. There is no built form proposed here, and it is to be fenced off during the demolition and construction stages.

Figure 13 Landscape Masterplan



Source: Oculus, 2025

Tree Removal, Retention and Replacement

90 existing trees on the site are to be removed as identified in the Arboricultural Impact Assessment (Appendix MM). 132 trees are proposed to be retained. 104 trees are proposed to be planted to replace the trees proposed to be removed. This results in a tree replacement ratio of 1.15:1.

Fencing

Data centres require a completely secured site to facilitate their operations. A 2.4m high dark grey palisade fence is proposed around the building. This will be set back generally in alignment with the DCP setback line along Mars Road, and along the site boundaries. At the southern side of the Data Centre the fence will be located close to the building form, providing for a deep contiguous vegetated interface with the neighbouring bushland to support the local bushland ecology.

Additionally, a boom gate, vehicle trap and guard house are located at the vehicle and pedestrian access points to the site to monitor and approved movements into and out from the premises.

3.5. Stormwater Management

A stormwater drainage system will be constructed to manage stormwater from the site. The proposed system will comprise of

- a pit and pipe network to collect minor storm runoff;
- above ground on-site-detention (OSD) basin with orifice and weir control, al
- an underground OSD tank.

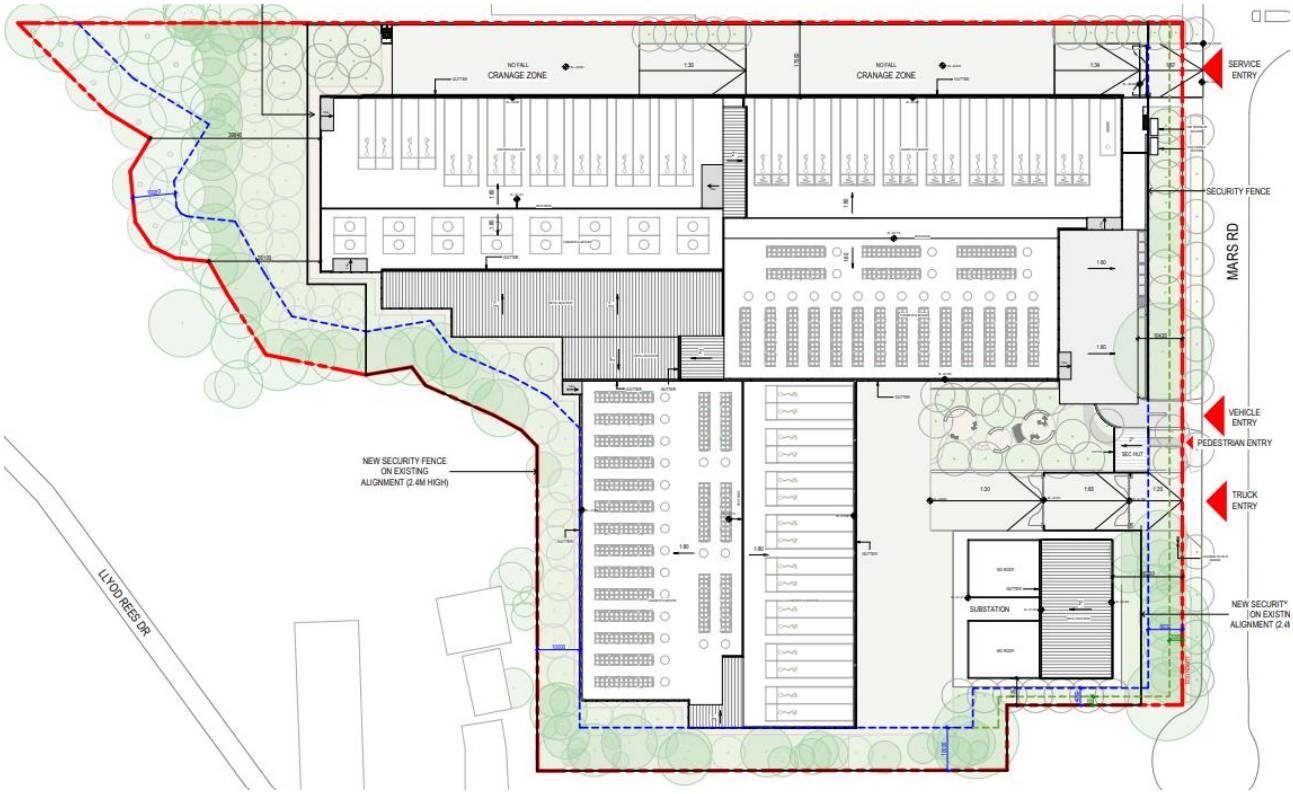
The OSD is proposed with a minimum volume of 631.8m^3 and a maximum discharge of 358.8L/s.

3.6. Transport and Parking

3.6.1. Site Access

Vehicular access to the site will be provided via separate driveways on Mars Road for staff vehicles, trucks and service vehicles. This includes two heavy vehicle access points on the eastern and western ends of the Mars Road frontage, as well as a light vehicle access point in between. The eastern access point is the main service vehicle access point, whereas the western access is to act as a service laneway only, see **Figure 14.**

Figure 14 Proposed Site Access



Source: HDR, 2025

Vehicular access to the site will be secure, with boom gates at each entrance and a gate house at the primary eastern entrance. Vehicle traps will provide surety of secure access to the site.

The loading dock is located on the ground floor within Building A.

Pedestrian access will be provided to the site via Mars Road via an access point located adjacent to the vehicle entry/exit driveway.

3.6.2. Parking

A total of 24 parking spaces will be provided for staff and visitors, including 1 accessible parking space. The car parking will be located within an undercroft below the office building at the front of the site.

End of trip facilities including changing facilities for staff will be provided within the office building. Bicycle racks will be located adjacent to the end of trip facility.

3.7. Utilities and Services

A substation (comprising electrical transformers and a switching station) will be constructed at the north-eastern corner of the site at the Mars Road frontage.

The substation will comprise 3 internal levels and will be fully enclosed. The structure will be approximately 12-14m in height from ground level and located behind the site's palisade security fence.

3.8. Operational Details

3.8.1. Operating Hours

The proposed data centre will operate on a continuous basis 24 hours a day, seven days a week. This includes staffing within the office areas.

3.8.2. Power supply

3.8.2.1. Back-up power system

The data centre is considered to be a 'mission critical' facility and for successful operation will be required to demonstrate sufficient resilience such that it can continue operating in accordance with agreed business arrangements in the event of a power failure, crisis or catastrophic event. The design concept is "Concurrently Maintainable," which means maintenance and upgrades can be performed without disrupting operations. This is achieved by having redundant components and distribution paths.

provides an analysis of alternative commercially available approaches considered during planning for the proposed development based on operations of the data centre and local environmental features.

Table 10 Alternative considerations for back-up power system

Technology	Considerations	Conclusion
Solar panels with battery storage	▪ Low power density, therefore large operational space for solar arrays and battery storage required for the proposed data centre load requirements. ▪ Large quantity of solar arrays and battery storage required, hence not a commercially viable option. ▪ Power availability subject to weather.	Not suitable.
Wind with battery storage	▪ Low power density, therefore large operational space for wind turbines and battery storage required for the proposed data centre load requirements. ▪ Large quantity of turbines and battery storage required, hence not a commercially viable option. ▪ Power availability subject to weather.	Not suitable.
Diesel generators	▪ Commercially available. ▪ Proven technology. ▪ The volume of stored diesel fuel should be kept to a reasonable minimum and comply with requirements of Australian Standards.	Suitable for back up Not suitable for ongoing operations
Gas peaker generators	▪ Slow start to pick up critical load, inability to accept dynamic load changes easily. ▪ Technology more suitable at medium voltage network level. ▪ On-site gas storage is not viable due to spatial constraints.	Not suitable

Technology	Considerations	Conclusion
Hydrotreated vegetable oil (HVO) biofuel	▪ Shelf-life comparable to diesel and produces less greenhouse gas emissions compared to diesel. ▪ No additional space required. No special storage required. ▪ There is a current lack of largescale production and storage of HVO in Australia.	Not suitable in near term, however generator models for the proposed data centre shall be selected to be HVO compatible when commercially available in the future
Hydrogen fuel cell	▪ Clean, zero-emissions alternative to diesel. ▪ Complex implementation and not commercially available at required ratings.	Not suitable
Green Hydrogen generators	▪ Complex implementation. ▪ Limited availability of redundant grid-scale network. ▪ Concern regarding overall reliability and resilience during maintenance and failure scenarios. ▪ May be considered for later stages subject to fuel system constraints and viability.	Not suitable in near term. Viability to be re-evaluated at future stages

As indicated in Table 10, alternatives to diesel back-up power generation are not considered to be suitable for the proposed facility at this time, although green hydrogen generators may be suitable in the future as the technology becomes viable and generators shall be selected where possible to be compatible with HVO as an alternative fuel source to diesel. The proponent will continue to re-evaluate the viability of such technologies at future stages.

Proposed Back-Up Power System Description

The proposed data centre is proposed to be supplied with redundant utility feeders. Should one feeder supply become unavailable, or if there is a complete loss of utility power in the area for an extended period of time, it is then expected for on-site power generating systems to be required to support the building load.

In final configuration, the proposed back-up power system for the data centre would comprise of 49 low voltage diesel generators (44 x 2.8MW / 3.5MVA, 4 x 2.2MW / 2.75MVA and 1 x 600 KW / 750kVA generators).

This system is designed to support the data centre critical loads, life safety and admin loads. The generator quantities are designed to have redundant components, allowing for continuous operation of the data centre during maintenance or a failure of a generator. All generators are containerized and located externally on the roof level of the development. The generators will be served by a dedicated fuel system fed from approximately 8 in-ground bulk fuel storage tanks.

To prevent diesel spill, the daily fuel tank within each generator enclosure and bulk fuel tanks shall be double-walled and utilise an interstitial space that is censored to detect leaks. Additionally, fuel pipework shall be double-walled or utilising drip trays subject to further design coordination. The fuel distribution from the bulk tanks to each diesel generator will be concurrently maintainable and will have a dedicated fill point and laundering system.

Back-up Power System Maintenance Requirements

For standby generators to be ready to operate should an unexpected interruption to mains power occur, a regular maintenance and testing schedule is required. The below standby generator testing schedule in Table 11 is proposed for the final stage development of the data centre once all generators have been installed.

The generators will be subject to scheduled maintenance activity every quarter and will be tested during business hours (7:00am to 5:00pm) from Monday to Friday.

Table 11 Emergency Generator Testing Regime

Quarter	Runtime (Minutes)	Cooldown (Excluded from Runtime)	No. of Generators	Generators per test	Total minutes	Description
1	30	5	49	1	1470	Tested at 100% load
2	30	5	49	1	1470	Tested at 100% load
3	30	5	49	1	1470	Tested at 100% load
4	60	5	49	1	2940	Tested at 100% load

Based on Table 11, the generators will be tested for 7,350 minutes per year or 122.5 hours.

3.8.2.2. Cooling System

Options Analysis of Cooling Systems

The design considered several typical commercially available cooling technologies (see Figure 15) – namely air-cooled versus water-cooled central plant. These technologies were then assessed for viability based on several key factors which include space constraints, whole of-life cost considerations, availability of power and/or water as a resource, ESG considerations with reducing water usage, customer operational requirements and climate/design weather conditions.

One of the main challenges of a development within the metropolitan area is the constraint of the available building footprint and water consumption. To optimise the available roof space, a centralised water-cooled chiller system has been proposed for one of the three data halls. Air-cooled chillers with adiabatic assist are proposed for the other two data halls to minimise water consumption. In general, the water consumption of adiabatic-assisted air-cooled chillers is lower compared to water-cooled chillers, but they result in a higher PUE and require a larger footprint. Therefore, a combination of water-cooled and air-cooled chillers is proposed in this project to balance footprint usage, water consumption, and PUE.

In addition, both air-cooled and water-cooled systems benefit from free-cooling mode and are more energy efficient compared to non-evaporative (dry) cooling systems (generally lower peak and annualised PUE values). Although this design does consume a significant volume of water, conscious selection and operation of cooling towers will help to minimise the consumption of potable water.

Figure 15 Cooling Option Review

Cooling Option Review
Client: Goodman
Project: Project Mars
Address: 12 Mars Road, Lane Cove West NSW 2066
Package: Cooling Option Review

TECHNICAL EVALUATION

Evaluation Criteria	Maximum Unweighted Score	Weighting (%)	Maximum Weighted Score	Option 1 - Evaporative Closed Circuit Cooling Tower with DX CRAC Units Score	Option 1 Weighted Score	Option 2a - Evaporative Closed Circuit Cooling Tower with Water Cooled Chillers Score	Option 2a Weighted Score	Option 3 - Air Cooled Chillers with Adiabatic Assist Score	Option 3 Weighted Score	Option 4 - Evaporative Open Circuit Cooling Tower with Water Cooled Chillers Score	Option 4 Weighted Score	Option 5 - Air Cooled Chillers with Adiabatic Assist & Evaporative Open Circuit Cooling Tower with Water Cooled Chillers Score	Option 5 Weighted Score
Modularity/Scalbility	10	5	5	7	3.5	5	2.5	5	2.5	5	2.5	6	3.0
Reliability	10	10	10	4	4.0	9	9.0	8	8.0	9	9.0	9	9.0
Flexibility	10	5	5	9	4.5	7	3.5	6	3.0	7	3.5	9	4.5
Plant Space Requirements and DA impacts	10	13	13	5	6.5	3	3.9	7	9.1	8	10.4	7	9.1
Compliance with Hyper Scaler A Requirements	10	10	10	7	7.0	10	10.0	10	10.0	10	10.0	10	10.0
Compliance with Hyper Scaler B Requirements	10	2	2	10	2.0	10	2.0	10	2.0	10	2.0	10	2.0
Water Usage	10	10	10	6	6.0	6	6.0	7	7.0	4	4.0	6	6.0
Acoustics	10	10	10	6	6.0	6	6.0	5	5.0	6	6.0	5	5.0
Max IT load capacity and PUE	10	10	10	8	8.0	7	7.0	8	8.0	10	10.0	9	9.0
Non-Price Weighted Score	Out of	75	75		47.5		49.9		54.6		57.4		57.6
RANKING NON-PRICE (1=BEST)					5		4		3		2		1

Evaluation Criteria	Maximum Unweighted Score	Weighting (%)	Maximum Weighted Score	Price/Score	Weighted Score	Price/Score	Weighted Score	Price/Score	Weighted Score	Price/Score	Weighted Score	Price/Score	Weighted Score
Partial Capital Cost Per MW	10	10	10	$ 988 000	8.0	$ 946 200	8.5	$850 100	10.0	$ 903 500	9.0	$867 500	9.5
Plant Replacement Cost	10	10	10	6	6.0	7	7.0	10	10.0	8.0	8.0	9.0	9.0
Maintenance Costs	10	5	5	6	3.0	7	3.5	10	5.0	8	4.0	9	4.5
Total Price Weighted Score	Out of	25	25		17.0		19.0		25.0		21.0		23.0
RANKING PRICE (1=BEST)					5		4		1		3		2

Total Weighted Score	Maximum Unweighted Score	Weighting (%)	Maximum Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Total Technical Weighted Score		75	75		47.5		49.9		54.6		57.4		57.6
Total Price Weighted Score		25	25		17.0		19.0		25.0		21.0		23.0
Total Weighted Score	Out of	100	100		64.5		68.9		79.6		78.4		80.6
RANKING PRICE (1=BEST)					5		4		2		3		1

Proposed Data Hall Cooling System

The data hall spaces are proposed to be flooded cold aisles where cool air is distributed throughout the entire data hall space by chilled water fan wall units (FWUs) and require a path for air to flow from the hot aisle back to the cooling units, known as a return air plenum.

In final configuration, there will be a total of 8 open-loop cooling towers and 8 water cooled chillers, as well as 40 air cooled chillers designed to support the final full IT load deployed within the data centre.

The energy demand of the proposed data hall cooling system is estimated to be 20% of the facility's total energy usage. The estimated annual water to be used on-site for operation of the new data centre is approximately 510,000m^3.

3.9. Staging and Development Timing

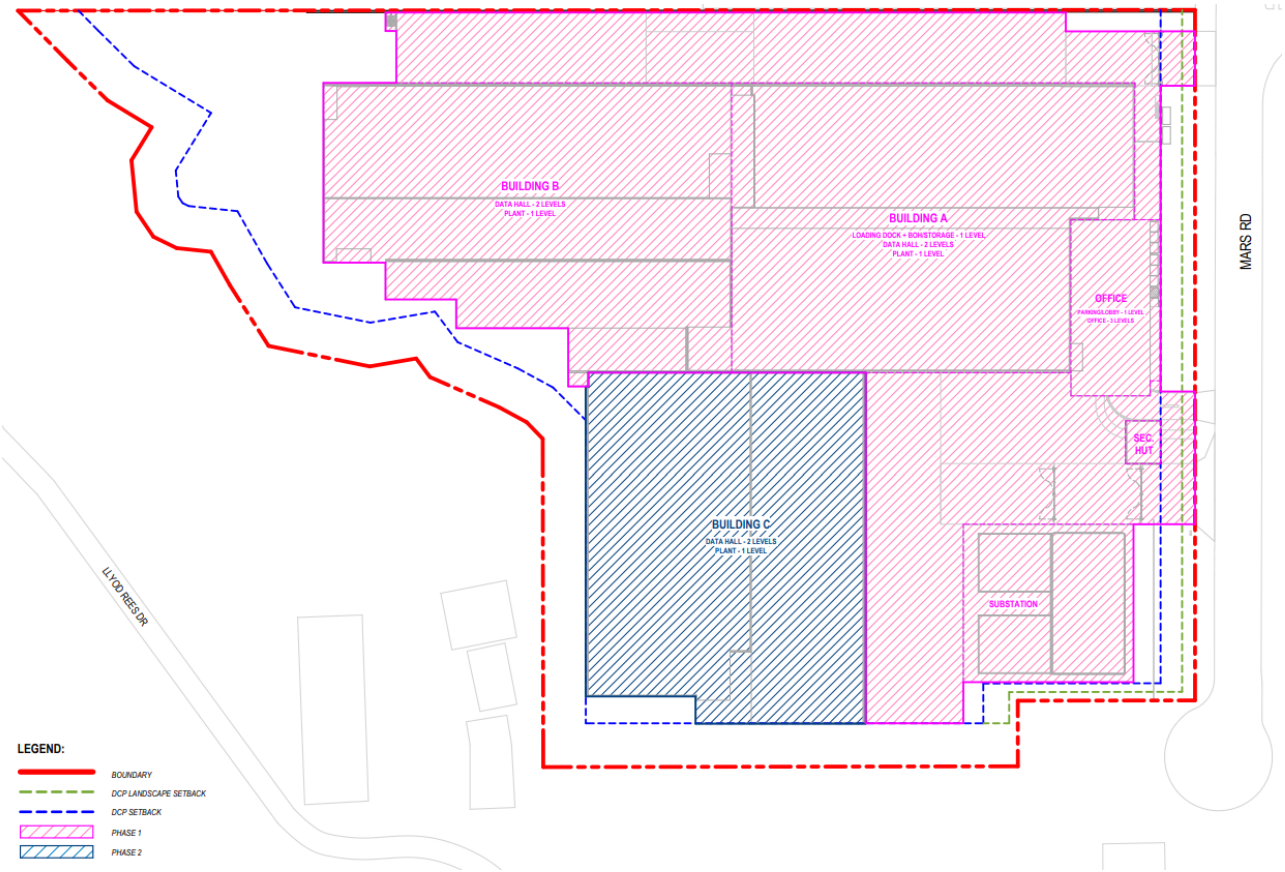
Construction of the development is proposed to be staged. The proposed development will be delivered in two coordinated stages, ensuring an orderly construction sequence that balances operational requirements with positive urban design outcomes.

Phase 1 establishes the project's public presence along Mars Road through the street facing Office Building, supported by Technical Buildings A and B which accommodate core operational functions. The substation, also positioned on Mars Road, is included in this stage and has been strategically located to meet infrastructure needs while screening the loading dock from view, thereby improving the streetscape and protecting local amenity in the interim scenario.

Phase 2 completes the development with the delivery of Building C, consolidating site capacity and reinforcing the architectural and landscape principles set in the first stage.

This staged approach provides a logical, efficient pathway for development while ensuring each phase contributes meaningfully to the public domain and the overall cohesion of the precinct.

Figure 16 Project Staging



Source: HDR, 2025

Works will be completed over 5 construction certificate (CC) stages as detailed below:

- **CC Stage 1** – Demolition and remediation
- **CC Stage 2** – Site preparation and site establishment including set up of restricted areas, hoardings and other safety measures including traffic management measures and construction controls.
- **CC Stage 3** – In-ground services installation, structural works. During this stage, connection to services, including potable water, wastewater, electricity and communications would be undertaken at agreed stages during construction. Minor power use will be required during construction.
- **CC Stage 4** – Façade construction, installation of services, fit-out. During this stage, site commissioning and testing will be undertaken. Commissioning will include testing all elements of the development including safety, quality systems and processes.
- **CC Stage 5** – Landscaping and external works.

It is anticipated that construction will commence in Q1 2026 and will involve a 24-month construction and design program.

The proponent requests that conditions of consent relating to CC requirements are tailored to refer to the relevant construction stages of the proposed works. Alternatively wording, such as "*prior to the relevant construction certificate"* may be preferred.

4. Statutory Context

This section of the report provides an overview of the key statutory requirements relevant to the site and the project, including:

- *Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (**EPBC Act**)*
- *Protection of the Environment Operations (POEO) Act 1997 & Amendment Act 2011 (**POEO Act**)*
- *Protection of the Environment Operations (Clean Air) Regulation 2022 (**POEO Clean Air Regulation**)*
- *NSW Biodiversity Act 2016* (**BC Act**)
- *Water Management Act (**WM Act**)*
- *Environmental Planning and Assessment Act 1979* (**EP&A Act)**;
- *Environmental Planning Assessment Regulation 2021* (**the Regulations**);
- *State Environmental Planning Policy (Planning Systems) 2021* (**Planning Systems SEPP**);
- *State Environmental Planning Policy (Transport and Infrastructure) 2021* (**T&I SEPP**);
- *State Environmental Planning Policy (Resilience and Hazards) 2021* (**R&H SEPP**);
- *State Environmental Planning Policy (Industry and Employment) 2021* (**I&E SEPP**);
- *State Environmental Planning Policy (Sustainable Buildings) 2022* **(SB SEPP)**
- *Lane Cove Local Environmental Plan 2009 (**LCLEP**)*
- *Lane Cove Development Control Plan 2009 (**DCP**)*

It identifies the key statutory matters which are addressed in detail within the EIS, including the power to grant consent, permissibility, other approvals, pre-conditions and mandatory considerations.

4.1. Statutory Requirements

The following sections provide a summary of the relevant statutory requirements having regard to the *State Significant Development Guidelines*. A detailed statutory compliance table for the project is provided at **Appendix C**.

4.1.1. Power to Grant Approval

The legal pathway under which the consent is sought, why this pathway applies, and the relevant consent authority is outlined in Table 12.

Table 12 Power to Grant Approval

Matter	Consideration
Declaration of SSD	In accordance with Schedule 1 of the Planning Systems SEPP, development for the purpose of a data centre outside of the City of Sydney LGA that has a total power consumption of more than the relevant amount is classified as state significant development: ***"25 Data centres*** *(1) Development that has a total power consumption of more than the relevant amount* *(1A*) Subsection (1) does not apply to development on land within the area of the City of Syndey

Matter	Consideration
	(2) In this section – ***Relevant amount*** means – *For development in relation to which the relevant environmental assessment requirements are notified under the Act on or before 31 May 2023 – 10 megawatts, or* *For any other development – 15 megawatts".* The proposal is anticipated to utilise a total estimated power supply of 81 MW and therefore exceeds the minimum threshold set out in Schedule 1 of the Planning Systems SEPP. Accordingly, the proposal comprises State Significant Development. The project was declared State Significant via issuance of the project SEARs on 10 April 2025.
Consent Authority	Under section 4.5 of the EP&A Act, the Minister for Planning is designated as the consent authority, or the Independent Planning Commission (IPC) where trigger thresholds are met.

4.1.2. Permissibility

The permissibility of proposed development is outlined in Table 13.

Table 13 Permissibility

Matter	Consideration
Land use(s)	Data Centre
Land use zone(s)	E4 General Industrial
Permissibility	The site is zoned E4 General Industry in accordance with the *LCLEP 2021*. Data Centres are permitted with consent in the E4 Zone.

4.1.3. Other Approvals

The other approvals required to carry out the project are outlined in Table 14.

Table 14 Other Approvals

Matter	Consideration
Protection of Environment Operations Act 1997 (POEO Act 1997) – Environmental Protection Licences	Schedule 1 of the Protection of Environment Operations Act 1997 (POEO Act 1997) contains a core list of activities that require a licence before they may be undertaken or carried out. Under the POEO Act 1997, 'activity' is defined as: *"an industrial, agricultural or commercial activity or an activity of any other nature whatever (including the keeping of a substance or an animal)".* Schedule 1, Part 1 of the POEO Act lists out scheduled activities for which an Environmental Protection Licence (EPL) is required for the premises at which it is carried out. Schedule 1, Part 1, Clause 9 'Chemical Storage' lists petroleum products storage as a scheduled activity if the proposal includes the "*capacity to store more than 200 tonnes (liquefied gases) or 2,000 tonnes (chemicals in any other form)".*

Matter	Consideration
	The proposal will include the storage of 1,054kL of diesel, which will be below the threshold for petroleum products storage. Therefore, an EPL is not required. Schedule 1, Part 1, Clause 17 applies to metropolitan electricity works (internal combustion engines). However, Clause 17(1A) notes that this clause does not apply to the generation of electricity by means of electricity plan that is emergency stand-by plan operating for less than 200 hours per year. The proposed back-up generators will be operated for 200 hours per annum or less. Therefore, the criteria for EPL for metropolitan electricity works is not triggered.
Protection of Environment Operations (Clean Air) Regulation 2022	Under Section 72 of the POEO (Clean Air) Regulation, "Emergency standby plant" is exempt from the air impurities standard for nitrogen dioxide and nitric oxide specified in Schedule 2, Part 2, Division 3 for the plant if— (a) the plant comprises a stationary reciprocating internal combustion engine for generating electricity, and (b) it is used for a total of not more than 200 hours per year. The proposed back-up generators will be operated for less than 200 hours per annum. Therefore, the proposal will be exempt from the air impurity standards for NO2 and NO specified in the Regulation.
National Parks and Wildlife Act 1974	The NPW Act aims to prevent the unnecessary or unwarranted destruction of relics and the active protection and conservation of relics of high cultural significance. The provisions of the Act apply to both indigenous and non-indigenous relics. Pursuant to Section 4.41 of the EP&A Act, SSD is exempt from the need for a section 90 permit for the removal of items of Aboriginal heritage. An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Artefact to assess the site's sensitivity and consider any potential impacts associated with the proposed development (Appendix V). A PAD has been identified in the south of the site as it demonstrates archaeological potential based on previous investigations in the area. However, the proposed works will be located entirely outside of the PAD area. Accordingly, the ACHAR concludes that the proposed development has no potential to impact Aboriginal objects and no further archaeological investigation is warranted. An Unexpected Finds protocol is recommended to be implemented during construction.
Biodiversity Conservation Act 2016	The BC Act protects native vegetation, species of threatened flora and fauna, endangered populations and endangered ecological communities and their habitats in NSW. Section 7.9 requires a development application for SSD to be accompanied by a Biodiversity Development Assessment Report (BDAR), unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity value. A biodiversity assessment report has been prepared by SLR and is provided at Appendix S.

4.2. Pre-Conditions to Granting Consent

Table 15 outlines the pre-conditions to exercising the power to grant approval which are relevant to the project and the section where these matters are addressed within the EIS.

Table 15 Pre-Conditions

Statutory Reference	Pre-Condition	Relevance	Section in EIS
Resilience and Hazards SEPP Section 4.6 – Contamination and remediation to be	Under the SEPP a consent authority must be satisfied that the land is suitable in its contaminated state - or will be suitable, after remediation - for the purpose for	A PSI, DSI and RAP have been prepared by Senversa. The RAP concludes that with the implementation of the measures identified in the RAP that the site	**Section 6**

Statutory Reference	Pre-Condition	Relevance	Section in EIS
considered in determining development application	which the development is proposed to be carried out.	can be made suitable for the proposed development.	
Industry and Employment SEPP Chapter 3 – Advertising and Signage	A consent authority must not grant development consent to an application to display signage unless the consent authority is satisfied that the signage is consistent with the objectives of the Chapter as set out in section 3.1(1)(a), and that the signage the subject of the application satisfies the assessment criteria specified Schedule 5.	An assessment of the proposed signage against the relevant provisions of Chapter 3 of the Industry and Employment SEPP has been prepared and is provided in Appendix C. The assessment demonstrates that the proposal is fully consistent with the objectives of Chapter 3 and the criteria included within Schedule 5 of the SEPP.	Appendix C
Sustainable Buildings SEPP Section 3.2 – development consent for non-residential development	Development consent must not be granted to non-residential development unless the consent authority is satisfied that the embodied emissions attributable to the development have been quantified.	An Embodied Emissions Form has been completed and is provided in Appendix Q.	Appendix Q
Section 3.3 – Other considerations for large commercial development	Development consent must not be granted to large commercial development unless the authority is satisfied the development is capable of achieving the standards for energy and water use specified in Schedule 3. For the purposes of subsection (2), development is capable of achieving a standard specified in Schedule 3 if there is a NABERS commitment agreement in place to achieve the standard.	The data hall building will include ancillary offices, which have a gross floor area of greater than 1,000m^2 and therefore comprises 'large commercial development' for the purposes of the Sustainable Buildings SEPP. A NABERS Agreement to Rate is provided in Appendix R.	Appendix R
Biodiversity and Conservation SEPP	**Section 2.6 – clearing that requires permit or approval** A permit cannot be granted to clear native vegetation in any non-rural area of the state that exceeds the biodiversity offsets scheme threshold.	A Biodiversity Assessment Report has been prepared and is enclosed in Appendix S. Three offset credits are required to support the proposed development.	Section 6
SEPP (Transport and Infrastructure) 2021	**Section 2.21 – Traffic generating development** Before determining a development application for development to which this section applies, the consent authority must give written notice of the application to TfNSW within 7 days after the application is made. The consent authority must take into consideration any response to the notice that is received from TfNSW within 21 days after the notice is given. The section applies to industrial development (with access to a non-classified road) if gross floor area or site area (if the site area is	The site has access to a local road. The site area of the proposed development exceeds 20,000m^2. The proposal therefore comprises 'traffic-generating' development as defined by the Transport and Infrastructure SEPP. It is acknowledged that the application will need to be referred to TfNSW prior to its determination.	Section 6

Statutory Reference	Pre-Condition	Relevance	Section in EIS
	less than the gross floor area) is 20,000m^2 or more		
Lane Cove LEP 2009	**Clause 5.21 – Flood Planning** Development consent must not be granted to development on land the consent authority considers to be within the flood planning area unless the consent authority is satisfied the development— (a) is compatible with the flood function and behaviour on the land, and (b) will not adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties, and (c) will not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood, and (d) incorporates appropriate measures to manage risk to life in the event of a flood, and (e) will not adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.	A Flood Impact Assessment has been prepared by BG&E (refer to Appendix Z) and addresses the requirements of clause 5.21 of the LEP. The report identifies that the site is not flood affected.	Section 6
	Clause 6.1A – Earthworks (2) Development consent is required for earthworks unless— (a) the work is exempt development under this Plan or another applicable environmental planning instrument, or (b) the work is ancillary to other development for which development consent has been given. (3) Before granting development consent for earthworks, the consent authority must consider the following matters— (a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality, (b) the effect of the proposed development on the likely future use or redevelopment of the land, (c) the quality of the fill or the soil to be excavated, or both, (d) the effect of the proposed development on the existing and	Civil Engineering Plans have been prepared for the proposed development. These identify the drainage plans and erosion and sediment controls that will be implemented during construction of the proposed development.	Appendix Y

Statutory Reference	Pre-Condition	Relevance	Section in EIS
	likely amenity of adjoining properties, (e) the source of any fill material and the destination of any excavated material, (f) the likelihood of disturbing relics, (g) the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.		

4.3. Mandatory Considerations

Table 16 outlines the relevant mandatory considerations to exercising the power to grant approval and the section where these matters are addressed within the EIS

Table 16 Mandatory Consideration

Statutory Reference	Mandatory Consideration	Section in EIS
Consideration under the EP&A Act and Regulations		
Section 1.3	Relevant objects of the EP&A Act	Appendix C
Section 4.15 (1)(a)(i) Relevant environmental planning instrument	All relevant EPIs are addressed in the EIS and appendices. These include:	
	Resilience and Hazards SEPP	Appendix C
	Planning Systems SEPP	Appendix C
	Industry and Employment SEPP	Appendix C
	Biodiversity and Conservation SEPP	Appendix C
	Transport and Infrastructure SEPP	Appendix C
	Sustainable Buildings SEPP	Appendix C
	LCLEP 2021	Appendix C
Section 4.15 (1)(a)(iii) Relevant development control plan	Section 2.10 of the SEPP (Planning Systems) 2021 provides that DCPs do not apply to State Significant Development. Notwithstanding, relevant provisions of Lane Cove Development Control Plan 2009 (LCDCP 2009) have been considered.	Appendix C
Section 4.15(1)(b) the likely impacts of that development,	The likely impacts of the development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	Section 6 and Section 7
Section 4.15(1)(c)	The suitability of the site for the development	Section 7
Section 4.15(1)(d)	Any submissions made in accordance with the Act or regulations	Section 7
Section 4.15(1)(2)	The Public Interest	Section 7

Statutory Reference	Mandatory Consideration	Section in EIS
Mandatory relevant considerations under EPIs		
Resilience and Hazards SEPP – clause 3.12	In determining an application to carry out development to which this Part applies, the consent authority must consider (in addition to any other matters specified in the Act or in an environmental planning instrument applying to the development)— a. current circulars or guidelines published by the Department of Planning relating to hazardous or offensive development, and b. whether any public authority should be consulted concerning any environmental and land use safety requirements with which the development should comply, and c. in the case of development for the purpose of a potentially hazardous industry—a preliminary hazard analysis prepared by or on behalf of the applicant, and d. any feasible alternatives to the carrying out of the development and the reasons for choosing the development the subject of the application (including any feasible alternatives for the location of the development and the reasons for choosing the location the subject of the application) e. any likely future use of the land surrounding the development.	Section 6 and Appendix EE
Resilience and Hazards SEPP – clause 4.6(1)	A consent authority must not consent to the carrying out of any development on land unless it has considered whether the land is contaminated. If the land is contaminated, the authority must be satisfied that the land is suitable in its contaminated state (or will be suitable after remediation) for the purpose for which the development is proposed to carried out. If the land requires remediation to be made suitable for the purposes for which the development is proposed to be carried out, the consent authority must be satisfied that the land will be remediate before it is used for the proposed purpose.	Section 6, Appendix AA, Appendix BB and Appendix CC
Transport and Infrastructure SEPP Section 2.122(4)	Before determining a development application for development to which this section applies, the consent authority must take into consideration – (i) any submission that RMS provides in response to that notice within 21 days after the notice was given (unless, before the 21 days have passed, TfNSW advises that it will not be making a submission), and (ii) the accessibility of the site concerned, including – (A) The efficiency of movement of people and freight to and from the site and the extent of multi-purpose trips, and (B) The potential to minimise the need for travel by car and to maximise movement of freight in containers or bulk freight by rail, And (iii) Any potential traffic safety, road congestion or parking implications of the development	Section 6 and Appendix O
Sustainable Buildings SEPP Section 3.2	A consent authority must consider whether the development is designed to enable the following: • The minimisation of waste from associated demolition and construction, including by the choice and reuse of building materials • A reduction in peak demand for electricity, including through the use of energy efficient technology	Section 6 and Appendix P

Statutory Reference	Mandatory Consideration	Section in EIS
	• A reduction in the reliance on artificial lighting and mechanical heating and colling through passive design • The generation and storage of renewable energy • The metering and monitoring of energy consumption • The minimisation of the consumption of potable water	
Sustainable Buildings SEPP Section 3.3	In deciding whether to grant development consent to large commercial development, the consent authority must consider whether the development minimises the use of onsite fossil fuels, as part of the goal of achieving net zero emissions in New South Wales by 2050.	Appendix P
LCLEP 2009	Objectives and land uses for E4 General Industrial Zone • Part 4 – Principal development standards • Part 5 – Miscellaneous provisions – Section 5.10 Heritage conservation and Section 5.21 Flood planning • Part 6 – Additional local provisions – Section 6.1A Earthworks	Appendix C
Considerations under other legislation		
Biodiversity and Conservation Act – section 7.14	The BC Act protects native vegetation, species of threatened flora and fauna, endangered populations and endangered ecological communities and their habitats in NSW. Section 7.9 requires a development application for SSD to be accompanied by a Biodiversity Development Assessment Report (BDAR), unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity value. A biodiversity assessment report has been prepared by SLR and is provided at Appendix S.	Section 6 and Appendix S
Development Control Plan		
Lane Cove Development Control Plan 2009	Clause 2.10 of the Planning Systems SEPP states that development control plans (whether made before or after the commencement of this Policy) do not apply to SSD. As such, there is no requirement for assessment of the proposal against the LCDCP 2009 for this SSDA. Notwithstanding this, consideration has been given to the following provisions: ▪ Part B – General Controls ▪ Part E – Industrial Controls ▪ Part J – Landscaping and Tree Preservation ▪ Part N – Signage and Advertising ▪ Part Q – Waste Management and Minimisation ▪ Part R – Traffic, Transport and Parking ▪ Part S – Environmental Sustainability	Section 6 and Appendix C
Development Contributions		
Development Contributions	The proposal will be levied in accordance with Council's Section 7.11 Development Contributions Plan. This is the applicable contributions plan that applies to the proposal.	Section 6
Housing and Productivity Contributions	The Minister may determine to include a planning condition requiring a development contribution to be paid in accordance with the Housing and Productivity contribution.	Section 6

5. Community Engagement

The following sections of the report describe the engagement activities that have been undertaken during the preparation of the EIS and the community engagement which will be carried out if the project is approved.

5.1. Engagement Carried Out

Community and stakeholder engagement has been undertaken by the Project Team in the preparation of the SSDA. This included direct engagement and consultation with:

- Surrounding landowners and tenants
- Community groups including users of the Blackman Park Sporting Ground, Lane Cove West Public School and local Bushcare user groups
- Registered Aboriginal Parties (please refer to Section 6.2)

The following actions were taken to inform, and seek feedback from, the community regarding the proposed development:

- Early noise study doorknock
- Letterbox drop of community newsletter
- Posterboards
- E-newsletter
- Invitations to project briefings
- Key stakeholder briefings
- Community swing-by session
- Enquiry Management

Consultation was also undertaken with the following stakeholders to inform the detailed assessment of key matters associated with the proposed development:

- DPHI Planning and Assessment Team, specifically the Industry Assessments team
- Lane Cove Council
- Lane Cove Councillors
- Transport for NSW
- Sydney Water
- AusGrid
- NSW EPA
- Transport for NSW
- NSW Fire and Rescue
- Heritage NSW

The engagement was consistent with the community participation objectives in the Undertaking Engagement Guidelines for State Significant Projects and complied with the community engagement requirements identified in the SEARs.

In accordance with the Regulations, the EIS will be placed on formal public exhibition once DPHI has reviewed the EIS and deemed it ‘adequate’ for this purpose. Following this exhibition period, the applicant will respond to any matters raised by notified parties.

5.2. Agency Views

Engagement with various agencies has been undertaken to inform the preparation of the SSDA and this EIS.

Department of Planning, Housing and Infrastructure

Goodman has considered the feedback provided by DPHI's Industry Assessments team throughout the preparation of the SSDA. Goodman will continue to consult and provide lodgement updates to the Industry Assessments team and offer opportunity to comment and provide feedback on plans.

While not strictly speaking applicable to the project as SSD, the development should comply with Council DCP setback controls. The project was as a result updated to ensure full compliance. Other Items of note included mitigating impact to adjacent ecological buffer zone along the south and eastern boundaries, visual impact, noise and air quality impact.

NSW EPA

Details of the proposed development and a request for feedback was issued to NSW EPA via email on 8 April 2025. On 23 April 2025, the EPA provided a detailed list of matters to be addressed within the SSDA. These related to the following:

- Environmental impacts of the project
- EPA licensing and approval requirements
- Construction works
- Air issues
- Noise and Vibration
- Waste, chemicals and hazardous materials and radiation
- Water
- Groundwater
- Soils
- Contamination
- Climate change

Each of the above matters have been addressed within the EIS and the accompanying technical appendices.

Lane Cove Mayor and Councillors

On 8 September 2025 a briefing meeting was held with Lane Cove Councillors to provide them the opportunity to be informed about the project and provide feedback. The Councillors raised the following issues:

- Tree removal
- Overshadowing on the nursery and depot
- Ownership of the site
- Location of the data centre
- Water usage
- Diesel storage
- Data redundancy
- Power
- Planning pathway

- Infrastructure

Project responses to Councillors queries are provided in Appendix E.

Lane Cove Council

On 10 April 2025, a meeting was held with a Lane Cove Council representative. Feedback received from Council related to the following issues:

- Height control and setbacks
- Noise and air quality compliance
- Visual impact assessment
- Community engagement strategy
- Documentation and compliance
- Stormwater management
- Employment opportunities.

Heritage NSW

Goodman emailed Heritage NSW on 8 April 2025 to notify them that an SSD application is being prepared for a Data Centre at 12 Mars Road, Lane Cove West. The email provided summary information about the SSD, studies to be undertaken and invited their feedback.

Details of the consultation undertaken with Heritage NSW is provided in the ACHAR at Appendix HH.

Transport for NSW (TfNSW)

On 8 April 2025, Goodman emailed TfNSW notifying them that an SSDA is being prepared for a data centre at 12 Mars Road, Lane Cove West. On 10 April 2025, TfNSW responded via email noting that they have reviewed the documentation and confirmed there are no additional assessment requirements beyond the standard SEARs requirements.

Sydney Water

On 8 April 2025, Goodman emailed Sydney Water notifying them that an SSDA is being prepared for a data centre at 12 Mars Road, Lane Cove West. No feedback has been received from Sydney Water.

Ausgrid

On 8 April 2025, Goodman emailed Ausgrid notifying them that an SSDA is being prepared for a data centre at 12 Mars Road, Lane Cove West. No feedback has been received from Ausgrid.

NSW Fire and Rescue

On 8 April 2025, Goodman emailed NSW Fire and Rescue notifying them that an SSDA is being prepared for a data centre at 12 Mars Road, Lane Cove West. 298 April 2025, NSW Fire and Rescue responded by email informing Goodman that they engage directly with DPHI on pre-approval matters and do not provide specific feedback to proponents at this stage. If required, they will review and comment on the finalised proposal via the Major Projects Portal.

5.3. Community Views

Two rounds of stakeholder and community consultation have been undertaken to understand the community's views on the proposed development. In the first round, we:

- Made a 1800 phone number and email address available to the community for questions and feedback.
- Distributed an information newsletter to 1,144 residents and to Lane Cove Public School.
- Held two community information sessions at The Canopy, Lane Cove, which was attended by 45 people.
- Emailed Lane Cove Councillors, offering a briefing meeting.

On request from Council, a further round of consultation with the community was undertaken including:

- The distribution of an information postcard to immediate neighbours, offering a briefing meeting with the project team; and to residents in the Western Ward of Lane Cove with an invitation to a community webinar. 7,324 residents in Lane Cove West received the postcard.
- We wrote to bushland care and sporting clubs inviting them to an online briefing, which was attended by 8 people.
- 20 people attended the community webinar. We openly and transparently accepted a request from an *In the Cove* reporter to attend the community webinar.
- 6 near neighbours attended the 5 focus meetings we held at Lane Cove Library.
- Urbis promoted the opportunity to participate in a social impact survey, which has been completed by 57 people.
- A meeting was held on Friday 26 September with the relieving Principal and relieving Deputy Principal of Lane Cove West Public School.

The key issues raised during community consultation included:

- Power usage
- Water usage
- Electro Magnetic Field
- Noise
- Site selection

Project responses to all the feedback received by the community are provided in Appendix E.

There was also confusion with near neighbours that the Sydney Water / Interflow project was related to the proposal for 12 Mars Road. Goodman have clarified that these two projects are not related in any way.

The Applicant will continue to engage with local community groups throughout the planning process.

5.4. Engagement to be Carried Out

The proposed future consultation responds to the community feedback during the preparation of the EIS and the community participation objectives in the *Undertaking Engagement* guide.

Goodman will continue to keep stakeholders and the community informed of the project approval process through the exhibition and determination phases by:

- Continuing to engage with the community about the project, its potential impacts, and the approval process; and
- Enabling the community to seek clarification about the project through the two-way communication channels.

Further community and stakeholder consultation will be undertaken if the project is approved.

6. Assessment of Impacts

This section describes the way in which the key issues identified in the SEARs have been assessed. It provides a comprehensive description of the specialist technical studies undertaken regarding the potential impacts of the proposed development and recommended mitigation, minimisation and management measures to avoid unacceptable impacts.

The detailed technical reports and plans prepared by specialists and appended to the EIS are individually referenced within the following sections.

Detailed Assessment	Standard Assessment
Design Quality	Water Management
Built form and Urban Design	Hazards and Risks
Visual impact	Contamination and Remediation
Traffic, Transport and Accessibility	Waste Management
Trees and Landscaping	Aboriginal Cultural Heritage
Ecologically Sustainable Development	Environmental Heritage
Biodiversity	Social Impacts
Air Quality	Infrastructure Requirements
Noise and Vibration	Bush Fire Risk
Ground and Water Conditions	BCA and Access
Flood Risk	Developer Contributions

6.1. Built Form and Urban Design

6.1.1. Existing Environment

The site currently contains four large industrial buildings; associated hardstanding and access roads and car parking. Two hundred and twenty two (222) trees are also located on the site predominately along its perimeter providing a canopy coverage equating to 25% of the site area. Vehicular access to the site from Mars Road is provided via three (3) driveways.

The existing development includes minimal side and rear setbacks. A small landscaped setback is provided at the front of the site adjacent to Mars Road.

The existing buildings and associated hardstand and access roads will be demolished as part of the preliminary early works on the site.

6.1.2. Excellent Design

In accordance with *Better Placed,* it is demonstrated that the proposal achieves excellent design as outlined below:

- Adopting sustainable strategies to minimise energy consumption.
- Ensuring seamless access to various site components, enhancing user experience and connectivity to the urban context.
- Provide activation to primary street frontages (Mars Road).

- Provide enhanced landscape zones along Mars Road and generous tree coverage towards the southern parklands and adjacent to neighbouring bushland.
- Provide a considered, appropriate and high quality architectural outcome that is respectful of its place, achieved through articulation of distinct building elements, careful material selection and considered detailing.

6.1.3. Design and Layout

The design and layout of the proposed development provides an appropriate response to the site's context including surrounding infrastructure and uses. The proposed building comprises an inverted 'T-shape', which is divided into three separate 'blocks' ('Block A', 'Block B' and 'Block C'). Blocks A and B are orientated in a north-south direction parallel to the site's western boundary. Block C is oriented in an east-west alignment. The proposed configuration concentrates the building massing away from more sensitive receivers to the east of the site; avoids long uninterrupted elevations; and supports the staged delivery of the development.

Two levels of data halls as well as mechanical plant at roof level are proposed within each block. Back-up generators (required to power the data halls in the event of disruption to the existing power supply) will be located adjacent to each block. The majority of the proposed generators within the site are located along the western boundary towards the site's interface with surrounding industrial uses. The generators for Block C will be aligned in an east-west direction. Accordingly, the majority of these generators will be setback within the site and a significant distance away from the adjoining C2 conservation land and residential uses to the east.

The siting of the proposed generators will minimise visual, noise and overshadowing impacts to the more sensitive receivers to the east of the site.

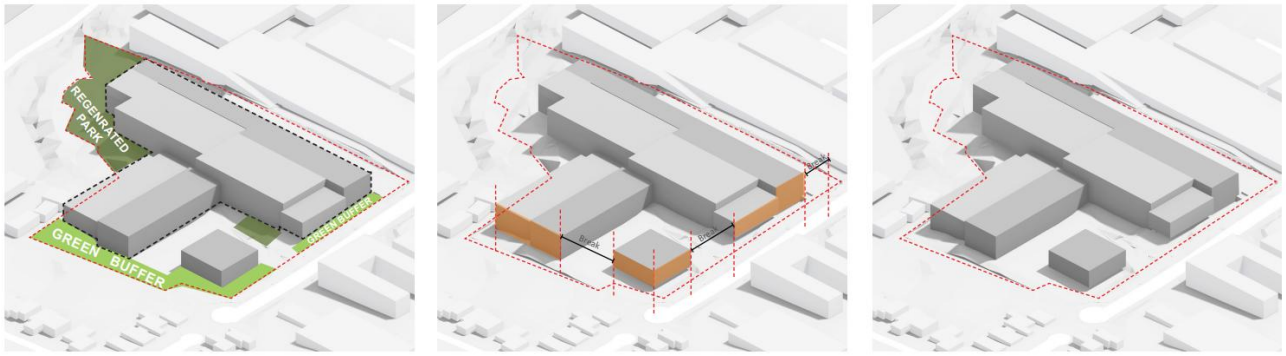
The ancillary office component and front-of-house space will be located to the front of the site facing Mars Road. The three-storey office will have an attractive, contemporary and welcoming appearance that will activate and enliven the Mars Road frontage (from which the site will be accessed and mostly regularly viewed). Locating the office and front-of-house space along the northern part of the site will also ensure that it is easily accessible to staff and visitors, and will maximise solar access within these key worker spaces.

Conversely, back-of-house and storage spaces are proposed towards the centre of the site behind the proposed built form. Locating these more functional spaces towards the middle of the site will ensure that they are screened from views from adjoining land and roads and will minimise acoustic and other associated environmental impacts.

Power to the data centre building will supplied via a three storey substation located within the north-eastern corner of the site. The siting of the substation ensures that it can be easily accessed by the energy provider without compromising site security. The substation will be screened by existing and proposed landscaping and will be well-integrated within the site's overall landscape setting to minimise its visual prominence, noting that the north-eastern part of the site contains the lowest site levels along the northern boundary.

Vehicular access to the site will be provided via three separate driveways located along the Mars Road frontage. The number of driveways along the Mars Road frontage is consistent with the existing development and will enhance the safety of the site by enabling heavy and light vehicles to be fully segregated. The driveways for heavy vehicles have been sited in the north west corner and to the west of the substation, away from the more sensitive receivers to the east of the site.

Figure 17 Development of Site Massing



Source: HDR, 2025

6.1.4. Bulk and Scale

The proposed massing strategy comprises a considered and varied approach that appropriately responds to the site's context whilst satisfying future operational requirements. A stepped approach is proposed, which responds to the change in site levels from north to south and east to west. The proposed approach will ensure that the building is well-integrated with the site's landscape setting and minimises the visual prominence of the built form and overshadowing.

The stepped massing approach is shown in the images below. Block A is three storeys in height with mechanical plant located at roof level. However, the ground floor level will be located below the existing Mars Road natural ground level. Accordingly, Block A will present as a two storey building (with mechanical plant at roof top level) when viewed from Mars Road to the north.

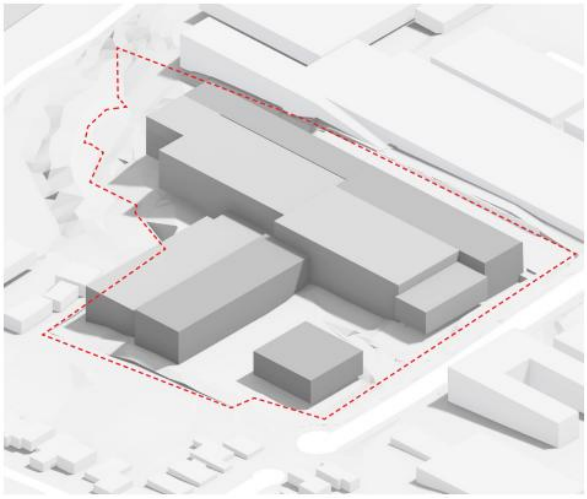
The proposed built form transitions to a two storey building in Block B (with mechanical plant on roof level) in response to the topography of the site, which slopes down towards Blackman Park and the Lane Cove River to the south.

Block C, which extends from the centre of the site towards the eastern boundary, will have a two storey form (lower ground and ground floor). A significant part of Block C will be constructed beneath the existing natural ground level to minimise visual and overshadowing impacts. Additionally, the adjoining back-up generators will be located more than 6.5 metres beneath the maximum building height control for the site. The height of the back-up generators will be lower than the adjoining Block C data hall, providing a varied massing approach.

Figure 18 Bulk and Scale of Proposed Development

Picture 7 Building Mass

Source: HDR, 2025



Picture 8 Submerging Mass

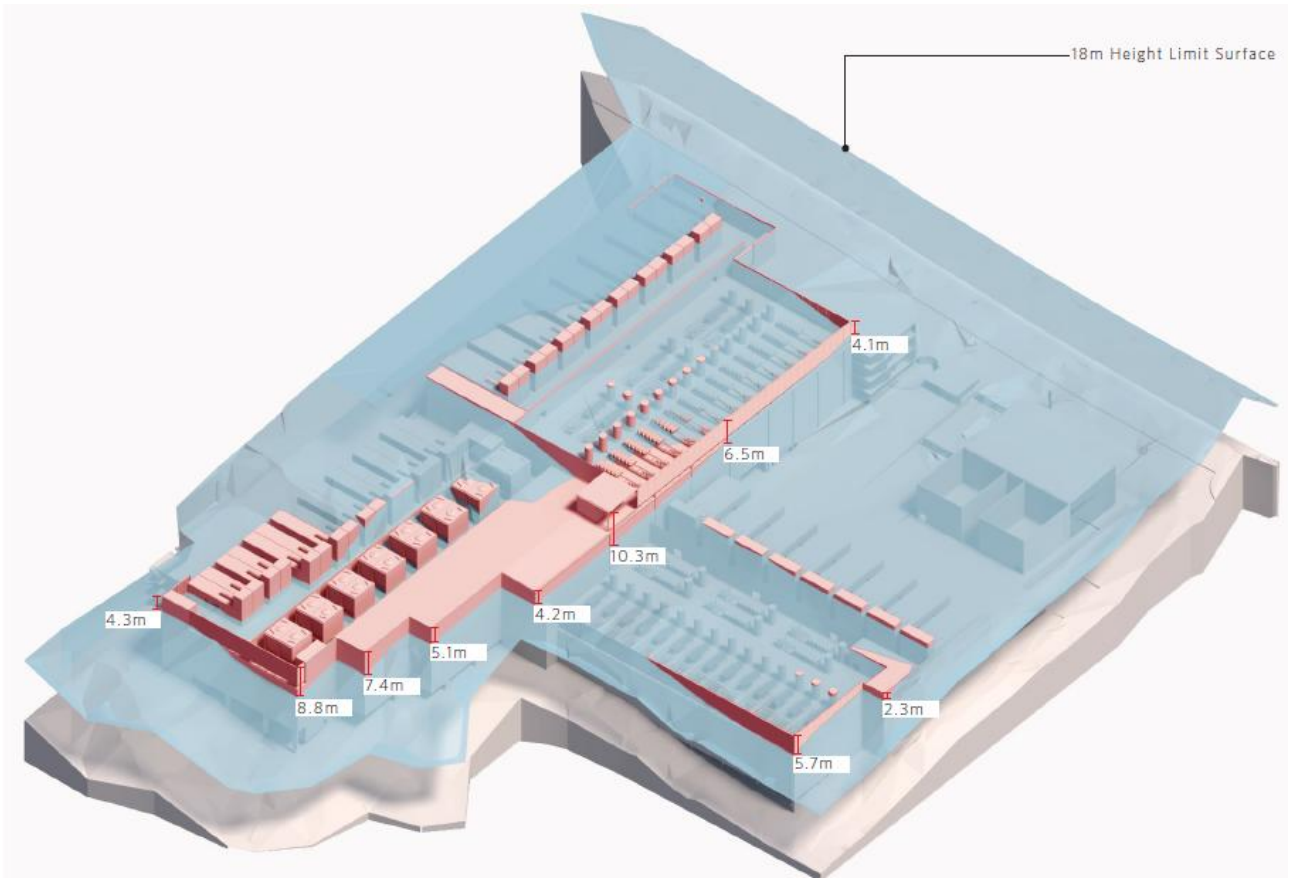
Source: HDR, 2025

The proposed data centre will result in height exceedances at varying locations and to varying extents across the site, due to the site topography. The extent is shown at Figure 18 below. The maximum building height is 28.3m, which comprises a 10.3m metre variation to the maximum height of building control set out within the Lane Cove LEP 2009. A Clause 4.6 Variation Request has therefore been prepared by Urbis (refer to Appendix OO), which demonstrates that compliance with the maximum building height control is neither reasonable nor necessary in this instance. The proposed development will comply with the relevant objectives for the E4 General Industrial Zone and the objectives of the height of building standard. The variation to the maximum building height control will not result in any adverse environmental impacts.

The data centre will be taller than surrounding industrial buildings within the Lane Cove West Industrial Area. Notwithstanding, the proposal will not comprise a significant 'step-change' from surrounding industrial development and will remain fully compatible with the character of the Lane Cove West Industrial Area. The proposed bulk and scale of the development is commensurate with that of many data centre facilities (which require large data halls and supporting infrastructure) and other contemporary industrial buildings in similar industrial areas within Greater Sydney.

The proposed variations to the building height control are predominantly located towards the centre of the site and away from sensitive receivers (only small variation is proposed near the site's eastern boundary).

Figure 19 Building Height Diagram



Source: HDR, 2025

The built form along the Mars Road frontage will fully comply with the existing height control. Upper level setbacks will minimise visual and overshadowing impacts and provide visual interest within the site.

The bulk and scale of the development has been informed by the operational requirements of the data centre. Back-up generators and mechanical plant at rooftop level are critical to the viability of the development. The proposed massing will allow the development potential of this highly accessible brownfield site to be optimised and enable generous landscaped setbacks to be incorporated within the south of the site and to the eastern and northern boundaries. Strict compliance with the maximum height control would ultimately necessitate an extension of the building footprint elsewhere within the site, which would reduce the setbacks and result in the removal of additional vegetation and other potentially adverse impacts.

Critically, the massing strategy and layout of the proposed development seeks to concentrate the building form towards the western boundary (i.e. close to the industrial interface) and within the central part of the site. The design of the data centre limits the extent of the building façade (and back-up generators) along the eastern boundary of the site and includes a significant break in the massing between Block C and the substation, minimising environmental impacts to more sensitive receivers to the east of the site. The configuration of the proposed data centre including its T-Shape configuration and stepped massing approach also create several significant breaks in the building massing (providing visual relief) and breaks the overall scale of the building.

A range of planting is proposed within the site, including along the northern and eastern boundaries, which will screen and soften the appearance of the built form. 'Buffer planting', incorporating a range of tall trees and other plants, will provide a sensitive transition to the adjacent C2 Environmental Conservation land and additional screening from the residential properties beyond.

The substation will be significantly lower than the maximum building height for the site and located within the lowest part of the site's northern frontage. The setting of the substation will ensure that is well-integrated within the site landscaping to minimise its prominence in views from Mars Road. The large existing trees located along the northern boundary of the site will be retained as part of the proposed development.

6.1.5. Setbacks

The proposed development complies with the Lane Cove DCP setbacks. These are also significantly exceeded in some locations, with significant landscape screening planting provided.

The built form will be setback from the north approximately 8m from Mars Road which is compliant with the Lane Cove DCP. The setback will be landscaped and include vegetative screening and shrub and ground cover planting.

The proposed development will be well setback to the southern boundary, ranging from the minimum 10m DCP requirement to 39.8m. It retains the bushland vegetation to the south of the site which provides an appropriate response and transition to the land to the south towards Lane Cove River. Significant additional planting will also be introduced to this sensitive southern interface to optimise local ecological habitats.

The proposed development will be setback between 6.3m to 10m from the eastern boundary, again compliant with the required minimum DCP setbacks. Vegetation along the eastern boundary will be retained to improve amenity and reduce noise for adjoining residents.

The data hall development will be set back 17.6m from the western boundary. However, there will be a service vehicle access route directly adjacent to the boundary. This is consistent with the existing development at the site.

Overall, the proposed setbacks achieve a well-considered balance between the operational requirements of the data centre, integration with the surrounding precinct, and consistency to planning objectives. They contribute to streetscape quality, landscaping, and connectivity.

6.1.6. Materials and Finishes

The proposed development adopts a fine grain architectural language that distinctly expresses the individual building components; responds to the site's context; and embeds cultural narratives based on an understanding of Country. Particular design emphasis is given to the northern, southern and eastern facing elements, which will be partly visible from outside of the site.

A deeply articulated approach is proposed to the office building, which will provide a playful form and composition. The building draws inspiration from, and provides a sensitive response to, Country and bushland surrounding the Lane Cove River. Textured gum-leaf coloured powdercoated aluminium cladding will complement the natural palette of the surrounding vegetation, whilst the building's tactile finish captures the layered movement of water.

Extensive glazing is proposed on the office building, which will provide a high quality and contemporary appearance. The glazing will enhance the amenity of the office building by facilitating access to daylight and providing an outlook towards Mars Road.

The textured approach will create an attractive and welcoming appearance along the Mars Road frontage and complement the simpler and more recessive appearance of the data centre behind. Metal louvres will be provided at rooftop level to screen services from views outside of the site. The light grey metal coloured plant (generators) and pre-cast concrete facades of the data centre building are recessive in appearance and will limit the perceived scale of the building when viewed from outside of the site.

Durable, low-maintenance and high environmental performing materials are proposed to minimise the proposed development's environmental impacts. The use of pre-cast concrete will reduce embodied emissions associated with the proposed development and expedite construction.

Overall, the proposed development will incorporate a range of high-quality materials and finishes that will provide visual interest within the site and complement the character and appearance of the Lane Cove West Industrial Area. The design of the office building draws inspiration from Country and the bushland around the Lane Cove River and will provide a highly engaging appearance that activates the Mars Road frontage. The proposed materials will minimise the visual impacts of the proposal and enhance the overall sustainability of the site.

6.1.7. Overshadowing

An overshadowing analysis has been undertaken by HDR and is provided at Figure 20. The diagrams indicate that overshadowing will mainly occur to the east, south and west during the winter solstice however some shadowing will also occur at the summer solstice. Whilst shadowing will occur to the west of the site, this interface is used for industrial purposes which do not require solar access protection.

The land to the south and east of the site is zoned C2 Environmental Conservation and includes various shade resistant plant species. Ecological advice has confirmed that the additional shading to the neighbouring bushland will not affect the health and ongoing viability of the plant species. Further, the incremental additional shadowing will not generate negative impacts to local fauna as discussed in Appendix S.

The local community nursery is located adjacent to the east of the site. As shown in the shadow diagrams, the proposed development will result in minor overshadowing to this site at or just before 3pm at midwinter and at the summer solstice. This shadow is cast by the substation in the north eastern corner of the site which sits at a maximum height of 14m, well below the 18m height limit applicable. The substation is also sited at a setback compliant with the Lane Cove DCP. The shadow extent cast in this location is influenced by the fall of the land, as the topography slopes down to the east. Whilst there will be some shadowing in this location, it is only for approximately 30 mins to 3pm and is resultant of a compliant built form. The level of impact is considered to be minimal as the nursery will achieve sunlight through the extensive tree cover on that property at all other times of the day. It is also noted that the extent of shadow cast by the proposed substation will be, on balance, comparable or slightly less than the current 3pm shadow cast on the nursery by the existing building on the site.

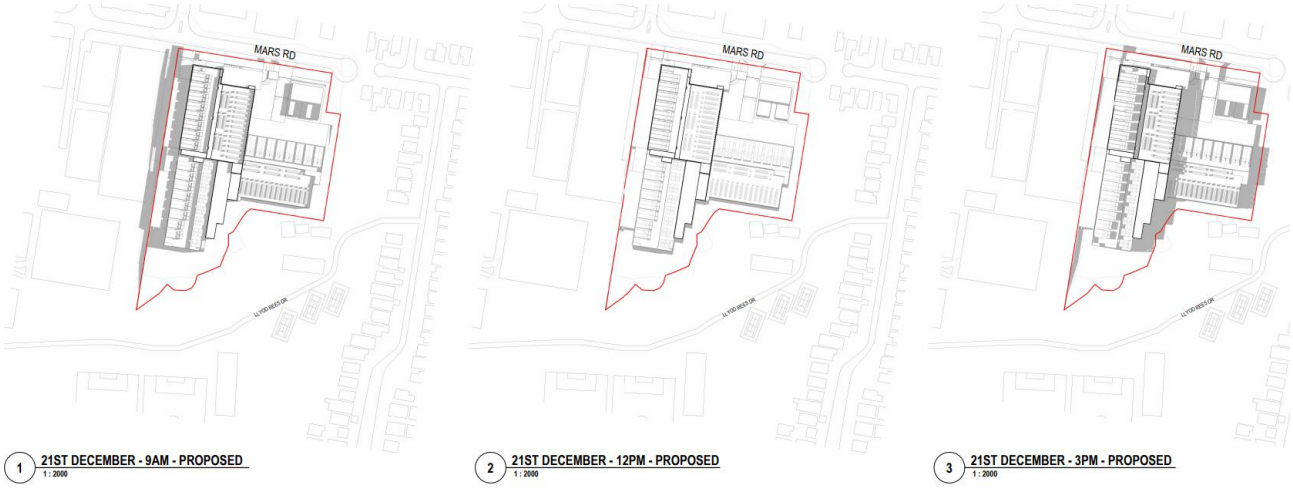
Further east of the site there is land zoned R2 Low Density Residential. However, as shown in the shadow analysis the proposed development does not result in overshadowing into the rear of these properties.

Overall, the shadowing impacts are considered to be acceptable.

Figure 20 Shadow Diagram – 21 June

Source: HDR, 2025

Figure 21 Shadow Diagram – 21 December



Source: HDR, 2025

6.2. Visual Impact

A Visual Impact Assessment (VIA) has been prepared by Urbis and is enclosed in **Appendix N**. The VIA has been prepared to analyse the visual effects of the proposed built form on nearby sensitive receivers and public domain views from five key locations surrounding the site.

6.2.1. Existing Environment

Due to the underlying topography, presence of vegetation within the surrounding streets and intervening built form both within and surrounding it, the effective visual catchment of the existing site and the proposed development from the public domain includes:

- Blackman Park (located to the south of the site)
- A section of the Lane Cove National Park at Sugarloaf Point (located to the west of the site)
- Mars Road.

The significant tree coverage on the site as well as on the adjacent embankment create a densely vegetated buffer to the east and south.

The site has a moderate scenic quality owing largely to the significant vegetation located on the site and its surroundings including the embankment located around Blackman Park. The northern boundary of the site reduces its overall scenic quality given that there are clear views of existing contemporary development on the site.

There are close, sensitive viewing locations near the site including Blackman Park, along the Lane Cove River and within the Lane Cove National Park. Views from these locations have the potential to be sustained views of the development.

Views from residential dwellings to the site are limited due to the surrounding topography, dwelling orientations and spatial separations and the level of large, mature trees surrounding the site including within Blackman Park, surrounding streets and within private properties. Potential views of the proposed development are likely to be possible from:

- The neighbouring dwelling at 10 Banksia Close Lane Cove.
- Approximately five (5) dwellings located along Wood Street that are elevated above the Lane Cove Tennis Club. The tennis courts create a break in the surrounding trees allowing for views west to the site. The potential impacts are considered to be low.
- Potentially heavily filtered views from dwellings on the western side of Wood Street located to the north of the tennis court. The potential impacts are considered to be low.

- Approximately eight (8) dwellings located 780m to the west of the site elevated above Pittwater Road, which will likely have filtered views of the proposal. Given the distance between the site and these properties, the potential impacts are considered to be low.
- Residential dwellings with second levels and east facing views in East Ryde located around Melba Drive, with some views likely filtered by vegetation. Given the distance between the site and these properties, the potential impacts are considered to be low.

Seven viewpoints were selected for analysis as part of the VIA:

- View 01 – North-east view from Blackman Park
- View 02 – View west from Wood Street and Lloyd Rees Drive
- View 03 – View south-west from entrance to Lane Cove West Public School
- View 04 – View west from Currawong Avenue
- View 05 – View north from Myee Crescent
- View 06 – View east from Sugarloaf Point
- View 07 – North-west view from 17 Wood Street

The selected viewpoints are shown below.

Figure 22 VIA assessed viewpoints

Source: Urbis (2025)

The VIA notes that the photomontages have been prepared in accordance with the Land and Environment Court of New South Wales practice direction and can be relied upon for assessment.

6.2.2. Potential Impacts

An assessment of the potential visual impacts of the proposed development at each of the aforementioned views has been undertaken in the VIA. The VIA considers the impacts associated with the proposed development, including any specifically associated with the variation to the height of buildings standard.

Visual effects

The images below show the existing view and the anticipated visual effects resulting from the proposed development at each of the assessed viewpoints. A summary assessment finding for each viewpoint is noted above the comparative photo / photomontage. Further detailed assessment is included after the viewpoint comparisons.

The VIA provides specific consideration to the visual effects of the proposed building massing located above the 18 metre maximum height plane (shown red in the photomontage images). In Viewpoints 02 and 07, the additional building massing located above the maximum height plane will block a small section of open sky and add a minor amount of new built form to the view. However, this building massing will not block effects on scenic or heritage items and will not contribute any additional visual effects to those generated by the compliant parts of the development. From the other assessed locations, the additional building massing above the height plane is not visible and does not generate any visual effects.

Viewpoint 1 Summary Assessment: From the below photomontage, the VIA determined that the proposed development would result in no visual effect from Viewpoint 1.

Figure 23 Viewpoint 1 existing view

Source: Urbis (2025)

Figure 24 Viewpoint 1 photomontage (visual effects)

Source: Urbis (2025)

Viewpoint 2 Summary Assessment: From the below photomontage, the VIA determined that the proposed development would result in a low visual effect from Viewpoint 2.

Figure 25 Viewpoint 2 existing view

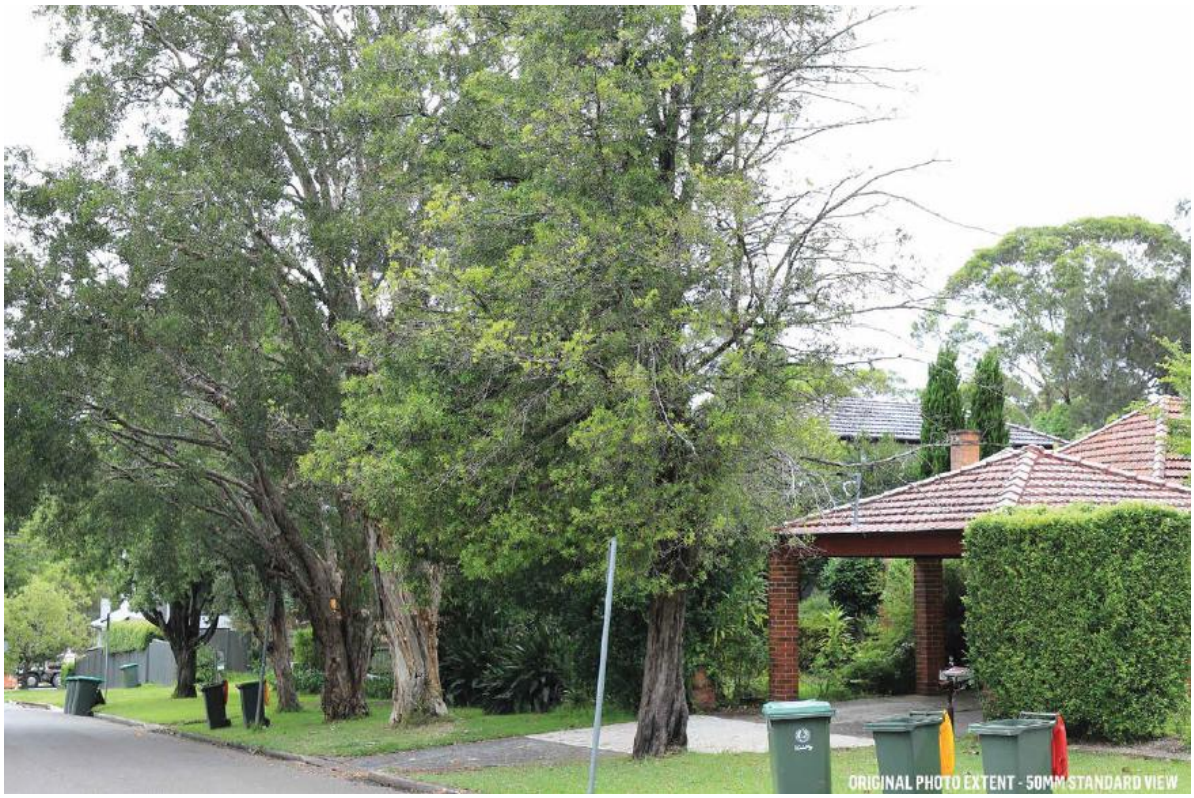
Source: Urbis (2025)

Figure 26 Viewpoint 2 photomontage (visual effects)

Source: Urbis (2025)

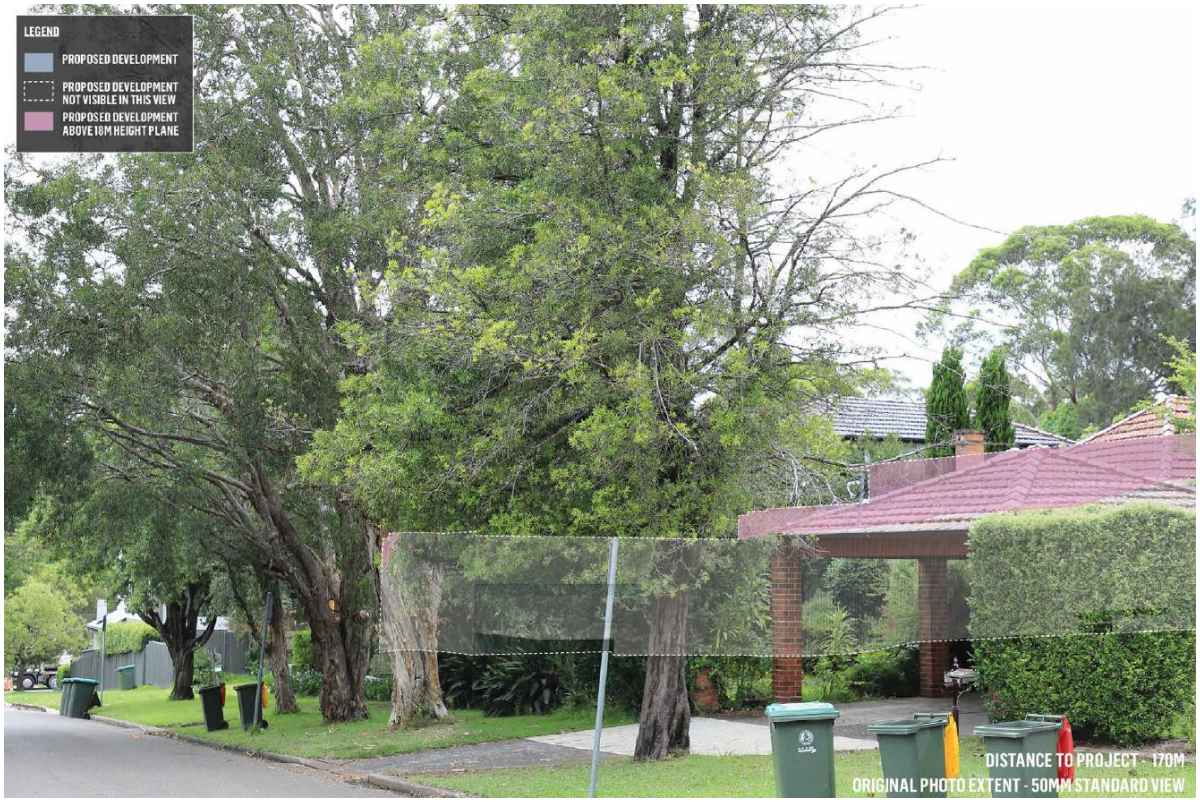
Viewpoint 3 Summary Assessment: From the below photomontage, the VIA determined that the proposed development would result in no visual effect from Viewpoint 3.

Figure 27 Viewpoint 3 existing view



Source: Urbis (2025)

Figure 28 Viewpoint 3 photomontage (visual effects)



Source: Urbis (2025)

Viewpoint 4 Summary Assessment: From the below photomontage, the VIA determined that the proposed development would result in no visual effect from Viewpoint 4.

Figure 29 Viewpoint 4 existing view

Source: Urbis (2025)

Figure 30 Viewpoint 4 photomontage (visual effects)

Source: Urbis (2025)

Viewpoint 5 Summary Assessment: From the below photomontage, the VIA determined that the proposed development would result in no visual effect from Viewpoint 5.

Figure 31 Viewpoint 5 existing view

Source: Urbis (2025)

Figure 32 Viewpoint 5 photomontage (visual effects)

Source: Urbis (2025)

Viewpoint 6 Summary Assessment: From the below photomontage, the VIA determined that the proposed development would result in no visual effect from Viewpoint 6.

Figure 33 Viewpoint 6 existing view

Source: Urbis (2025)

Figure 34 Viewpoint 6 photomontage (visual effects)

Source: Urbis (2025)

Viewpoint 7 Summary Assessment: From the below photomontage, the VIA determined that the proposed development would result in a low visual impact effect from Viewpoint 7.

Figure 35 Viewpoint 7 existing view

Source: Urbis (2025)

Figure 36 Viewpoint 7 photomontage (visual effects)

Source: Urbis (2025)

Visual impacts

The VIA has assessed the extent of visual change based on the seven representative modelled views and applied relevant weighting factors to determine the overall level of visual impacts resulting from the proposed development. The weighting factors that have been applied to inform the assessment and conclusions of the VIA.

Sensitivity – the overall rating for view place sensitivity was weighted according to the influence of variable factors such as distance, the location of terms of heritage significance or public spaces of high amenity and high user numbers.

The site is located immediately north of Blackman Park and east of the Lane Cove River and Lane Cove National Park. These locations have high sensitivity, with Blackman Park utilised by a high number of daily users for a range of recreational purposes.

Existing residential development is located to the east of the site within established intermediary vegetation. Residents of these properties would be expected to have a high level of sensitivity to visual change from the area.

There are no heritage items in the immediate or close proximity to the site.

Overall, sensitivity surrounding the site is rated as medium-high.

Physical absorption capacity – the extent to which the existing visual environment can reduce or eliminate the perception of the visibility of the proposed development.

The existing visual environment has a high capacity to absorb the visual changes demonstrated in the assessed views. Built form, vegetation and topography in both the immediate and more distant context screen the proposal from views to varying degrees and limits the ability to perceive changes in the assessed existing visual compositions.

Visual compatibility – the relevant parameters for visual compatibility are whether the proposed development can be constructed and utilised without the intrinsic scenic character of the locality being unacceptably changed.

The proposed development will be located within a developed industrial area which includes commercial and warehouse and distribution buildings with large floorplates and ranging from 1 – 3 storeys in height. In this regard, the proposed development is visually compatible with existing built form to the north and west of the site and would not be out of place or have unexpected features for viewers from these areas.

The area to the east and the south of the site is characterised by open space and low density residential development. However, due to the level of built form and vegetation in these locations, visibility of the proposed development in the assessed views is limited. The scenic quality of existing views and compositions from these areas are retained.

Accordingly, the proposed development has a high level of visual compatibility with the existing visual environment.

Viewing period – this refers to the influence of time available to a viewer to experience the view to the site and the visual effects of the proposed development.

Viewing periods of the site from close locations in the public domain (Blackman Park and Lloyd Rees Drive) are for medium duration as these include recreational facilities where people would be expected to spend sustained periods of time. The visual effects of the proposal visible from these locations, however, are low as demonstrated in the assessed views.

Viewing periods towards the site from more distant public locations are for short durations of time, typically from roads. Views from the Lane Cove River and foreshore to the west may have more sustained views towards the site. However, the visual effects generated by the proposal as demonstrated in the assessed views are low.

Viewing distance – the greater the potential viewing distance (experienced from either fixed or moving viewing places) the lower the potential for a viewer to perceive and respond to the visual effects of the proposed development.

Visibility of the proposed development from all distance classes will be limited due to intervening development, vegetation, topography or a combination of these. The ability to perceive the proposed

development and any visual effects generated by it, based on the assessed views, is largely restricted to close viewing locations including at Blackman Park and Lloyd Rees Drive.

Significance of residual visual impacts – the residual impacts predominately relate to the extent of permanent visual change to the immediate setting. It is noted that the residual impacts are predominately limited to individuals' preferences for nature and existing built form and as such there is no inherent mitigation measure by means such as colour palate, material finishes and articulation of building surfaces.

For the proposed development, the residual impacts are low and acceptable given the location of the site and its surrounding visual context. The proposed development is visually compatible with surrounding contemporary development to the north and west of the site in the Lane Cove Industrial Area. Additionally, the intrinsic character from viewpoints to the east, south and west of the Lane Cove River is not altered as demonstrated in the assessed views.

Overall, the visual impacts for each assessed view location are as follows:

- Viewpoint 01 - nil
- Viewpoint 02 - low
- Viewpoint 03 - nil
- Viewpoint 04 - nil
- Viewpoint 05 - nil
- Viewpoint 06 - nil
- Viewpoint 07 – low

6.2.3. Cumulative Impact Assessment

The potential for cumulative visual impacts with the developments identified in Section 2 of this report have also been considered as part of the VIA. The VIA notes that the highly urbanised nature of the site and its surroundings limits opportunities for expansive views where significant cumulative visual impacts would occur from close and medium distance viewing locations. Due to the separation distance between the development, intervening built form and underlying topography, the opportunity for cumulative visual impacts is considered to be nil.

6.2.4. Mitigation Measures

The visual impacts of the proposed development are acceptable. No additional mitigation measures are required.

6.3. Traffic, Transport and Accessibility

A Transport Impact Assessment (TIA) including a Preliminary Construction Traffic Management Plan (CTMP) and Green Travel Plan have been prepared by Ason Group and are enclosed in Appendix O. The TIA assesses the anticipated traffic impacts of the proposed development during the construction and future operation of the proposed development.

6.3.1. Existing Environment

The site is currently accessed via three existing driveways located on Mars Road. Two of the driveways serve heavy vehicles entering and exiting the site. The other driveway provides access to existing on-site parking.

The road network surrounding the site includes a combination of local, regional and state roads. This includes Mars Road (a Local Road) to the north of the site as well as:

- Lane Cove Road (a State Road) is located approximately 3.3km north-west of the site.
- Centennial Avenue (a State Road) is located approximately 575m south-east of the site.
- Epping Road (the M2) (a State Road) is located approximately 700m north of the site.

- Penrose Street (a Regional Road) is located approximately 650m south-east of the site.

Two bus stops are located in the immediate vicinity of the site along Mars Road. The bus stops are served by the 258 'Chatswood to Lane Cove West' and 285 'Lane Cove West to City via freeway' services.

Footpaths are located on both sides of several of the roads within the surrounding area. Mars Road also contains bicycle paths, which connect to a wider cycleway network to the east.

6.3.2. Potential Impacts

Traffic generation – construction phase

Anticipated heavy vehicle movements have been estimated having regard to the likely requirements for construction plant, equipment and haulage. Additionally, construction workers are expected to arrive in the morning and depart in the evening.

The traffic generated by the proposed development during construction will be:

- AM peak: 11 movements per hour (movements, in and out combined)
- PM peak: 10 movements per hour (movements, in and out combined)
- Daily: 86 movements per day (movements, in and out combined).

Construction traffic generation during the road network peak hour is not expected to exceed the operational peak hour traffic generation of the proposal. A detailed Construction Traffic Management Plan (CTMP) will review and address construction vehicular traffic throughout each stage of the development.

Traffic generation – operation phase

The anticipated traffic generation associated with the operational phase of the proposed development has been calculated using comparable data centres across Sydney. Detailed surveys of several data centres were undertaken by Ason Group.

From the survey results, a traffic generation rate was established by taking the average generation rate across all the sites. The surveys indicate a trip generation rate of:

- AM peak (07:45 – 08:45): 0.09 vehicle trips per hour per 100m^2
- PM peak (12:30 – 13:30): 0.08 vehicle trips per hour per 100m^2
- Daily: 0.71 vehicle trips per day per 100m^2.

For completeness, a sensitivity test of the proposed trip generation rates was undertaken. The proposed rates were compared with the trip generation rates of the existing NEXTDC S3 data centre located at 2 Broadcast Way, Artarmon. The NEXTDC S3 data centre was selected as it is located in relatively close proximity to the site and is most comparable in terms of public transport and active transport accessibility.

The AM and PM peak trip generation rates for the NEXTDC S3 data centre are 0.09 and 0.06 vehicles per 100m^2 respectively (i.e. equal to and less than the average AM and PM trip generation rates identified through the assessment of various data centres across Sydney).

For robustness, the average rates have been applied to the proposed development. Application of these rates results in 11 trips in the AM peak and 10 trips in the PM peak.

The site currently contains several industrial buildings, which are operational and generate a combined 96 vehicle trips in the AM peak and 100 trips in the PM peak. Accordingly, Ason Group anticipate that the proposed development will result in a net reduction of 85 vehicle trips to and from the site during the AM peak and a net reduction of 90 vehicles trips in the PM peak, demonstrating that the data centre operation will generate significantly less traffic than the current warehouse operation.

Accordingly, the operational phase of the proposed development will not result in any adverse traffic or other impacts on the local highway network.

Access arrangements – construction phase

Access to the site during construction work will be provided via Mars Road.

An on-site turning area shall be provided in the location of the future car park to enable all construction vehicles to enter and exit the site in a forward direction.

Access arrangements – operational phase

Vehicular access to the site will be provided via three driveways (see Figure 37):

- Eastern access: service laneway for heavy vehicles
- Central access: car park access for light vehicles
- Eastern access: main access for heavy vehicles.

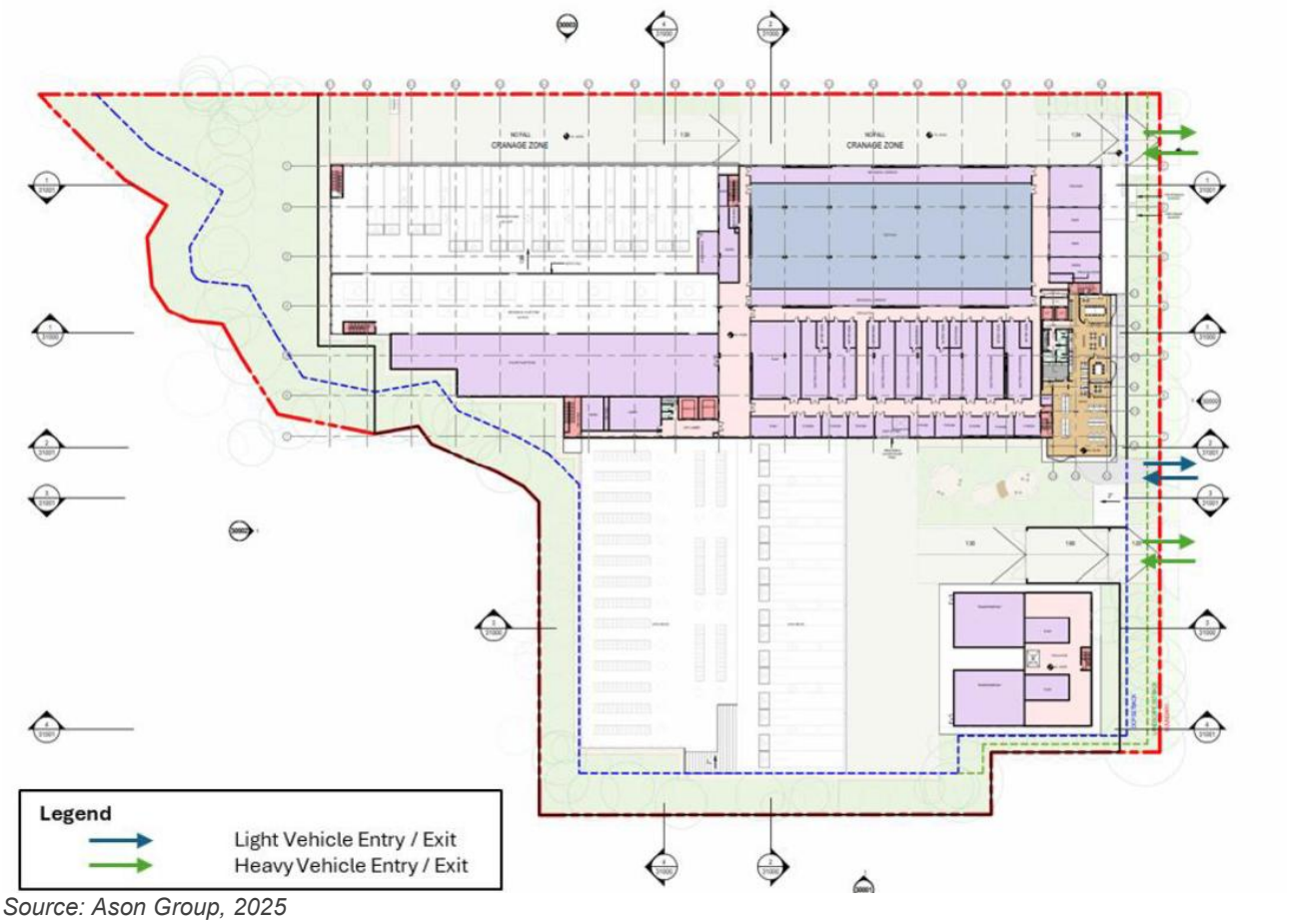
Truck/car traps will be provided at each driveway as an access control and security measure. The 'truck/car traps' will comprise of two swinging gates and therefore operate in two stages for vehicles to fully enter or exit the site.

The design of the proposed driveways will allow up to two (2) light vehicles to queue behind the car trap on the central driveway and one (1) 12.5m heavy rigid vehicle to queue behind the truck trap on the eastern access.

Heavy vehicles entering and exiting the site via the western or eastern driveways will travel along ramps to the internal access roads. The ramps have been designed in accordance with Australian Standard AS2890.2.2018.

Swept path diagrams are enclosed within the TIA, which demonstrate that the driveways and internal access roads are capable of accommodating the largest design vehicles. The swept path diagrams also demonstrate that these vehicles will be able to enter and exit the site in a forward gear and safely manoeuvre.

Figure 37 Vehicle Access



Source: Ason Group, 2025

Car parking – construction phase

On-site parking for construction workers will be provided throughout the construction of the proposed development. The number and location of the temporary on-site parking is expected to change as construction progresses.

An on-site drop-off area will also be provided on-site and construction workers will be informed of and encouraged to access the site via car pooling and public / active transport.

Car parking – operational phase

The Lane Cove DCP and the TfNSW Guide to Transport Impact Assessment (GTIA) do not provide parking demand rates for data centres. Data centres typically function differently from traditional industrial/warehouse/office developments. Therefore, a first principles assessment has been undertaken based on the expected operational characteristics of the future data centre.

A review of similar and approved Data Centres across Sydney has been undertaken. Reference has been made to the operational characteristics of the approved and operating data centres to determine the expected operational staff numbers for the subject Site at any given time.

Table 17 Approved Parking Rates for Data Centres

Data Centre	**Address**	**SSDA/DA No.**	**GFA (m^2)**	**Approved staff**	**Staff/100m^2 GFA**
CDC Eastern Creek Campus	17 Roberts Road, Eastern Creek	SSD-10330	44,330	10	0.02
AirTrunk SYD1	35 Huntingwood Drive, Huntingwood	JRPP-16-03318	28,530	10 to 21	0.07
Equinix SY3	47 Bourke Road, Alexandria	D/2010/112	18,063	20	0.11
NextDC Sydney Data Centre (S1)	4 Eden Park Drive, Macquarie Park	LDA2011/413	10,391	12	0.12
NextDC Sydney Data Centre (S2)	8 Giffnock Avenue, Macquarie Park	LDA2017/0192	15,726	50	0.32
NextDC Sydney Data Centre (S3)	2 Broadcast Way, Artarmon	DA-2019/79 and DA2019/79/A	33,799	25	0.17
Average					**0.12**

A review of the approved data centres has been undertaken to determine an average staff rate for typical data centre type developments. The application of the average rate indicates that the Site is estimated to employ 15 staff members for its daily operations, noting a total GFA of 12,094m^2 has been considered for the Site including office and data hall area.

By way of conservative assessment, it is assumed that all 15 staff members will drive to the site independently, resulting in a maximum potential car parking demand of 15 car parking spaces. The proposal involves provision of 23 car parking spaces (plus 1 accessible space) which meets and exceeds the theoretical parking demand based on first principle assessment. It is noted there is an additional 8 car parking spaces which provides additional flexibility to the end users of the site noting that the future tenants are unknown at this point.

As noted above, Lane Cove DCP does not provide a dedicated accessible car parking rate for data centres. Therefore, reference has been made to Section D4 of the National Construction Code 2022. The development could be considered most akin to a Class 7b building (storage building) which sets out the following requirement:

- 1 accessible space for every 100 car parking spaces or part thereof.

Based on a car parking provision of 23 car parking spaces, the proposed development provides 1 accessible car parking space which satisfies this requirement.

Lane Cove DCP provides the following motorcycle parking rates:

- 1 motorcycle space per 15 car spaces for all types of development.

The proposed development provides 2 motorcycle spaces which satisfies this requirement.

Lane Cove DCP does not provide specific bicycle parking rates for data centre development. Therefore, reference is made to the Planning guidelines for walking and cycling from the NSW Government which recommends the following rates:

- Staff parking rate: 3-5% of staff
- Visitor parking rate: 5-10% of staff.

The proposed development provides 12 bicycle parking spaces which satisfies this requirement.

Lane Cove DCP does not provide specific end of trip facility rates for data centre developments. Therefore, reference is made to the Planning guidelines for walking and cycling from the NSW Government which recommends the following rates based on expected staff numbers:

- Locker rates: 1 per 3 bicycle racks, which results in a requirement of 4 lockers
- Shower provision: 2 showers (1 male and 1 female)
- Change room provision: 2 change rooms (1 male and 1 female).

The proposed development provides 14 lockers, 2 showers and 2 change rooms which satisfies this requirement.

All car parking spaces have been designed in accordance with Australian Standard AS2890.1:2004.

Green Travel Plan

A Preliminary Green Travel Plan (GTP) has been prepared for the site. The Preliminary GTP outlines the overarching requirements for a future detailed GTP, which will be prepared prior to the occupation of the development.

The detailed GTP will identify a range of site-specific measures aimed at promoting and maximising the use of sustainable travel modes to and from the site. The primary objectives of the future detailed GTP will be to:

- Reduce the environmental footprint of the proposed development
- Set future staff travel mode share targets
- Improve access, amenity, convenience, and safety of sustainable transport modes to/from the site
- Promote the use of active transport modes such as walking and cycling, particularly for short-medium distance journeys
- Reduce reliance on the use of private vehicles for all journeys
- Encourage a healthier, happier and mor active public transport use culture.

Preliminary mode share targets for the site are set out in the table below. These targets are to be revisited and updated after the opening of the proposed development and as part of ongoing monitoring of the GTP.

Table 18 Mode share targets

Travel Mode	Mode share of employees	Proposed targets	Relative change
Car as driver	84%	74%	-10%
Train	6%	6%	-
Bus	5%	9%	+4%
Car as passenger	3%	7%	+4%
Walked only	1%	2%	+1%
Bicycle	1%	2%	+1%

Measures that could be implemented to achieve the objectives of the GTP are set out below:

- The GTP, including its purpose and objectives, will be explained to all staff
- Public transport travel information will be provided to all staff and visitors. This could include a travel section online with links to local bus operator sites
- Car sharing will be encouraged for staff and visitors
- Assisted cycle purchase schemes and interest free loans to assist staff with purchasing a bicycle or bicycle equipment
- Transport section on the company website with links to local bus operator sites to ensure that travel information is always up to date
- Provision of transport information for site visitors.

These measures will be reviewed and refined as part of the preparation of the future detailed GTP.

A Travel Plan Coordinator will be responsible for the future monitoring and updates of the GTP. As a minimum, reviews of the GTP will be undertaken after 6 months of first occupation of the proposed development then every 1 – 2 years thereafter.

6.3.3. Cumulative Impact Assessment

The TIA identifies that the proposed development is anticipated to result in a significant reduction in traffic volumes associated with the site compared to its current operation. Accordingly, the proposal will not result in any adverse cumulative traffic impacts.

6.3.4. Mitigation measures

The following mitigation measures are proposed:

- A detailed CTMP will be prepared prior to the construction of development. The detailed CTMP will include a detailed assessment of the anticipated construction traffic generation associated with the proposed development and include details of proposed construction worker parking on the site.
- A detailed Green Travel Plan will be prepared prior to the occupation of the proposed development.

Subject to the implementation of the measures set out within the detailed CTMP and detailed Green Travel Plan the traffic impacts of the proposed development will be acceptable.

6.4. Trees and Landscaping

An Aboricultural Impact Assessment has been prepared by Civica to assess the impacts of the proposed development on existing trees. Existing trees have been retained as far as reasonably practical and will be supplemented by additional planting and landscaping within the site. A landscaping scheme for the site has also been prepared by Oculus.

6.4.1. Existing Environment

A total of two hundred and twenty two (222) trees are located within the site. The trees are predominately concentrated along the site's northern and eastern boundaries and within the southern part of the site.

The existing trees comprise:

- Twenty one (21) high retention (Category A) value trees - predominately located within the north east corner of the site along the Mars Road frontage
- One hundred and eight (108) moderate retention (Category B) value trees – located along the northern and eastern boundaries and within the southern part of the site
- Eighty one (81) low retention value (Category C) trees – predominantly located along the eastern boundary, in the south-western corner, and in the central part of the site.
- Twelve (12) trees that are unsuitable for retention (Category U trees) – located within the north-western and south-western corners of the site as well as along the eastern boundary

6.4.2. Potential Impacts – tree removal

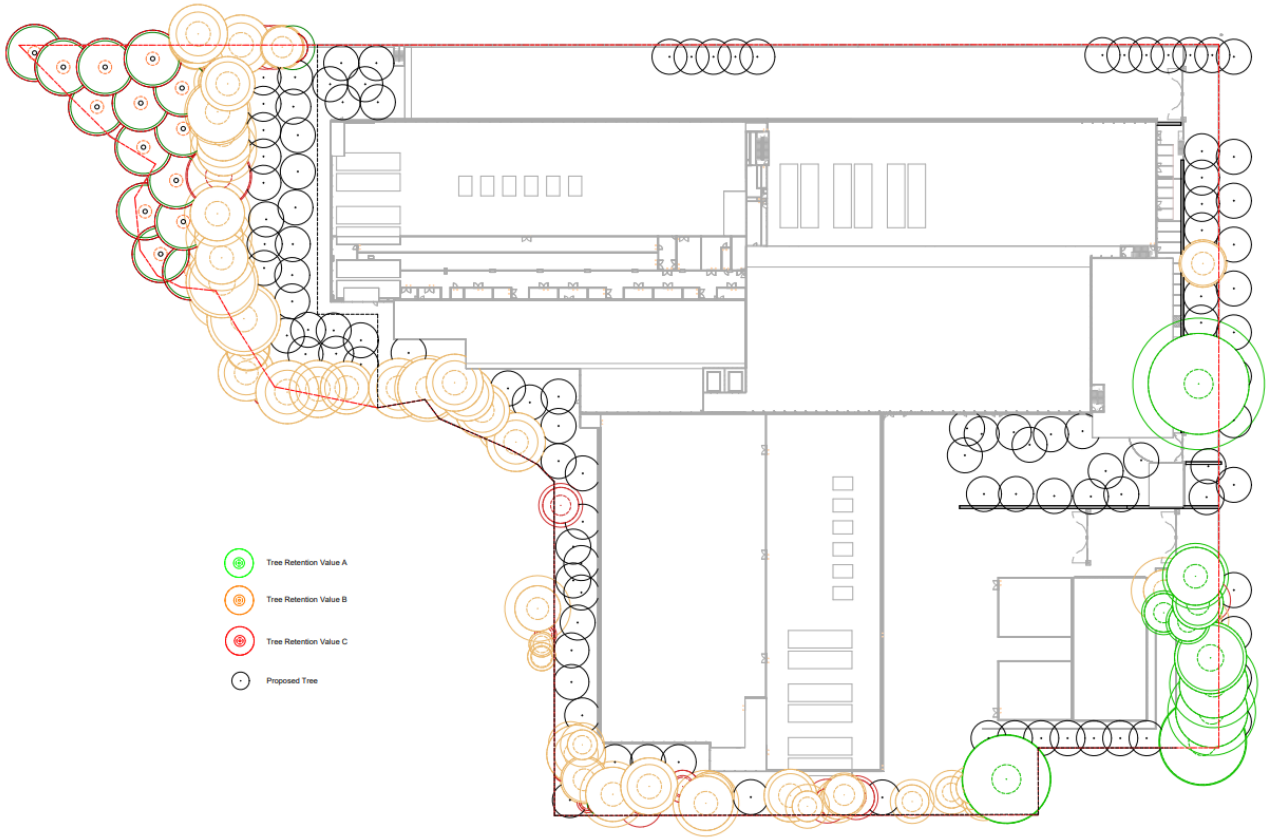
An Arboricultural Impact Assessment (AIA) report has been prepared by Civica to assess the 222 trees identified within the proposed development area. The AIA is provided at Appendix MM. The key findings of the AIA are listed below:

- 82 trees would require removal based on the design of the proposed development. Of these 82 trees:
  - Seven (7) trees are Category A (high retention value). Trees of this retention value warrant design consideration and amendment to ensure their viable retention
  - Thirty two (32) trees are Category B (moderate retention value). Trees with this retention value warrant minor design consideration in an attempt to allow for their retention.
  - Forty three (43) trees are Category C (low retention value). Trees in this category are generally low quality, easily replaceable or have poor health/structure and do not warrant design consideration.
- Eight (8) trees are recommended for removal irrespective of the development. These trees are identified as Category U (no retention value) due to their poor health and structure.
- 132 trees were recommended for retention.

The remaining 132 trees will be retained and protected as necessary during construction works. The retained trees include 14 Category A trees, 76 Category B trees and 38 Category C trees and 4 Category U trees.

Tree removal has been minimised as far as reasonably practicable and will be mitigated through the installation of new planting as described below. The trees to be removed are principally located towards the centre of the site. The removal of these trees has been necessitated by the proposed footprint of the data centre building and internal hardstand / driveway locations and is ultimately required to ensure that the development potential of this highly accessible brownfield site is optimised. Retaining trees in the centre of the property would result in a less optimal building footprint which would impact an increased number of trees closer to the southern site boundary and reducing the extent of increased landscaped area in that location adjacent to neighbouring bushland ecological communities.

Figure 38 Tree Removal and Retention Plan



Source: Oculus, 2025

6.4.3. Landscaping Approach and quality

The proposed landscaping approach seeks to retain as many existing trees as possible and incorporate additional planting that appropriately responds to the site's context and its future use as a contemporary data centre facility. The majority of the existing trees within the north-eastern corner of the site and along the eastern boundary will be retained. Additionally, the trees within the southern part of the site will also largely be retained.

The proposed landscaping scheme has been informed by several key design and planting principles including:

- Retaining areas of significant planting (especially perimeter trees) and high value trees where possible.
- Strengthening the site's connection to country by utilising endemic species; establishing a unique sense of place that responds to the land, sky and waterways of the surrounding area; and incorporating indigenous thematic reference and 'colours of country' where appropriate.
- Responding to the character of the surrounding area by incorporating indigenous planting which will integrate with existing indigenous planting
- Screening the proposed built form by reinforcing tree planting along the Mars Road frontage and elsewhere within the site.
- Creating a landscape buffer on the eastern part of the site adjacent to the environmental conservation zoned land and residential areas.
- Increasing canopy cover by providing new tree planting in proposed setbacks.
- Increasing shrub and groundcover planting to absorb urban heat and enhance the appearance of the site.

- Increasing biodiversity by promoting a variety of planting.
- Creating connections between interior and outdoor spaces to provide new opportunities for staff and visitors.

The proposed landscaping scheme includes the retention of existing trees (Corymbia citriodora and Eucalyptus microcoorys) along the northern part of the site, which will provide screening to the proposed substation, data centre building and generators.

Significant new and additional planting will also be provided within the site to supplement the retained vegetation. This will include 'buffer planting' along the eastern boundary, 'screen planting' along the western boundary; and 'bush regeneration' planting in the southern part of the site. Additional planting is also proposed along the northern site boundary to provide screening from Mars Road.

All large and medium canopy trees planted on site will be planted at 200L pot size and with a minimum height of 4m high at time of installation and therefore covered by Council's Landscaping, Street Trees and Tree Preservation policies.

A landscaped 'buffer strip' exceeding 4 metres in width will be provided along the eastern boundary of the site. 'Buffer planting' will contain a mix of tall planting and plants with foliage at ground level. The buffer planting will screen the proposed built form from views from the east, support local biodiversity and provide an appropriate transition to the adjoining environmental conservation land.

'Screen planting' is also proposed on the western boundary of the site at its interface with adjoining industrial land.

Large existing street planting will be retained along the site's northern boundary. The existing planting will be supplemented by additional planting around the proposed office building and to the front of Block A.

In total, the proposed development will achieve a canopy coverage of 24.7% (9,290m^2) and 25.1% (8,391m^2) of the site area will comprise deep soil, which exceeds the minimum requirement set out in the Lane Cove DCP. The proposed landscaping design has prioritised connecting deep soil zones to ensure healthy root communities, drainage networks and an ecologically rich ecosystem.

A high-quality outdoor amenity area will be provided within the site for staff and visitors to enjoy. It will comprise a series of terraced landscaped spaces between the building fronting Mars Road. The amenity areas include low seating walls and unfixed outdoor furniture surrounded by lush planting that offers shade and seasonal colour whilst assisting with increasing biodiversity at the site.

Buffer Areas

The layout of the proposed development has been designed to incorporate significant landscaped setbacks to the site's southern and eastern boundaries. These 'buffer areas' will incorporate significant tree planting and provide an appropriate transition to adjoining C2 Environmental Conservation land to the south and east of the site. In the south of the site, the proposed buffer area will vary from approximately 10m to 39.8m metres in depth. This area is not enclosed by the site's security fence, and will interface uninterrupted with the bushland in the lot to the south. Along the eastern boundary of the site, a landscaped buffer setback ranging from 4m – 10m in width is proposed.

All environmental weeds within the landscape buffer are to be removed as per the Biosecurity Act 2015 and Lane Cove Council DCP 2010 Section H.12.

6.5. Urban Heat

An urban heat island memo has been prepared and is provided at Appendix TT to demonstrate how the proposed development has been designed to mitigate the urban heat island effect. The following urban heat island mitigation strategies have been incorporated into the design of the development:

- Extensive planting has been proposed in all available open areas to enhance vegetation and increase tree canopy coverage across the site
  - Deep Soil Zone: Approximately 8,391m^2 (25.1%) of the site area
  - Tree Canopy Cover: Approximately 9,290m^2 (24.7%) of the site area

- The proposed project has aimed to minimise on-grade impermeable surfaces (such as concrete driveways) by integrating vegetated areas wherever feasible, contributing to reduced heat buildup. The egress and maintenance pathways around the site will primarily use permeable paving wherever feasible, with final locations to be confirmed during detailed design.
- Use of high albedo materials – such as cladding and paving with high Solar Reflectance Index (SRI) values. The specified façade elements, including metal cladding, precast concrete, and the roofing, which together form the bulk of the building, are proposed in a 'light grey' finish, contributing to a high SRI and thereby reducing urban heat island impacts.
- The retained planting and proposed new canopy aims to mitigate the urban heat island effect by maximising canopy and biomass as well as shading hardstand in particular to the street frontage. Driveway areas are proposed to be light coloured in-situ concrete to maximise reflectivity and minimise heat absorbance.

As a data centre, it is inherent that there is more heat to reject from the building compared to a typical commercial, residential, or light-industrial building, due to the demands of large-scale cooling. However, to minimise the impact of heat rejection on habitable rooms and open communal spaces, the following have been considered:

- **Evaporative Cooling Tower and Adiabatic Air-cooled Chillers:** The primary method of heat rejection is a hybrid system that prioritises water-based cooling via evaporative cooling towers and adiabatic air coolers. In this system, most of the thermal energy is used to vaporise water and saturate the air, rather than being transferred to the surrounding air. This significantly reduces convective heat release and helps mitigate the Urban Heat Island effect more effectively than conventional air-cooled systems.
- **Strategic Equipment Placing:** All heat-generating equipment related to ventilation and cooling is situated on a well-ventilated roof, further limiting heat buildup at the roof level. Cooling towers and adiabatic air-cooled chillers are positioned away from primary living areas, balconies, and communal zones. They are also positioned on rooftops with sufficient vertical clearance and setbacks to facilitate effective heat dissipation and prevent recirculation.
- **Data Centre Location:** The Data Centre is located on elevated ground, minimising heat island effects on nearby residences and communal open spaces located downhill.

The identified urban heat island mitigation measures provided assurance that the proposed development will effectively minimise the urban heat island impacts within the site.

6.6. Ecologically Sustainable Development

An Ecologically Sustainable Development (**ESD**) Report has been prepared by HDR and is provided at Appendix P. The ESD Report provides an overview of the ecologically sustainable design initiatives for consideration for the proposed development.

Power Usage Effectiveness

The proposed design is energy efficient. An average annual Power Usage Effectiveness (PUE) of 1.35 (using ASHRAE Recommended conditions) is targeted, which places the proposed development at NABERS Energy Stars rating between 4.5 and 5 stars, better than the SEARs requirement for the data centre to achieve a minimum NABERS Energy rating of 3 stars.

Water Use Effectiveness

Water Usage Effectiveness (WUE) is a measure of water efficiency for a data centre. The lower the WUE the more water efficient a data centre is. However, it is important to consider WUE in the context of PUE, for example an air sourced cooling system would have a WUE of zero but could be less energy efficient resulting in a higher PUE. The WUE has been calculated in accordance with "The Green Grid, Water Usage Effectiveness (WUEtm): A green Grid Data Centre Sustainability Metric" to be 0.97 L/kWhr.

The estimated annual water used on-site for operation of the new data centre is 510,009m^3.

Table 19 summarises the project's ESD Strategy by addressing the core initiatives incorporated into the design.

Table 19 ESD Initiatives

ESD Indicator	ESD Initiative
Indoor Air Quality	Ductwork will be protected during construction to minimise contamination with debris and moisture prior to occupation. To minimise indoor air contamination and promote occupant health, preference will be given to paints, adhesives, sealants and floor coverings which have low Volatile Organic Compound (VOC) emissions and engineered wood products with low formaldehyde emissions.
Biodiversity	Measures to avoid and minimise impacts are likely to include retaining native vegetation along the southern and eastern edges of the site, including areas that contain potential threatened species foraging habitat. Mitigation measures include salvage of plant material during pre-construction vegetation clearing works, including seed-bearing trees and shrubs and scalping of native soils for future landscaping and/or rehabilitation of disturbed ground.
Management practices	Construction contractors will be required to operate to Australian Environmental Standards. Building commissioning and tuning shall be undertaken in alignment with internationally recognised standards such as American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and Chartered Institution of Building Services Engineers (CIBSE). In the design finalisation phase, the proponent in collaboration with the builder and design team shall seek to implement an environmental management plan to address the scope of construction activities and to manage environmental impacts on site. The builder shall provide training on the building's sustainability targets, emphasising the crucial role of site workers in achieving sustainable construction outcomes
Waste	A Waste Management Plan has been prepared by SLR and submitted as part of the SSDA. It identifies how construction waste will be handled, processed and disposed of, or re-used or recycled in accordance with the SEARs and guided by Council's requirements.
Transport	The electrical infrastructure for car park design includes a 20% capacity allowance for future EV charging, in compliance with Section J of the National Construction Code (NCC).
Energy efficiency	The high efficiency design is achieved through a combination of the following: ▪ The proposed development shall be fully electric, incorporating renewable energy generation on-site through photovoltaic (PV) electricity generation systems. Plant space shall be allocated for future installation of battery storage systems. ▪ The proposed data hall will operate at elevated temperatures, maximising the efficiency of the cooling and heat rejection systems. ▪ High efficiency air cooling system with adiabatic assist and free cooling ▪ High efficiency chilled water-cooled system ▪ The early design phase proposed chillers exceed local code requirements in efficiency and feature low Global Warming Potential (GWP), reinforcing the project's sustainability goals ▪ Variable Speed Drives (VSDs) will be used on fans and pumps allowing turndown and energy savings at part load. ▪ All lighting to be LED ▪ Light pollution to be reduced through efficient lighting design and energy efficient technologies in accordance with NCC Section J requirements. ▪ High efficiency rate appliances and equipment ▪ Reduction of hot water energy consumption through installation of low flow fixtures, insulating hot water pipes. High efficiency electrical drives will be used on the various systems ▪ Sub-metering throughout the facility to help monitor and interpret energy consumption in operation and enable optimisation year-on-year ▪ The inclusion of a Building Monitoring System (BMS) integrates energy-smart control and monitoring, tracking energy consumption of the chiller, electric motors (via variable

ESD Indicator	ESD Initiative
	speed drives), and the mechanical services switchboards, with additional smart technology for other major equipment to be considered during detailed design for enhanced efficiency ▪ Envelope design using insulation, high performance selective glazing and external shading on appropriate elevations to achieve Section J envelope minimum compliance, balanced with allowing daylight into office spaces to reduce the reliance on artificial lighting
Water	▪ A 50kL rainwater tank has been proposed to collect rainwater to support landscape irrigation ▪ The development will use 100% of the collected rainwater on-site for irrigation, urinal and toilet flushing, ensuring efficient and sustainable water usage
Materials	The following measures can be taken to reduce construction-related emissions: ▪ Considering the asset's lifespan during the design phase, especially concerning decommissioning. Ensure that the design facilitates material recovery and reuse in construction processes. ▪ Analyse and enhance the design to pinpoint areas where material quantities can be reduced without compromising design performance. ▪ Identify materials that can serve as replacements for lower embodied carbon options. ▪ Precast concrete will be used to expedite construction and reduce the embodied carbon of the development. ▪ Preference will be given to materials responsibly sourced such as: a. Fabricated structural steelwork - Environmental Sustainability charter of the Australian Steel Institute (ASI) b. Steel - ISO 14001 / World Steel Associates Climate Action Programme c. Timber - Reused / FSC / AFC/ PEFC d. PVC - Best practice PVC e. Other – ISO 14001
Climate resilience	▪ All IT equipment and critical supporting services will be supported by uninterruptible power supplies (UPS) ▪ Water tanks will be designed to sustain water supply to the mechanical plant in the building, ensuring operational stability during utility water outages ▪ The buildings air conditioning systems will be designed based on extreme weather conditions, ensuring thermal comfort under adverse climate change scenarios

Greenhouse Gas Emissions

A Greenhouse gas emissions estimate has been provided in the ESD Report. This included an assessment of Scope 1 emissions (related to direct emissions from sources within the site boundary); Scope 2 emissions (resulting from the consumption of imported electricity form the local grid) and Scope 3 (indirect emissions attributable to losses through the electricity transmission and distribution network). Therefore, the sources of emissions estimated include:

- Imported electricity consumed in the operation of the facility, and
- On-site diesel fuel consumption consumed in the routine testing of backup diesel generators.

Emissions have been estimated on an annual basis under assumption of full and ultimate operational capacity over a 50-year period.

Data used for the estimation of Greenhouse Gases (GHG) emissions has been taken from the National Greenhouse Accounts Factors (2024). Emission for the generation of electricity is projected to decline with increased renewable energy supply up to the net zero carbon target of 2050. The proposed generators are capable of using biodiesel when a suitable supply becomes available in Sydney. Therefore, a conservative estimate places the transition from diesel to biodiesel by 2050.

Emissions arising from diesel fuel consumption

The source of Scope 1 emissions within the facility are the diesel generators which provide a backup source of electricity for the facility. The 49 generators will resulting in a total of 79.61 kL diesel fuel consumption for generator testing annually.

In the first year of operation, based on the predicted 2029 emissions factors, diesel consumption will result in an estimated 215.73 tonnes of CO_2.

Emissions arising from consumption of imported grid electricity

Scope 2 and 3 emissions are produced through the consumption of imported electricity from the national grid. Electrical energy consumption estimate is based on the maximum power usage for the facility operating at 100%, 365 days a year.

In the first year of operation based on the predicted 2029 emissions factors, Electricity consumption will result in 408,276 tonnes of CO_2.

Total emissions over the life of the data centre

Based on the conversion to biodiesel by 2050,

- The total GHG emissions for life of the asset is predicted to be 4,850,594 tonnes CO_2 equivalent.
- The total GHG emissions for the first year of operations is predicted to be 408,492 tonnes CO_2 equivalent.
- The total GHG emissions for the last year of operations is predicted to be 0 tonnes CO_2 equivalent.
- The average annual GHG emissions for the life of the asset is precited to be 97,012 CO2 equivalent.

The proposed development is predicted to contribute 408,492 tonnes CO2 equivalent to the 2029/2030 State and territory greenhouse gas inventories. The predicted GHG emissions will fall year on year in line with the decarbonisation of grid electricity. The proposed generators are designed to run on biodiesel once a reliable supply becomes available in Sydney. A conservative estimate for the transition from diesel to biodiesel is projected for 2050. Through the combination of a decarbonised grid and the use of biodiesel the proposed development is predicted to have 0 GHG contributions by 2050.

Ecologically Sustainable Development (ESD) Principles

The ESD principles defined in Clause 193 of the EP&A Regulation 2021 have been considered in the design and ongoing operation of the proposal.

The Precautionary Principle:

Risks posed by construction shall be addressed through the development of required management plans to identify potential hazards and aspects on the site and detail appropriate control measures to eliminate or reduce potential risks.

Environmental risk factors will be identified in an ecological assessment, to identify any landscape features and native fauna and flora, assess their extent, type and presence of any threatened species, and to make recommendations on measure to avoid and minimise impacts on biodiversity on the site.

The operation of a data centre has no inherent risk to the environment. However, datacentres do consume large amounts of electricity. Various sustainability measures covering aspects from energy and water consumption, and impact on environment will be targeted, including the optimisation of mechanical services design and requirement of energy efficient data centre equipment, which would minimise the impact of the development on the environment in the long term

Inter-generational equity:

The proposed development aims to reduce energy and water usage whilst minimising waste. The building systems are optimised so that energy and water consumption is minimised through various efficiency measures.

The building has been designed to achieve the requirements of Section J of the National Construction Code, including the minimum standards outlined in Part J4 (Building Fabric) of the NCC 2022 for conditioned areas. The design will enhance the façade, reduce thermal loads, and minimise carbon emissions, ensuring that the development results in an environmentally sustainable building with energy-efficient operations.

Waste produced during the construction and operational phases shall be diverted from landfill to be recycled. The measures outlined above ensures that the development minimises its impact on the health, diversity and productivity of the environment, thus maintaining it for the benefit of future generations.

Conservation of biological diversity and ecological integrity:

The Biodiversity Development Assessment Report (BDAR) prepared by SLR has been prepared that states that the proposal will not result in serious impacts to the local biodiversity on or surrounding the site.

Improved valuation, pricing and incentive mechanisms:

A Waste Management Plan will be implemented to establish recycling and landfill waste streams during the construction phase of the proposed development.

In addition, measures to reduce water and electricity consumption including procuring high-efficiency cooling systems, energy efficient IT equipment, rainwater capture and water reuse in the proposed design reduces consumption of resources by the development.

The project's environmental objectives are by first implemented via passive design measures in the building fabric, including high performance glazing, wall insulation, and roof insulation. Subsequently, more cost-effective building systems have also been considered.

6.6.1. Mitigation Measures

The proposal has demonstrated that it meets the relevant sustainability requirements of SEPP (Sustainable Buildings) 2021 and will utilise best practice methods in relation to operational sustainability.

Whilst no specific additional mitigation measures are recommended, the key ESD initiatives detailed in the ESD report shall be considered for adoption during the detailed design and ongoing operational phases of the project.

6.7. Biodiversity

A Biodiversity Assessment Report (BDAR) has been prepared by SLR and is enclosed in Appendix S. The BDAR assesses the anticipated impacts of the proposed development on biodiversity in accordance with the Biodiversity Conservation Act 2016 (BC Act) and the Biodiversity Assessment Method (2020) as required by the SEARs.

6.7.1. Existing Environment

The site contains 0.8 hectares of native vegetation, which equates to approximately 25% of the overall site area. The native vegetation predominately comprises Plant Community Type (PCT) 3592 Sydney Coastal Enriched Sandstone Forest. There is approximately 0.45ha of PCT 3592 within the site.

The southern portion of the site contains steep vegetated land. Native vegetation in this area is dominated by Red Mahogany and Sydney Turpentine in the canopy. The mid-layer is dense with weeds (mainly Privet and Lantana) and there is a ground layer of sparse native ferns.

The vegetation along the eastern boundary of the site is mixed planted/native. The presence of naturally occurring vegetation is suggested by a few isolated occurrences of Grey Ironbark, Broad-leaved Mahogany, Smooth-barked Apple, Sydney Peppermint, Mountain Cedar Wattle, Sweet Pittosporum, Bleeding Heart and ferns, which correlate to PCT 3592 Sydney Coastal Enriched Sandstone Forest.

The PCT 3592 within the site is in a 'low condition' due to the high level of disturbance to the shrub and ground layers. PCT 3592 does not represent a threatened ecological community (TEC), or ecological

community (EC) listed under the Commonwealth *Environment Protection Biodiversity Conservation Act 1999.*

The areas of native vegetation that provide potential habitat for threatened flora species are highly degraded, particularly in the understorey and ground layers, being previously landscaped and well maintained, or weedy. Accordingly, there is no suitable habitat on the site for any threatened species of flora. No candidate flora (species credit) species have been assessed.

One threatened species of microchiropteran Bat (Large-eared Pied Bat) has been assumed present on the site. The site contains potential foraging habitat for this candidate species. There is currently no evidence of microbats using the human-made structure on the site. However, according to the Threatened Biodiversity Data Collection (**TBDC**) it's possible that they could utilise buildings and structures for roosting and breeding from time to time (although natural features such as caves and tree hollows are the primary breeding habitats).

There is currently no evidence of threatened species using the areas of rocks and non-native vegetation within the site. There are several species which could forage/shelter in these features from time to time.

There is currently no evidence of threatened species using the areas of native vegetation in the immediate vicinity of the site, several species may forage or shelter in these areas from time to time and could rely on habitat connectivity along the eastern boundary of the site. There are many BioNet records of the Powerful Owl and Grey-headed flying-fox nearby.

6.7.2. Potential Impacts

Direct Impacts

After steps have been taken to avoid and minimise impacts, the proposed development will result in residual direct impacts during construction to:

- Clearing of PCT3592 in low condition
- Clearance of potential habitat for large-eared pied bat

The vegetation integrity score for residual direct impacts on native vegetation, TECs, threatened species and their habitat that were identified on the site has reduced by 28.1.

Indirect Impacts

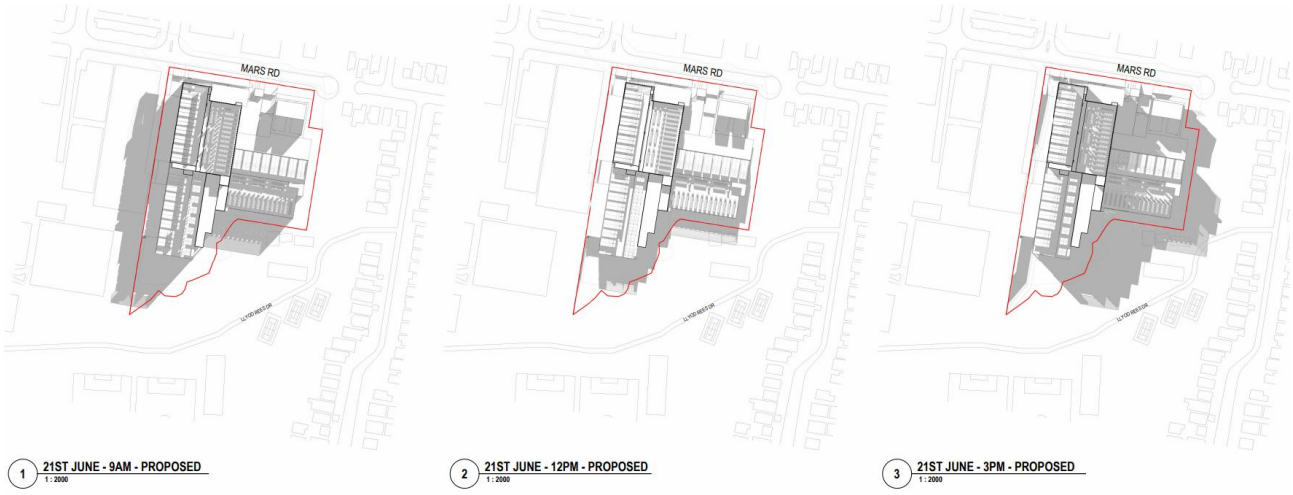
During construction of the proposed development, the following residual indirect impacts are likely to occur on native vegetation, threatened entities and their habitat beyond the development footprint:

- Inadvertent impacts on adjacent habitat or vegetation
- Reduced viability of adjacent habitat due to edge effects
- Reduced viability of adjacent habitat due to noise, dust or light spill
- Transportation of weeds and pathogens from the site adjacent to vegetation
- Rubbish dumping.

These indirect impacts are considered short-term low likelihood events that may reduce the viability or condition of areas of retained native vegetation and habitats if appropriate mitigation measures are not implemented.

Based on a review of the overshadowing diagrams, the limited extent of additional shading, and the urbanised character of the site and its surrounds, the anticipated impacts to adjacent native vegetation are considered minor. The vegetation community present (PCT 3592 – Sydney Coastal Enriched Sandstone Forest) typically comprises a mix of sclerophyllous and mesic species, including canopy dominants such as *Angophora costata*, *Corymbia gummifera*, *Eucalyptus piperita* and *Eucalyptus pilularis*, with a diverse understorey of ferns, vines, and shade-tolerant shrubs. The occurrence of species such as *Pittosporum undulatum*, *Homalanthus populifolius*, *Asplenium australasicum*, and *Sticherus flabellatus* within the subject land suggests a degree of ecological resilience to incremental changes in light availability. These species are well-adapted to the sheltered microclimates and enriched sandstone-derived soils typical of this PCT. As such, the ecological function, species composition, and regenerative capacity of adjacent remnant vegetation are unlikely to be significantly compromised.

Figure 39 Overshadowing Impact – 21 June



Source: HDR, 2025

Prescribed Impacts

Table 20 provides details on the prescribed impacts of the proposed development.

Table 20 Prescribed impacts

Impact	Nature	Extent	Duration	Consequences
Karst, Caves, Crevices, Cliffs, Rocks or Other Geological Features of Significance	Construction activities may further reduce the viability of rock habitats for threatened microbat species such as Large-eared Pied Bat, Large Bent-winged Bat and Little Bent-winged Bat	Rock features include a small length of exposed rock cutting and artificial rock gabion construction along the southwest boundary, as well as boulders in bushland to the south of the proposed development area.	Short-term disruption of potential bat roosting habitat during construction. It is not expected that a long-term impact would occur.	Temporary loss of bat roosting habitat.
Human-made Structures	Removal of several buildings and structures across the subject land could affect threatened micro-bats, being the Large Bent-winged Bat and Little Bent-winged Bat (if present).	Human-made structures include four existing buildings primarily composed of concrete and glass materials.	Short-term loss of potential bat roosting habitat. It is not expected that a long-term impact would occur unless bats were killed during demolition	Bats killed during demolition.
Non-native Vegetation	Removal of non-native vegetation could affect foraging and roosting behaviours of the ecosystem credit species which could forage/perch in small patches of non-native vegetation across the subject land (such as Powerful Owl, White-bellied Sea-Eagle, Grey-headed Flying Fox, Eastern Osprey, microbats).	Non-native vegetation represents various patches of planted vegetation and weeds that occur across approximately 0.4ha of the subject land.	Short term during construction.	Removal of potential foraging and perching habitats could result in overall reduction in available foraging habitat for a species. There are many other areas of non-native vegetation that represent potential foraging and roosting habitat for threatened fauna species in the locality. As such, the consequence for local threatened fauna

Impact	Nature	Extent	Duration	Consequences
				species of removing non-native vegetation within the subject land is minor
Habitat Connectivity	Habitat connectivity along the eastern boundary of the subject land extending across adjoining land approximately 50m to the east will be slightly reduced due to proposed tree removals along the eastern edge of the subject land.	The area of reduced habitat connectivity is 50m by 10m and is shown in Figure 12 (location along the eastern boundary where the proposed development impacts PCT 3592).	Short term during construction and long-term during operation.	Reduced habitat connectivity for threatened mammals may lead to decreased foraging and breeding success. However, the associated impacts are considered minor due to the small area affected and the presence of a remaining 50- metre-wide band of vegetated canopy to the east.
Waterbodies, Water Quality and Hydrological Processes	Impacts to water bodies, water quality and hydrological processes could affect the condition of receiving waters and adjoining native vegetation, as well as watering habitat for threatened species of fauna.	The extent of retained native vegetation which is down slope of the proposed development is approximately 1 hectare. No waterbodies are located within or adjacent to the subject land.	Short term during construction and long-term during operation	Impacts on water bodies, water quality and hydrological processes could lead to erosion, sedimentation, pollution, increased phosphorous in soils, weed invasion and changes to native species composition. Mitigation measures are proposed and associated impacts are considered to minor, especially when considering that the subject land currently has significant areas of hard surfaces that have already altered hydrological processes across the subject land.

All direct, indirect, prescribed or other residual biodiversity impacts are considered to be minor in nature and/or will be sufficiently mitigated or managed by implementing measures identified in **Section 6.7.3**.

There are no serious or irreversible impacts resulting from the proposed development.

Summary

Due to the impact of the proposed development on PCT Sydney Coastal Enriched Sandstone Forest, one (1) ecosystem offset credit is required. Two (2) ecosystem offset credits are required to address the impact of the proposed development on the large-eared pied bat.

6.7.3. Mitigation Measures

Table 21 provides details on the proposed mitigation measures to address the proposed development's impact during construction on flora and fauna. Implementation of the mitigation measures will ensure that impacts on native flora and fauna are mitigated to the fullest extent possible.

Table 21 Biodiversity Mitigation Measures

Mitigation measure	Action	Monitoring and evaluation strategy	Performance criteria	Adaptive management threshold	Adaptive management response
Instigating Clearing Protocols	Ecological pre-clearance survey	Once before construction; report outcomes	No fauna deaths during clearing	Breeding evidence found	Delay clearing; implement fauna rescue plan
	Monitor and rescue fauna	Daily during clearing; report outcomes	No fauna deaths	Wildlife injury or displacement	Relocate/rehabilitate fauna; dismantle trees sectionally
Reduce Lighting Spil	Use directional lighting; switch off unnecessary lights	Evening inspections; postconstruction report	No visible light spill; no disruption to nocturnal fauna	Light spill into adjoining vegetation	Adjust lighting setup; continue monitoring
Reduce Dust	Enforce speed limits; use water tankers on unpaved roads; cover or treat soil stockpiles	Inspect vegetation; postconstruction report	No visible dust on vegetation	Dust observed on vegetation	Enhance dust control measures and continue monitoring
Temporary Fencing	Install chain mesh fencing around retained vegetation	Inspect and photograph pre- and during construction	Fencing remains intact; no accidental clearing	Fencing failure or clearing occurs	Repair fencing; rehabilitate disturbed area
Hygiene Protocols	Clean vehicles, equipment, footwear, and clothing before site entry	6-monthly weed surveys; post-construction report	No additional weed encroachment into retained vegetation	Weeds detected in retained vegetation	Construction team to remove weeds
	Dispose of weeds appropriately during construction	Site inspections every 6- months; outcomes in post clearing report	No weeds on site	Weeds detected on-site	Construction team to remove weeds
Environmental Site Briefings	Highlight sensitive areas in all briefings	Inspect retained vegetation every 6 months during construction; report in post-clearing report	No staff-related damage to retained vegetation	Signs of staff-related damage (e.g. dumping, stockpiling)	Rehabilitate areas; reinforce briefings; add signage if needed
Management of Retained Native Vegetation Habitat	Rehabilitation survey and implementation	Ecologist to inspect retained vegetation during and after construction, mapping and	Minimal change in vegetation condition, no disturbance recorded	Reduction in condition detected	Intensify rehabilitation and maintenance activities

Mitigation measure	Action	Monitoring and evaluation strategy	Performance criteria	Adaptive management threshold	Adaptive management response
		photographing any disturbances for rehabilitation			
Clearing Protocols	Ecologist to inspect rock wall, structures and vegetation 2 days before demolition	One-off survey of impact areas; report outcomes	No deaths of threatened species	No deaths of threatened species	Suspend works, implement fauna rescue or relocation, and adjust timing or methods
Sediment Barriers or Ponds	Install and maintain sediment controls before and during works	Inspect weekly and after rain	No visible sediment	Evidence of sedimentation and erosion	Enhance sediment controls; review site drainage

6.8. Air Quality

An Air Quality Impact Assessment (AQIA) has been prepared by SLR and is provided at Appendix T. The AQIA undertakes an assessment of the risks to local air quality associated with the construction and operation of the proposed development. There are residential uses located to the east of the site, with the closest residential receivers being 50m east of the site. Additional residential areas are located approximately 60m to the east and 350m to the south.

6.8.1. Existing Environment

The Site is zoned E4 – General Industrial, indicating its intended use for industrial purposes. It is bordered by several different land uses, including RE1 – Public Recreation directly to the south and R2 –Low Density Residential to the east, with C2 – Environmental Conservation and SP2 – Infrastructure zones nearby. The presence of RE1 and residential zones in close proximity suggests that careful consideration must be given to the potential impacts of industrial activities, on adjacent sensitive receptors.

Background Air Quality

The AQIA provides an assessment of the background air quality based on the Macquarie Park Air Quality Monitoring Station (AQMS). The Macquarie Park AQMS monitors the concentration levels of the following air pollutants:

- Oxides of nitrogen (NO, NO_2, and NO_x)
- Carbon monoxide (CO)
- Sulfur dioxide (SO_2)
- Fine particles ($PM_{2.5}$ and PM_{10})

The monitoring data for NO_2, CO and SO_2 indicate that the respective air quality criteria (short term and long term) for these pollutants are easily achieved at the Macquarie Park AQMS. Other points noted in the AQIA are:

- Exceedances of the 24-hour average PM_{10} criterion were recorded by the Macquarie Park AQMS in all years between 2019 and 2023, except in 2021 and 2022.
- Exceedances of the 24-hour average $PM_{2.5}$ criterion were recorded in all years between 2019 and 2023 except 2022.

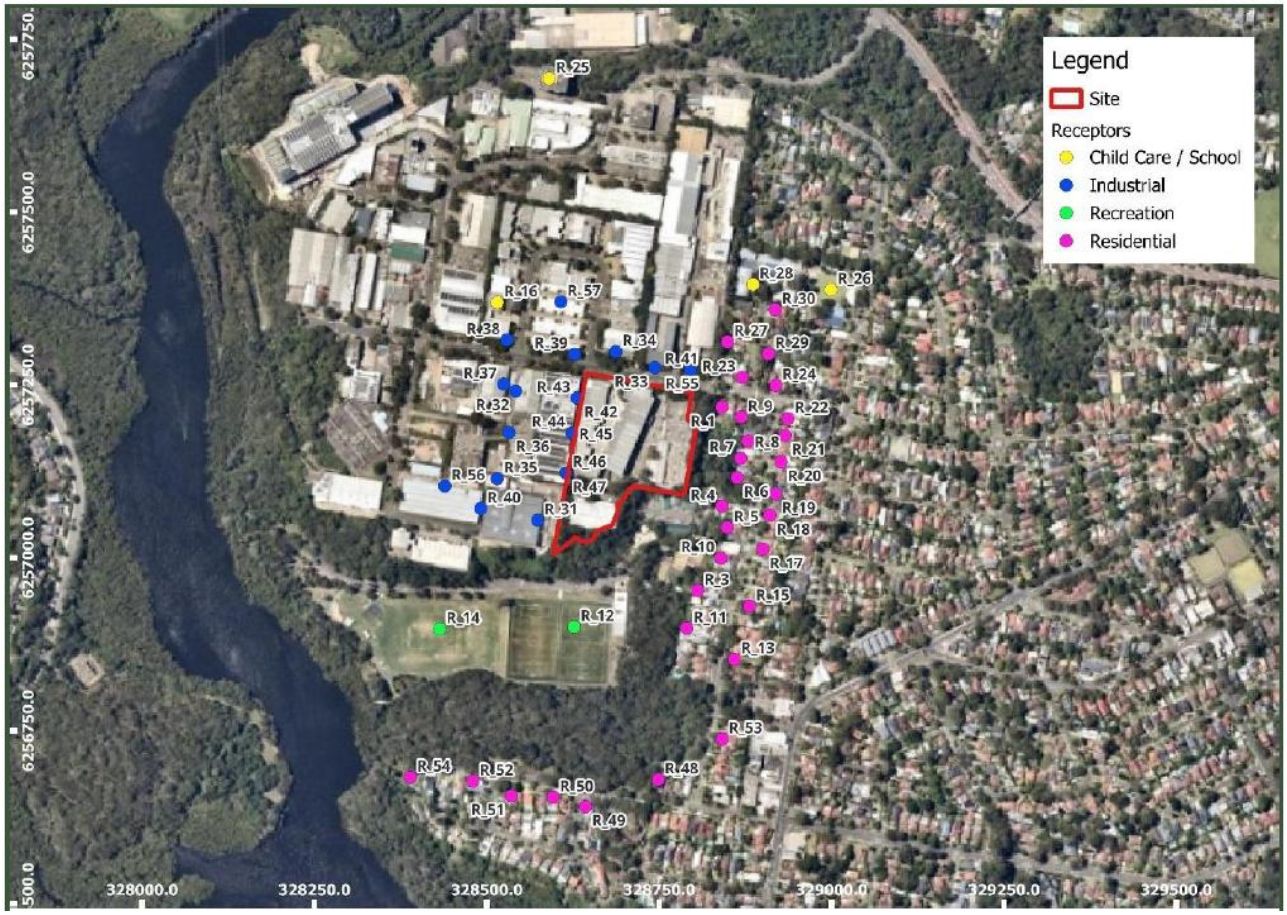
The Macquarie Park AQMS data shows that background particulate levels can be elevated at times. As discussed further below, the AQIS proposes mitigation measures to be implemented during construction and operation so that the activities do not contribute to any additional exceedances of air quality criteria in the surrounding area.

6.8.2. Potential Impacts

Sensitive receptors

The AQIA identifies the following sensitive receptors (Figure 40) in proximity to the site that may be impacted by the proposal in regard to air quality. Residential uses are considered high sensitivity receptors and commercial uses are considered medium sensitivity receptors.

Figure 40 AQIA Sensitive Receptors



Source: SLR, 2025

Construction phase impacts

The potential for off-site air quality impacts during the construction stage of the project was assessed using a qualitative risk-based approach. As set out in the AQIA, potential impacts of dust emissions associated with proposed demolition and construction activities at the proposal site has been determined based on the methodology outlined in the Institute of Air Quality Management (UK) (IAQM) document, “Assessment of dust from demolition and construction” (Holman et al 2014).

Based on the IAQM, the AQIA uses a four-step process for assessing dust impacts from construction activities:

- **Step 1:** Screening based on distance to the nearest sensitive receptor; whereby the sensitivity to dust deposition and human health impacts of the identified sensitive receptors is determined.
- **Step 2:** Assess risk of dust effects from activities based on:
  - the scale and nature of the works, which determines the potential dust emission magnitude; and

  - the sensitivity of the area surrounding dust-generating activities.

- **Step 3:** Determine site-specific mitigation for remaining activities with greater than negligible effects.
- **Step 4:** Assess significance of remaining activities after management measures have been considered.

The risk assessment indicates that there is a ***medium*** risk of adverse dust soiling and ***low*** risk of adverse health effects occurring at the off-site sensitive receivers occurring at the off-site sensitive receptor locations if no mitigation measures were to be applied to control emissions during construction works.

A reappraisal of the predicted unmitigated air quality impacts on receptors has been performed to demonstrate the minimisation of risks associated with the use of mitigation strategies. When the mitigation measures identified are implemented, dust deposition and human health impacts for demolition, earthworks, construction trackout phases are anticipated to be ***negligible***. On this basis, and subject to adoption of the recommended mitigation measures, the construction air quality impacts are considered to be acceptable.

Operational phase impacts

The potential for off-site air quality impacts during the operational stage of the proposed development were conservatively assessed quantitatively through the use of dispersion modelling techniques in general accordance with the approved methods. The primary source of potential emissions during the operational phase will be standby generators which are included as a back-up power supply to ensure continuous power capacity to critical data infrastructure in the event of a failure of the primary or secondary power supply to the site. The proposed data centre facility is a mission critical facility that if not able to operate 100% of the time, could lead to catastrophic impacts for society, organisations, and businesses that it serves. In response to this:

- standby generators are required to provide power in the event of an unexpected interruption of mains grid electricity for more than a few minutes.
- during the operational phase, the generators would be a source of products of combustion while undergoing scheduled testing or when in use in the event of a power failure. In general, power interruptions may last from a few seconds to a few hours and therefore even when required, the generators would only operate for a relatively short time.

Every standby generator will be tested every quarter of the year (Q1, Q2, Q3, and Q4). Only one generator will be tested at any one time, and all generator testing will be conducted between 07:00 am and 5:00 pm, Monday to Friday. For Q1, Q2 and Q3 every generator set will operate for 40 minutes (inclusive of 10 minutes of cooldown after testing). This equates to a total of 5,880 minutes of generator operation time for Q1, Q2 and Q3 combined. For Q4, every generator will operate for 70 minutes (inclusive of 10 minutes of cooldown after testing) which equates to 3,430 minutes of generator operation. The total annual generator operating hours over the year due to generator testing is estimated to be 9,310 min or 155.2 hours.

In order to assess the worst-case generator testing conditions, the modelling undertaken for the maintenance scenario conservatively assumes that 1 generator runs continuously between 07:00 am and 5:00 pm.

A range of different back-up generators and stack arrangements are proposed to be used on site. Accordingly, the modelling for the testing regime considers four scenarios:

- Building A: 26.5m stack serving a 2.8MW generator on Building A
- Building B1: 20m stack serving a 2.8 MW generator on Building B
- Building B2: 20m stack serving a 2.2 MW generator on Building B
- Building C: 14m stack serving a 2.8MW generator on Building A.

The modelling shows that:

- Exceedances of the particulates matters criteria have previously been recorded by the Macquarie Park Air Quality Monitoring Station. Notwithstanding, the predicted incremental increase of PM_{10} and $PM_{2.5}$ arising from the proposed testing regime does not result in additional exceedances of the criteria.
- The predicted cumulative maximum 1-hour average and annual average Nitrogen Dioxide (NO_2) concentrations are below the relevant ambient air quality criteria at all receptor locations modelled.

- Given the insignificant incremental increase of CO predicted at the identified receptors and the existing low concentrations of CO (both relative to the criteria), exceedances of the relevant criteria due to the operation of the Site are not predicted.
- Given the insignificant incremental increase of SO2 predicted at the identified receptors and the existing low concentrations of SO2 (both relative to the criteria), exceedances of the relevant criteria due to the operation of the Site are not predicted.
- The testing regime will not result in an exceedance of the 1-hour average Polycyclic aromatic hydrocarbons (PAH) concentration beyond the Site boundary.
- The testing regime will not result in an exceedance of the 1-hour average benzene concentration beyond the Site boundary.

Overall, the dispersion modelling for the testing regime demonstrates that the proposed testing regime will not result in any exceedances of the relevant ambient air quality criteria.

Modelling of 'emergency conditions', in which the power supply to the site has been disrupted and the back-up generators are in use, has also been undertaken. To realistically assess the particulates created by the emergency conditions, the AQIA conservatively assumes that the emergency operation occurs for one hour of each day in the year.

The modelling indicates that the incremental increase in particulate matter at the identified receptors as a result of the emergency conditions will result in additional exceedances of the PM_{10} criteria. These exceedances can be attributed to high background $PM_{2.5}$ concentrations recorded at the Macquarie Park Air Quality Monitoring Station for the modelled year. Additional exceedances of the PM2.5 24-hour criterion only arise if all generators are operating for 24 hours.

Additionally, the modelling of the emergency conditions show that:

- Predicted cumulative maximum 1-hour NO_2 concentrations could potentially exceed the relevant criteria at four of the 57 receptors modelled. For the worst impacted receptor, a total of two exceedances were predicted out of the 8,760 hours modelled.
- Exceedances of the relevant criteria for CO are not anticipated from the emergency conditions scenario.
- Exceedances of the relevant criteria for SO_2 are not anticipated from the emergency conditions scenario.
- The addition of incremental impacts to the background concentration of PAHs will not cause an exceedance of the relevant criteria.
- The addition of incremental impacts to the background concentration of Benzene will not cause an exceedance of the relevant criteria.

When assessed conservatively assuming that emergency operation occurs every hour of the day, a single exceedance of the 1-hour average NO2 criterion was predicted for four of the 57 receptors modelled. However, applying a more realistic situation of one emergency operation event lasting an hour and occurring at a frequency of once per year (rather than every day as modelled), the likelihood of an exceedance occurring at the worst impacted receptor is equivalent to one exceedance every 4,380 years.

The likelihood of power interruptions occurring (necessitating the use of the back-up generators) has previously been assessed by SLR for a similar facility in Eastern Creek. That study observed that:

- There were two power interruptions in the past ten years for that site.
- Each interruption consisted of the loss of one of four feeder supplies.
- The two interruptions lasted for 13 minutes and 21 minutes respectively.
- The loss of one feeder to that site did not require all generators to be used to provide emergency power.

Assuming similar network performance supplying the proposal, it can be concluded that the actual likelihood of an exceedance of the air quality criteria at nearby sensitive receptors due to the emergency operation of the proposed development is negligible.

Overall, it is not anticipated that any impacts upon human health or amenity values would be experienced during the operational phase of the proposed development. Accordingly, air quality monitoring and mitigation measures (except for neighbour notification during emergency operations) is not necessary.

6.8.3. Cumulative Impact Assessment

Table 22 provides a cumulative impact assessment of the proposed development with surrounding local developments.

Table 22 Cumulative Impact Assessment – Air Quality

Project	Distance to Site	Project Status	Potential overlap between impact of project on assessment matter	Potential cumulative risk
Airtrunk Syd2 (1 Sirius Rd, Lane Cove West)	500m	Data centre development comprising 29,000m² of technical data hall area, 4,000 m² of office and storage space, and 24 data halls	There is a potential for cumulative impacts between the Airtrunk Data Centre and the Project, especially in the emergency scenario. This scenario will eventuate in case there is a grid outage in the area, which may impact the Airtrunk Data Centre and the Project at the same time.	The project may result in significant cumulative air quality impacts under emergency conditions.
Ingredion ANZ (170 Epping Road, Lane Cove)	1,500m	Food products supplier	It's a grain mill product manufacturing facility, but according to their NPI report, it is a source of combustion gas emissions.	The project may result in significant cumulative air quality impacts under emergency conditions
Apollo Place Data Centre (1 Apollo Place, Lane Cove West)	400m	The approved data centre development comprises a four-storey facility on a site of approximately 0.55 ha, with a total installed capacity of 45 MW.	There is a potential for cumulative impacts between the Apollo Place Data Centre and the Project, particularly in emergency scenarios. This scenario will eventuate in case there is a grid outage in the area, which may impact the Apollo Place Data Centre and the Project at the same time.	The project may result in significant cumulative air quality impacts under emergency conditions.

6.8.4. Mitigation Measures

The following mitigation measures will be undertaken to minimise the air quality impacts of the proposed development. Not all these measures would be practicable or relevant for the Site, hence a detailed review of the recommendations should be performed as part of the development of the Construction Environmental Management Plan (**CEMP**) and the most appropriate measures adopted.

Construction phase

Mitigation measures for the construction phase of the development are detailed in section 7.1 of the AQIA and are summarised below.

Mitigation Measures specific to Demolition:

- Soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust).
- Ensure effective water suppression is used during demolition operations. Handheld sprays are more effective than hoses attached to equipment as the water can be directed to where it is needed. In addition, high volume water suppression systems, manually controlled, can produce fine water droplets that effectively bring the dust particles to the ground.
- Avoid explosive blasting, using appropriate manual or mechanical alternatives.
- Bag and remove any biological debris or damp down such material before demolition.

Mitigation Measures specific to Earthworks:

- Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.
- Use hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable.
- Only remove the cover in small areas during work and not all at once.

Mitigation Measures specific to Construction:

- Avoid scabbling (roughening of concrete surfaces) if possible.
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
- For smaller supplies of fine power materials ensure bags are sealed after use and stored appropriately to prevent dust.

Mitigation Measures specific to Trackout:

- Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use.
- Avoid dry sweeping of large areas.
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.
- Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.
- Record all inspections of haul routes and any subsequent action in a site log book.

Daily Environmental Inspections

These daily environmental inspections will include, but not be limited to:

- Visual inspection of any airborne dust being generated on-site or being observed blowing off-site
- Ensuring roads leaving the Site are free of soil, and that there is no observable soil tracking onto the road network

- Inspection of the erosion and sediment control systems for silt build-up
- Inspection of stockpiles and waste storage areas to ensure no significant wind erosion is observable.

The implementation of the mitigation measures will result in negligible dust deposition and human health impacts. On this basis, the construction air quality impacts are considered to be acceptable.

Operational phase

The following mitigation measures are proposed during the operational phase of the proposed development:

- Neighbouring properties will be notified in the event that emergency operation of all of the generators is required.

On this basis, the air quality impacts of the proposed development are acceptable.

6.9. Noise and Vibration

A noise and vibration impact assessment has been prepared by SLR. The assessment details the anticipated construction and operational noise and vibration impacts of the proposed development and is enclosed in **Appendix U**.

6.9.1. Existing Environment

Residential areas are located adjacent to the site to the northeast, east and southeast. Distant residential is also located to the south (across Blackman Park), and the west and southwest (west of Lane Cove River). Blackman Park is located adjacent to the site to the south which consists primarily of active recreation areas (playing fields, skatepark, tennis courts, etc). Isolated childcare, school and places of worship receivers are distant to the northwest, northeast and southeast, respectively. Industrial uses are located to the west and north of the site within the Lane Cove West Industrial Area.

Figure 41 identifies the surrounding context, sensitive receivers and noise monitoring locations.

Unattended noise monitoring was completed in February, March, April, November and December 2025. The measured noise levels have been used to determine the existing noise environment and to set the criteria used to assess the potential impacts from the proposal.

Short-term attended noise monitoring was also completed at each monitoring location during the unattended monitoring surveys. Additional attended noise monitoring during the night-time was undertaken at several locations adjacent to receivers to the east and south of the site in September 2025 to provide an indication of the various noise sources during the night-time. Further attended noise monitoring in NCA02 was undertaken during the unattended monitoring survey at L02, to compare background noise levels at various locations within NCA02. The attended noise monitoring determined that the primary sources of noise during the day at the identified noise monitoring locations was for the:

- LA_{max} – cars, trucks or motorbike close to the noise monitoring location
- $LA_{eq\ (15\ mins)}$ – birds, local traffic and aircraft flyovers
- $LA_{90\ (15\ mins)}$ – local and distant traffic as well as birds.

Figure 41 Surrounding sensitive receivers and noise monitoring locations

Source: SLR, 2026

6.9.2. Potential Impacts

The following assessment criteria were used to identify and manage potential impacts of the proposed development:

- NSW *Interim Construction Noise Guidelines* (**ICNG**) – for assessing and managing impacts from construction on residences and other sensitive land uses.
- Vibration criteria divided into three categories: human comfort, building contents, structural or cosmetic damage – for assessing and mitigating any vibration impacts from construction works.
- NSW Noise Policy for Industry (**NPfI**) – requirements for the assessment and management of operational noise from industry in NSW.

Construction Noise and Vibration Assessment

From the assessment of construction noise and vibration from the site, the following potential impacts have been identified to be mitigated. The assessment uses 'realistic worst-case' scenarios to determine the impacts from the noisiest 15-minute period that are likely to occur for each work scenario, as required by the ICNG. These scenarios are discussed in Table 23.

Table 23 Construction scenarios

Scenario	Works Activity	Equipment	Likely duration
W.01	Vegetation clearing	Chainsaw, chipper, excavator, front end loader, dump truck, water truck	1 month
W.02	Demolition	Rockbreaker, dozer, front end loader, dump truck, water truck	6 months

Scenario	Works Activity	Equipment	Likely duration
W.03	Earthworks	Dozer, excavator, front end loader, vibratory roller, dump truck, water truck	3 months
W.04	Excavation of hard rock	Rockbreaker, excavator, dozer, front end loader, dump truck, water truck	1 month
W.05	Construction of pads and hardstands	Concrete pump, concrete truck/agitator, concrete vibrator	6 months
W.06	Construction of structures and equipment installation	Elevated working platform, flatbed truck, hand tools, mobile crane	12 months

The impacts represent construction noise levels without mitigation applied.

The anticipated construction hours are as follows:

- 7.00 am to 6.00pm, Mondays to Fridays,
- 8.00am to 1.00pm on Saturdays, and
- At no time on Sundays or Public Holidays.

The worst-case predictions show:

- W.01 (vegetation clearing), W.02 (demolition), W.03 (earthworks), W.04 (excavation of hard rock):
  - Construction noise levels are predicted to result in moderate to high exceedances of the NMLs at the nearest residential receivers in NCA01 to NCA04 when works are closest to the receivers.
  - Exceedances would typically be minor to moderate when works are further across the site from the nearest residential receivers, and at residential receivers further back from the first row of buildings.
  - Noise levels at the nearest residential receivers in NCA01 to NCA03 are predicted to exceed the Highly Noise Affected NML when the noisiest equipment is working close to these receivers.
  - No exceedances of the NMLs are predicted at NCA05 residential receivers or childcare centres, with the exception of a very minor exceedance at childcare during W.04 (excavation of hard rock).
  - Noise levels at the Community Nursery in NCA02 are predicted to result in minor to moderate exceedances when works are closest to that receiver
  - Noise levels at the nearest school classrooms, place of worship and active recreation are predicted to results in minor exceedances when works are closest to those receivers.
  - Noise levels at the nearest industrial receiver are predicted to result in minor to moderate exceedances when works are closest to the most-affected receivers.
- W.05 (construction of pads and hardstands) and W.06 (construction of structures and equipment installation):
  - Construction noise levels are predicted to result in low to moderate exceedances of the NMLs at the nearest residential receivers in NCA01 to NCA04 when works are closest to the receivers.
  - Exceedances would typically be minor or below the NMLs when works are further across the site from the nearest residential receivers, and at residential receivers further back from the first row of buildings.
  - Exceedances at the Community Nursery in NCA02 would typically be minor when works are closest to that receiver.
  - No exceedances of the NMLs are predicted at NCA05 residential receivers, childcare centres, school classrooms, place of worship and active recreation.

  - Noise levels at the nearest industrial receiver are predicted to result in minor exceedances when works are closest to the most-affected receivers

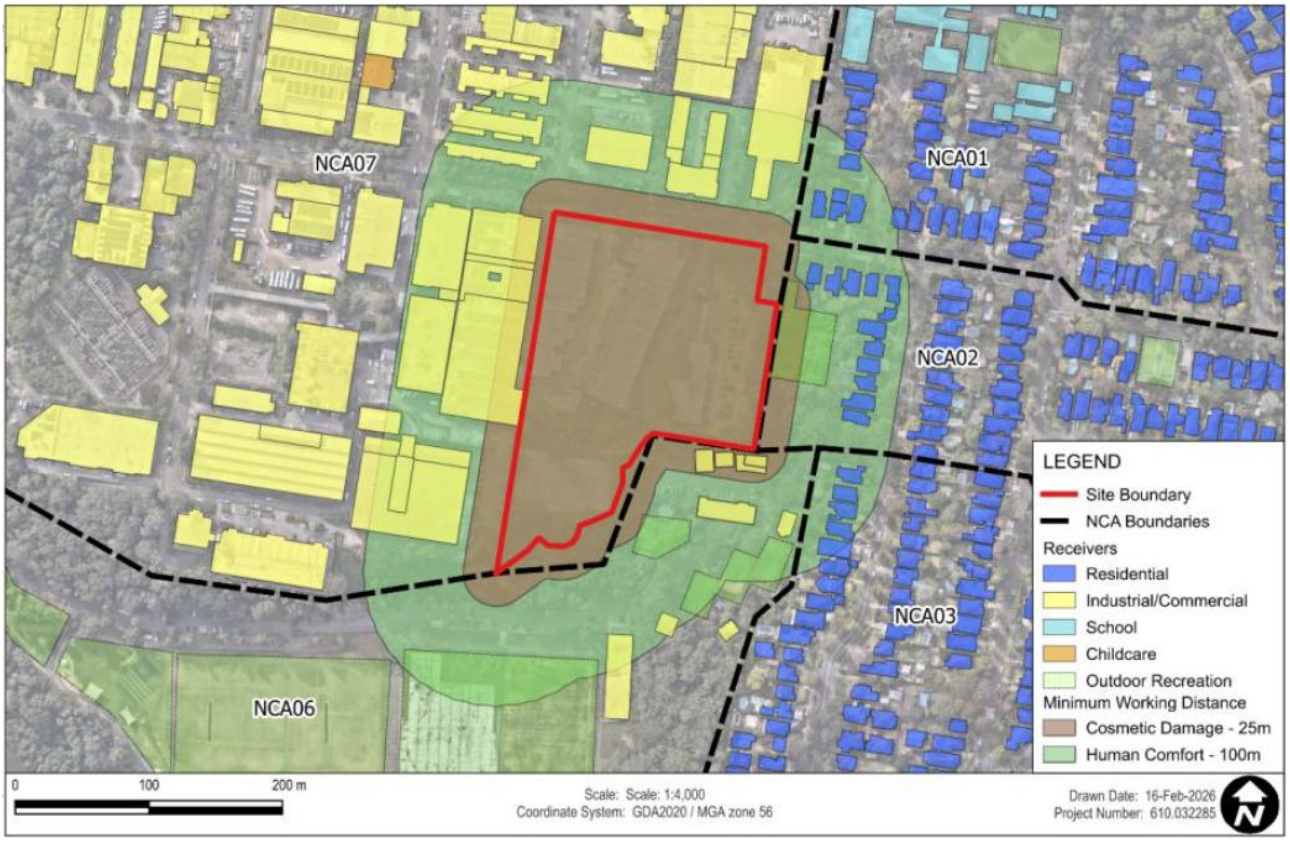
- The highest impacts are predicted during ‘vegetation clearing’ when a chainsaw/chipper is in use, and during ‘demolition’ and ‘excavation of hard rock’ when a rockbreaker is in use.

The impacts identified are only expected to occur when noisy work is being completed close to site boundaries, relative to each receiver. When work is further from the receiver, or when less noise-intensive equipment is being used, the noise levels and potential impacts would be lower. Reasonable and feasible construction noise mitigation measures (identified below) should be applied where exceedances of the NMLs are predicted.

Figure 42 shows the nearest industrial/commercial buildings to the west, the Council depot to the south-east and Community Nursery to the east are within the minimum working distance when vibratory rollers are in use at the nearest boundaries of the construction. The nearest residence to the east (10 Banksia Close) and the skatepark to the south are also close to being within the minimum working distance.

Figure 42 also shows that the nearest industrial/commercial, residential and outdoor recreation receivers surrounding the site are within the human comfort minimum working distance. Occupants of these buildings/areas may be able to perceive vibration impacts at times when vibratory rollers or rockbreakers are in use nearby. Where impacts are perceptible, they would likely only be apparent for relatively short durations when vibration-intensive equipment is in use. Feasible and reasonable construction vibration mitigation measures should be applied where vibration-intensive works are required within the minimum working distances.

Figure 42 Construction vibration – large vibratory roller



Source: SLR, 2026

Operational Noise Assessment

An assessment of the noise generated from the data centre during its operation has been informed in accordance with the requirements of the Noise Policy for Industry (NPfI). All operational noise has been factored into the assessment.

In accordance with NPfI, the residential receiver amenity category is assessed as ‘suburban’.

An assessment of the normal operational conditions (OP.01) and maintenance/testing operations (OP.02) have been assessed against the Project Noise Trigger Levels (PNTL) is summarised in Table 25 below. The PNTL are the most stringent of the intrusiveness and amenity trigger level for each period, informed by background noise monitoring and the NPfI. The elements of the project operation included in the assessment for OP.01 and OP.02 are detailed in Table 24.

Table 24 Operational Assessment Scenarios

Scenario	Name	Description
OP.01	Normal Operations	▪ All equipment operating at typical peak capacity, except for backup generators and load banks. ▪ Assessed during daytime, evening and night-time periods
OP.02	Maintenance/testing operations	▪ All equipment operating at typical peak capacity, including concurrent maintenance / testing of one backup generator with two load banks. ▪ All generator locations were modelled, with the worst-case generators for each receiver included in the predicted noise levels for that receiver. ▪ Assessed during daytime only
Power Outage	Emergency Power Failure	▪ All equipment operating at typical peak capacity, including backup generators ▪ Load banks are not included in the power outage scenario as they are used only during testing of the backup generators.

In the assessment, a 3dB safety factor has been added to the predicted noise levels. This safety factor represents an allowance for potential uncertainty and increased noise emissions from the proposal that may occur due to selection of different mechanical plant units, increases to cooling tower noise due to variable frequency drives, additional minor external mechanical plant that is not known at this stage, or other minor modifications to noise sources utilised on the site.

Table 25 Operational Noise Assessment

Receiver Location	Period	Predicted Noise Level $LA_{eq(15minute)}$ (dBA)[5]			Compliance OP.01/OP.02
		Noise Criteria	OP.01	OP.02	
NCA01 Residential	Day	48	43	444	Yes / Yes
	Evening	43	39	-	Yes / -
	Night	36	36	-	Yes / -
NCA02 Residential	Day	48	48	47	Yes / Yes
	Evening	43	38	-	Yes / -
	Night	36	36	-	Yes - -

Receiver Location	Period	Predicted Noise Level $LA_{eq(15minute)}$ (dBA)[5]			Compliance OP.01/OP.02
		Noise Criteria	OP.01	OP.02	
NCA03 Residential	Day	45	35	44	Yes / Yes
	Evening	43	34	-	Yes / -
	Night	35	33	- -	Yes / -
NCA04 Residential	Day	43	28	40	Yes / Yes
	Evening	43	27	-	Yes / -
	Night	38	25	-	Yes / -
NCA05 Residential	Day	43	20	35	Yes / Yes
	Evening	43	19	-	Yes / -
	Night	38	18	-	Yes / -
Child Care	When in use	53	28	37	Yes / Yes
Educational	When in use	43	29	34	Yes / Yes
Place of Worship	When in use	48	29	37	Yes / Yes
Active Recreation (NCA02)	When in use	53	52	53	Yes / Yes
Active recreation (other)	When in use	53	32	41	Yes / Yes
Industrial	When in use	68	54	68	Yes / Yes

Source: SLR 2026

The above assessment indicates that noise from the proposal is predicted to comply with the PNTLs at all receivers during both OP.01 (normal operations) and OP.02 (testing of backup generators) with the mitigation measures detailed below.

Operation of backup generators (outside of maintenance/testing) is only expected to occur during an emergency where mains power to the development is lost. It is not considered reasonable for the development to be required to meet the operational noise criteria during this infrequent emergency scenario and it has not been assessed further.

Sleep Disturbance Assessment

The predicted night-time maximum noise levels at the nearest residential receivers are shown in Table 26. These have been modelled inclusive of the mitigation measures detailed below. The predictions include noise enhancing weather conditions.

Table 26 Sleep Disturbance Assessment

Receiver Location	Source	Maximum Noise Level LA_{max} (dBA)[1]			Below Screening Level
		Sleep Dist Screening Level	Predicted	Exceedance	
NCA01 Residential	Light vehicle movements and parking	52	52	-	Yes
NCA02 Residential		52	50	-	Yes
NCA03 Residential		52	36	-	Yes
NCA04 Residential		52	31	-	Yes
NCA05 Residential		52	19	-	Yes

Source: SLR 2025

Maximum noise levels are predicted to comply with the sleep disturbance screening level at the nearest residential receivers. As such, maximum noise levels from the development are unlikely to result in sleep disturbance at these receivers and a detailed maximum noise level assessment is not required.

Traffic Noise Assessment

There are no residential receivers along the access route between the site on Mars Road and Epping Road, however the residences at the west end of Banksia Close are close to the site entrance.

Daytime and night-time vehicle movements from the proposed development are substantially lower than the existing warehouses on the site, and the proposed site entrances are a similar distance or further from the residences than the existing site entrances. The potential impacts from development-related traffic on the surrounding roads, which would be lower than the existing development, are expected to be negligible and no consideration of mitigation is required.

The noise assessment concluded that:

- Noise from the proposal is predicted to comply with the PNTLs at all receivers during both OP.01 (normal operations) and OP.02 (testing of back-up generators) with the mitigation measures detailed below.
- Details of the mechanical plant used in this assessment are indicative, including the unit types, sound power levels, number of units and locations of equipment. All mechanical plant items should be reviewed during later acoustic assessments during the detailed design stage of the project to confirm compliance with the PNTLs. It is expected that compliance is achievable through a combination of appropriate mechanical plant selection, acoustic louvres where appropriate.
- Maximum noise levels are predicted to comply with the sleep disturbance screening level at the nearest residential receivers.
- The anticipated traffic noise generated from the proposal are expected to be lower than existing operations and negligible in terms of impact.

Emergency Power Failure

Operation of backup generators (outside of maintenance/testing) is only expected to occur during an emergency where mains power to the development is lost. It is not considered reasonable for the development to be required to meet the operational noise criteria during this infrequent emergency scenario.

6.9.3. Cumulative Impact Assessment

Construction Noise

Cumulative construction noise impacts can occur where multiple work activities are being completed near to a particular receiver at the same time. The construction work associated with the proposal has the possibility of interacting with the construction activities of other nearby projects.

Table 27 Nearby Developments – Potential Cumulative Construction Impacts

Project	Development Description	Current Status	Cumulative Impact
Lane Cove West Data Centre. 1 Sirius Road, Lane Cove West SSD-9741	Ongoing construction of data centre building alterations and additional space.	Most recent Modification approved 13 June 2024 – construction likely to continue for several years.	Located around 450 m to the northwest of the proposal, and 580 m from the receivers most-affected by construction of the proposal. Potential cumulative impacts not anticipated.
Apollo Place Data Centre. 1 Sirius Road and 1 Apollo Place, Lane Cove West SSD-67407231	Demolition of existing warehouses and construction of data centre.	Approved 9 October 2025 – construction likely to commence in 2026.	Located around 380 m to the northwest of the proposal, and 540 m from the receivers most-affected by construction of the proposal. Potential cumulative impacts not anticipated.

Table 27 indicates that the potential for cumulative construction noise impacts from the identified projects are not anticipated due to their distance from the most-affected receivers adjacent to the proposal site.

Should other projects be approved in the area there is potential for cumulative construction impacts if they are constructed at the same time as the proposal, however this would be addressed in their respective Construction Noise and Vibration Management Plans. Since construction scenarios and equipment for projects in the area would generally require similar items of equipment to the proposal, concurrent construction work could theoretically increase the worst-case noise levels in this report by around 3 dB (i.e., a logarithmic adding of two sources of noise at the same level). The likelihood of worst-case noise levels at any individual receiver being generated by works on different projects at the same time is, however, considered low.

As such, cumulative construction impacts are not likely to significantly alter the predictions in the NVIA, and no specific mitigation is expected to be required. The potential cumulative impacts from the proposal and other projects would continue to be considered as the project progresses when detailed construction planning is developed.

Operational Noise

The NPfI states that it aims to limit continuing increases in cumulative industrial noise through the application of amenity noise levels, which are applicable to all industrial noise sources in an area. The policy accounts for potential cumulative impacts by lowering the criteria for each individual development to ensure that the ambient noise level within an area from all industrial noise sources combined remains below the recommended amenity noise levels, where feasible and reasonable. As such, the potential cumulative impacts from the proposal and other potential sources of industrial noise in the area are accounted for in the proposal-specific PNTLs and, therefore, do not require further consideration.

6.9.4. Mitigation Measures

Construction Phase

The use of standard mitigation measures to minimise the impacts is considered sufficient to control the majority of the impacts during construction phase. Examples of measures that could be applied to the work are provided in the Transport for NSW Construction Noise and Vibration Guideline.

The following recommended and standard mitigation measures include:

- Regular toolbox notification and training of workers and contractors to be aware of nearby noise sensitive receivers and use equipment in ways to minimise noise.
- Use the minimum sized equipment necessary to complete the work and where possible, use alternative, low-impact construction techniques
- Long term stationary noise sources should be enclosed or shielded from nearby sensitive receivers where possible
- Where rockbreakers or other pneumatic equipment is required, select silenced and dampened equipment where possible
- Implement community consultation to provide surrounding receivers with information such as the total construction time, what works are expected to be noisy, their duration and mitigation measures that are being applied to minimise the noise
- Consultation should include nearby 'other sensitive' receivers such as educational institutions. Noise intensive work that is predicted to impact 'other sensitive' receivers will be scheduled outside of particularly sensitive periods, such as exams, where possible.
- A Construction Noise and Vibration Management Plan (CNVMP) would be prepared before any work begins. The plan would:
  - Identify nearby sensitive receivers
  - Describe the activities, construction equipment and work that will be completed and quantify resulting impacts at sensitive receivers
  - Include noise and vibration management criteria and relevant licence and approval conditions
  - Include measures to manage noise and vibration and minimise the potential for impacts during construction, aligned with the results of community consultation and feedback during the approval process
  - Set out requirements for noise and vibration verification monitoring
  - Set out procedures for handling complaints. AS 2436 provides further guidance on the control of construction noise and vibration and includes the nominal noise reduction possible from various mitigation strategies.

Construction impacts are expected to remain during certain work activities at the nearest sensitive receivers even with the implementation of all feasible and reasonable mitigation measures. The CNVMP would review the predicted residual construction noise impacts when more detailed planning information is available and confirm the mitigation measures which would be implemented to minimise construction noise impacts as much as practicable.

Operational Phase

Where operational noise impacts from the development are predicted to exceed the relevant noise criteria, feasible and reasonable operational noise mitigation and management measures should be considered, with the aim of reducing noise emissions to the relevant criteria.

A detailed assessment of potential feasible and reasonable mitigation measures that can be applied to the development to minimise the operational noise impacts is summarised in Table 27.

The measures should be regarded as indicative and would be further refined during detailed design and in an Operational Noise Management Plan (ONMP) when the specific tenants operations are known.

Table 28 Operational noise mitigation options

Reference	Mitigation option	Feasible?
Source Control		
S1	Optimised site layout to minimise noise emissions from the site	Yes – applied during design of the development
S2	Limit vehicle movements	No – vehicle volumes used in this assessment are likely needed to meet tenant's requirements. Additionally, vehicle movements are not predicted to be a dominant contributor to noise emissions from the development.
S3	Limit heavy vehicle movements during the evening and night-time	Yes – heavy vehicles will not be unloaded or access the site during the evening or night-time periods.
S4	Roller doors kept closed when loading/unloading is not occurring.	Yes – roller doors should be kept closed when not in use for loading/unloading.
S5	Appropriate design of site layout to minimise the need for trucks to stop or brake outside of loading docks with line of sight to residential receivers.	Yes – applied during design of the concept. The loading area was positioned as far as practicable from the receivers, with respect to site constraints, access points and equipment replacement requirements.
S6	Use broadband and/or ambient sensing alarms on heavy vehicles where they are required to reverse during the night-time.	Yes – encourage use of broadband and/or ambient sensing alarms on heavy vehicles where they are required to reverse during the night-time
S7	Scheduling of generator testing	Yes – generator testing will be undertaken only during the daytime, and will be scheduled around deliveries so that heavy vehicles will not be unloaded or access the site during generator testing.
S8	Appropriate specification and location of mechanical plant during detailed design.	Yes – the specified example units of mechanical plant have been selected to meet the noise requirements of the project. The noise impacts from all items of mechanical plant would be reviewed during detailed design stage to confirm units selections and any mitigation requirements. This includes generator enclosures and exhaust silencers, load bank enclosures.
S9	Generator and load bank acoustic enclosure design during detailed design.	Yes – the generator enclosures have been designed with large attenuators within the enclosure for the air intake and discharge through the enclosure. Additionally, silencers

Reference	Mitigation option	Feasible?
Source Control		
		will be utilised within the generator exhaust gas flue. Load banks have been housed in a precast enclosure with acoustics louvres for the intake and discharge louvres. Specific models for the attenuators, silencers and acoustic louvres would be reviewed during detailed design stage to confirm units selections and mitigation requirements.
S10	Substation design during detailed design.	Yes – the substation transformers have been modelled with an attenuated sound power levels based on data provided the proposed transformer manufacturer. Additionally, the two transformer bays are surrounded with 11.1m walls and propose to utilise acoustic absorption on the inside face of the walls. Specific models for the transformers, attenuation and absorption would be reviewed during detailed design stage to confirm units selections and mitigation requirements.
S11	Production of an Operational Noise Management Plan.	Yes – the ONMP would detail any operational requirements for the proposed development.
Path Control		
P1	Acoustic Screening	Yes – an indicative combination of solid screening and acoustic louvres on the rooftop has been incorporated in the building design. Additionally, screening around the indicative office AC units has been included in the noise model. Any louvred areas would indicatively use Architectural Product Solutions Model A12350 acoustic louvres or similar (manufacturer data sheet supplied by the project team). The design and requirements for acoustic screening would be confirmed during the detailed design stage of the project.

6.10. Contamination and Remediation

A Preliminary Site Investigation (**PSI**) has been prepared by Senversa and is included at Appendix AA. A Detailed Site Investigation (**DSI**) has been prepared as recommended by the PSI and is included at Appendix BB. A Remedial Action Plan (**RAP**) has been prepared as recommended by the DSI and is included at Appendix CC.

6.10.1. Existing Environment

An assessment of the site history has been undertaken. This assessment revealed that the site was undeveloped prior to 1930. By 1951, a large industrial building was constructed in the north-west of the site with the remainder of the site undeveloped. From 1951 to 1970, two additional industrial buildings and a car park were constructed. By 1986, the eastern and southern parts of the site were redeveloped with large warehouse buildings and driveways. In 2004, the three industrial buildings formerly in the north-east of the site were demolished and replaced with two new warehouse buildings and driveways throughout.

No potentially contaminated activities have been identified within a 500m radius buffer from the site.

Soils onsite are underlain by kandosol soils described as red, yellow and grey massive earths. They generally have a sandy to loamy-surface soil, grading to porous sandy-clay subsoils with low fertility and poor water-holding capacity.

A hydrological review of the site and its surrounds indicated that there are 9 registered groundwater bores within 500m of the site, the closest being 433m to the south-east. The groundwater bores were identified as functional and used for monitoring purposes.

Groundwater below the site was recorded at being between RL34.874 and 39.92m AHD.

6.10.2. Potential impacts

From the PSI findings, there appears to be potential contamination on the site. The impacts have been identified via a conceptual site model.

There is the potential for 2 large underground storage tanks (**USTs**), several smaller flammable liquid storage depots and asbestos material on the site. Whether these USTs have been removed or buried is unknown. The potential asbestos material on site is related to a building constructed with asbestos cement and asbestos fire retardant material. The building was demolished between 1994 and 2003, but the demolition and disposal activities relating to this material are unknown.

Based on the conceptual site model, the following potential sources of contamination and contaminants of concern identified at the site are identified in Table 28.

Table 29 Potential sources of contamination

Potential source	Key contaminants of potential concern
Fill materials of unknown origin and quality across the site	Total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene, and naphthalene (BTEXN), polycyclic aromatic hydrocarbons (PAH), M82, organochlorine pesticides (OCP), organophosphorus pesticides (OPP), polychlorinated biphenyls (PCB), perfluoroalkyl and polyfluoroalkyl substances (PFAS), volatile organic compounds (VOCs), asbestos.
Potential USTs	Lead, TRH, BTEXN and VOCs
On-site historical uses (computer repair and distribution manufacturing, printing activities and associated chemical storage, automotive services)	TRH, BTEXN, PAH, M8, PCB, PFAS, and VOCs
Off-site historical use (dry cleaners directly to the west of the site, photography production and processing).	TRH, BTEXN, PAH, M8, PCB, PFAS, and VOCs

Based on the available information, a DSI has been undertaken for the site. This involved a site inspection, service clearance of each of the potential soil bore and monitoring well locations, advancement of 31 soil boreholes, installation of groundwater monitoring well, gauging, purging, survey and sampling of monitoring wells.

The DSI found that:

- Concentrations of the CoPC in soil were below the adopted human health guidelines with the exception of asbestos AF/FA in soil at borehole (BH) 05.
- Asbestos was reported to be present at BH05, BH10A, BH15, Potential Asbestos Containing Material (PACM) 01, PACM-04. Therefore, it should be assumed that bonded asbestos may be present in fill at the site. 10L quantification analysis has not been undertaken to assess the concentration of asbestos in fill due to the soil sampling methodology and size of boreholes limiting sample volumes.
- A number of samples exceeded the conservative soil Ecological Investigation Levels (EILs) for heavy metals and benzo(a)pyrene. These exceedances are not considered significant since most of the site is covered with concrete or asphalt hardstand (and will remain so under the proposed development design) and the assessment criteria are conservative.
- A limited number of samples exceeded the groundwater maintenance of ecosystems criteria for copper, nickel and zinc. It's considered that the nature of metals in groundwater reported are broadly consistent with site background conditions.
- Low-level heavy metal concentrations exceeding the adopted ecological assessment criteria in groundwater were observed across the site. These low-level concentrations are considered to be background concentrations.

The DSI concluded that the site is considered suitable for continued commercial/industrial use with the implementation of an Asbestos Management Plan (**AMP**). A RAP for the proposed redevelopment is recommended to be prepared and implemented documenting the requirements to ensure that asbestos identified in fill is appropriately remediated and validated.

A RAP has been prepared for the site, with a recommendation to remediate fill material across the site. While not all fill material is contaminated, for the purposes of remediation all fill material should be considered potentially impacted by asbestos. This is a conservative, precautionary approach adopted as the occurrence and concentrations of asbestos in fill have not been delineated.

A remedial options assessment was undertaken and this focused on management of contaminated or impacted soils. It considered: on-site or off-site treatment, removing contaminated soils and on-site containment with ongoing management. A preferred remediation approach was identified, and the proposed remediation works will involve:

- Enabling works including engagement of an environmental consultant, development of site management plans and establishment of environmental controls.
- Capping contaminated soils, including in new paved areas, unpaved areas and in-ground services.
- Management of imported material and exported waste from the site as part of the remediation works.
- Validation of the remediation works.
- Ongoing implementation of a passive Long-Term Environmental Management Plan (**LTEMP**) during operation of the site.

The RAP (provided at Appendix CC) provides specific details on the capping design, management of imported and exported materials, validation strategy and requirements for ongoing management. The preferred remediation approach is consistent with NSW remediation policy.

6.10.2.1. Mitigation measures

Prior to the commencement of remediation works the following mitigation measures should be implemented and these include:

- Asbestos works notification and management controls, including dust and fugitive fibre emission controls and monitoring.

- Sediment/erosion management.
- Stockpile management including identification of temporary stockpiling locations.
- Reference to health and safety management, including provisions for personal protective equipment.
- Excavation water (groundwater and stormwater runoff) management.
- Material tracking and disposal.
- Site access.
- Noise, odour and vibration controls.
- Monitoring requirements.

It is envisaged that these are developed and documented in:

- Site-Specific Health and Safety Plan (**HASP**).
- Construction Environmental Management Plan (**CEMP**).
- Construction Asbestos Management Plan (**AMP**), which could form part of the CEMP.

6.11. Other impacts not requiring detailed assessment

This section of the report addresses the matters which require a standard impact assessment. It outlines the findings of the assessment and the key mitigation measures used to ensure compliance with the relevant standards or performance measures.

6.11.1. Flood Risk

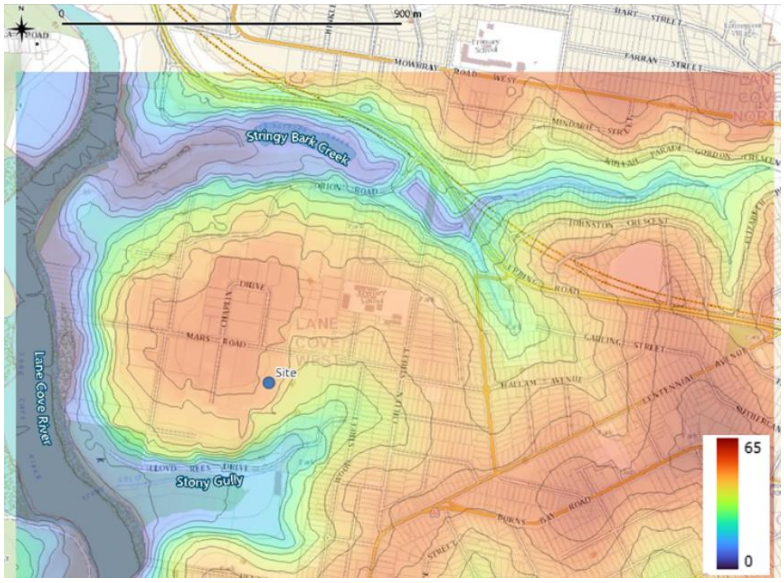
A flood risk assessment has been prepared by BMT and is enclosed in Appendix Z.

6.11.1.1. Existing Environment

The site is located approximately 420m to the east of the Lane Cove River and elevated over 40m from the river. Tributaries to the Lane Cove River, as well as Stony Gully and Stringybark Creek are located to the north and south. Due to the site's location and elevation, it is not located within a floodplain and not flood affected.

The existing underground stormwater pit and pipe network collect stormwater runoff on and around the site. In the event that this network reaches capacity, stormwater runoff is discharged via local roads into the Lane Cove River and later, Sydney Harbour.

Figure 43 Site Location and elevation (m AHD)



Source: BG&E 2025

6.11.1.2. Potential Impacts

There are no flooding impacts to the subject site nor its surrounds as a result of the proposed development. This is because the site is not affected by flooding due to its elevation, and stormwater runoff from the site will continue to be managed. A Flood Impact and Risk Assessment is not required as there is no existing flood impact, and the proposed development will not alter floor behaviour or risk.

6.11.2. Water Management

An Integrated Water Management Plan has been prepared by BG&E and is enclosed in Appendix X. The report describes the proposed civil engineering design for the development and the anticipated water supply and demand.

6.11.2.1. Existing Conditions

Existing water infrastructure located within the site or in its vicinity is shown in the survey plan prepared by LTS (refer to Appendix I) and includes an existing pit and pipe network. This network drains to Mars Road via a kerb outlet and to the east of the site. Pit and pipe infrastructure within the site also discharges to a pipe running through the land to the south-east of the site.

6.11.2.2. Stormwater Management

An integrated stormwater and water sensitive urban design concept has been prepared for the site to comply with the objectives of the DCP.

Stormwater drainage

On-site detention is required in accordance with the Lane Cove DCP. An OSD with a minimum volume of 631.8m^3 is proposed and a maximum discharge of 353.8L/s.

The proposed OSD will reduce peak stormwater flows on site in accordance with the Lane Cove DCP 2009. Additionally, the proposal will result in an increase in the pervious site area from 17% to 26% which serves to reduce the peak stormwater flows on site through infiltration and absorption.

Stormwater treatment

In pre lodgement discussions with Council, the proponent was advised that MUSIC modelling was to be undertaken for the development to size the GPT to ensure there is no increase in pollution rates post development.

A before and after MUSIC model was prepare dd to assess the adequacy of the proposed stormwater treatment measures and ensure that the stormwater discharge meets quality objectives prior to leaving the site.

A total of fourteen (14) Oceanguard (or equivalent) filters and one 1.5m cascade separator (or equivalent) are required. The Cascade Separator functions as the primary GPT for the site, fulfilling the requirements of Part O of the DCP.

Table 29 provides the MUSIC modelling results in relation to the pre-development objectives. This confirms that the proposed development will improve water quality at the site.

Table 30 MUSIC Model Results and Objectives

Pollutant	Pre-Development Rate	Post-Development Rate
Total Suspended Soils (TSS) (kg/yr)	1260	422
Total Phosphorous (TP) (kg/yr)	5.7	5.67
Total Nitrogen (TN) (kg/yr)	69	63.7
Gross Pollutants (GP) (kg/yr)	560	78.7

In summary the proposal results in the following water quality outcomes:

- GPTS are to be installed in the development,
- Perak stormwater flows are reduced,
- Porous surfaces are maximises, and
- Hard paved surfaces are minimised.

No risks have been identified that would constrain the future development of the proposed site, though design measures as identified above are necessary to accommodate Council requirements and minimise the impact on peak stormwater flows.

6.11.3. Hazards and Risks

An assessment of the proposed development against the relevant requirements of Chapter 3 of State Environmental Planning Policy Resilience and Hazards (2021) has been prepared by Riskcon and is enclosed in Appendix EE. A Dangerous Goods Report has also been prepared by Riskcon (please refer to Appendix DD) to address the SEARs.

6.11.3.1. Potential impacts

The operation of the proposed data centre requires the storage of Li-ion batteries, diesel and transformer oils on site. Table 30 sets out the anticipated maximum quantities of each of these dangerous foods to be stored on site.

Table 31 Maximum Classes and Quantities of Dangerous Goods Stored & SEPP-RH Screening

Class	Packing Group	Description	Quantity (L)	SEPP-RH Applicable (Y/N)?
9	Not applicable	Li-ion batteries	194,000 kg	N
C1	Not applicable	Diesel	1,049,000 L	N
C2	Not applicable	Transformer oils	68,000 L	N

Riskcon has reviewed the quantity of DGs stored on site and associated transport of these goods under the threshold criteria outlined in the Resilience and Hazards SEPP. The results of the assessment identified that lithium-ion batteries (Class 9) and combustible liquids do not trigger the Resilience and Hazards SEPP thresholds and therefore the site does not exceed any Resilience and Hazards SEPP storage thresholds.

The transport of DGs does not exceed any Resilience and Hazards SEPP storage thresholds, nor do any offensive operations occur at the site which may result in environmental emissions. It was also determined that there would be no unusual operations that would cause potential emissions, odours, or noise outside of normal warehouse type operations. Therefore, it is concluded that the site would not be regarded as potentially hazardous under the Resilience and Hazards SEPP.

The Dangerous Goods Report assesses the dangerous goods to be stored on site and confirms compliance with applicable standards and regulations in accordance with the Work Health and Safety Regulations 2017. The Work Health and Safety Regulation 2017 requires the risks associated with the storage and handling of hazardous chemicals to be assessed and minimised So Far As Is Reasonably Practicable (SFAIRP), which may be achieved via compliance with an applicable design standard.

RiskCon has reviewed the proposed storage and prepared a design assessment to communicate the items required for the facility to comply with the applicable standards. The following dangerous goods storage areas were identified for assessment:

- Bulk diesel tanks
- Power transformers
- Day tanks (indoor diesel generator tanks)
- Lithium-ion batteries (UPS)

RiskCon's review of the standards determined that the diesel storage tanks are to be governed by AS1940:2017 based on diesels classification as a combustible liquid. The Li-ion batteries are to be governed by AS/NZS 4681:2000 based on their classification as class 9 substance with the potential for thermal runway. These standards were used to create a series of requirements to guide the design of the stores. The detailed design requirements for the Bulk Diesel Tank, Day Tanks, and Lithium-Ion Batteries are provided within the Dangerous Goods Report.

The SEARs Cover Letter requires that the EIS must demonstrate the relevant aspects of the FM Global Property Loss Prevention Data Sheet 5-32 – Data Centres and Related Facilities have been considered and could be implemented as part of the development. FM Global Data Sheet 5-32 – Data Centres and Related Facilities contains design requirements concerning the main hazards associated with data centres, which is the UPS system. The risks posed by the lithium-ion batteries in the UPS require an increased level of fire safety that is not adequately addressed in the standard of performance utilised for a building containing dangerous goods.

In principle, the design complies with FM Global Data Sheet 5-32; however, it is important to note that the data sheet adopts a distinct approach to establishing its requirements, as the context of the document is centred around the US industry. As such, fully complying with some of the clauses for the data centre were considered to be not commensurate with the risk of the UPS system, as it required specific equipment and procedures that are not appropriate for implementation in Australia.

A summary risk assessment against related FM Global Datasheet 5-32 Recommendations has been undertaken in the Dangerous Goods Report at Appendix FF. Where recommendations are not suitable for the project, the risk assessment identifies alternative approaches to achieving the required outcome. This informs the fire engineered solutions for the building and is coordinated with the Fire Safety Concept Strategy (Appendix NN) prepared by Core Engineering Group.

The Dangerous Goods Report identifies that the testing method UL9540A will be used in lieu of AS IEC 62619 (as required by the SEARs cover letter) as the performance standard for lithium-ion batteries. The proposed testing method is recognised as a global standard for the industry that provides a level of protection suitable for data centre development. The UL9540A is a recognised and credible test method for evaluating thermal runaway propagation in battery energy storage systems. The results from the testing will address key issues associated with the Lithium-ion batteries, such as installation instructions, ventilation requirements, fire protection effectiveness, thermal propagation and fire service strategies.

Based on the Work Health and Safety Regulation 2017, RiskCon has determined that the site would operate at manifest quantities and the site would be classified as a Manifest site. This classification of the site necessitates additional documentation to comply with the requirements of the Work Health and Safety Regulation 2017, which RiskCon has included in their recommendations for the proposed data centre facility as set out below.

The report concludes that subject to the implementation of the mitigation measures, the impacts of the proposed development are acceptable.

6.11.3.2. Mitigation measures

The following mitigation measures will be implemented:

Design Requirements

- The design requirements detailed within this report shall be adhered to in the development of the design for the facility.
- Spillage containment with a net capacity of at least 34m^3 shall be installed for the power transformers.
- Where requirements have not been omitted by risk assessment, FM Global Datasheet 5-32 shall be adopted as the design basis with respect to the lithium ion batteries of the UPS
- An automated sprinkler system shall be installed in accordance with increased design density and area of operation to comply with FM Global DS 5-32 for the data halls and FM Global DS 5-33 for the battery rooms.
- Personnel shall be trained to ensure that the inactive door leaf remains in the closed position when not in use.
- A VEWFD system, which is the Aspirated Smoke Detection system, shall be provided in accordance with AS1670.1
- Off gas detection system in the battery rooms shall be provided to provide early detection and will be linked to the FIP. The system will automatically alert the fire brigade upon alarm. Additionally, on activation, the exhaust fans will run in emergency mode
- The battery manufacturer shall ensure that the Li-ion battery cells, modules, units and BMS are compliant with the testing requirements of UL9540A (Ref. [4]).
- Battery Management System (BMS) shall be provided to monitor and protect the Lithium-ion batteries, shutting them down on fault / over-temperature to prevent thermal runaway.
- An automatic mechanical ventilation system shall be provided.
- At least one (1) carbon dioxide portable fire extinguisher shall be provided on each floor.
- No gaseous fire suppression system will be utilised in the design.

Documentation Requirements

- A Dangerous Goods Register, indicating the type of chemical, any notations that may be required from the risk assessment and the Safety Data Sheet for the chemical.
- Placard Schedule.
- A Manifest and notification shall be submitted to SafeWork NSW.
- A DG Risk Assessment of the storage and handling areas.
- An Emergency Response Plan (ERP).

6.11.4. Pipeline Hazard Analysis

A Pipeline Hazard Analysis has been prepared by RiskCon and is provided at Appendix RR. The purpose of the Pipeline Hazard Analysis is to assess the potential impacts the proposed development may have on underground pipelines in the vicinity of the site.

RiskCon contacted ‘Before you Dig Australia’ to identify whether there are any high-pressure dangerous goods or gas pipelines in the vicinity of the site. The Pipeline Hazard Analysis identified that there are two buried gas pipelines within the immediate vicinity of the site:

- 210kPa Medium Pressure Gas Main operated by Jemena.

- 1050kPa High Pressure Gas Main operated by Jemena.

The 210kPa medium pressure gas line runs along Mars Road and has a section that branches off into the project site. Consultation has been undertaken with Jemena which indicated that there are no deep excavations along the site boundary or in the location of the pipeline where it enters into the project site. Therefore, there would be no impact to the pipeline. The proposed development has been designed to eliminate deep excavations within the proximity of the site boundary such that no impact would occur near the pipeline.

The 1050kPa high pressure gas line is located to the south of the site and is well outside of the development area. It is not expected to be impacted by construction of the proposed development.

The assessment concludes that the proposed development will have no impact on high-pressure dangerous goods or gas pipelines in the Lane Cove West area. It does include the following recommendations:

- The development at 12 Mars Rd, Lane Cove West, NSW shall be designed such that deep excavations within proximity of the northern site boundary and area of the 210 kPa pipeline on site are eliminated.
- Where it is not possible to eliminate deep excavations within proximity to pipelines, further consultation with Jemena shall occur and any works within 3 m of the pipelines shall have a Jemena standby present.
- Notwithstanding the above, Jemena shall be consulted to communicate any changes to the design and the proposed construction methodology to ensure no impact to the pipeline will occur.

6.11.5. Ground and Water Conditions

PSM have prepared a ground and water conditions assessment letter and Salinity Management Plan (**SMP**) to address the matters within SEAR 13. The letter and SMP are enclosed in Appendix V and Appendix W and include an assessment of the following:

- Potential impacts of the proposed development on soil resources and related infrastructure including riparian lands on or near the site
- Potential impacts on groundwater resources
- Salinity impacts

6.11.5.1. Soil resources

The proposed development will not change the broader use of the site, which currently contains several industrial buildings. The existing buildings will be demolished to facilitate the construction of the proposed data centre.

A total of 19,150m^3 of fill is proposed. Excavation ('cut') will occur in through the middle part of the site to the eastern boundary. A total of 67,410m^3 cut is proposed. Cut will be generally to a depth of 3m.

As detailed further within Section 6.11.2, a range of stormwater treatment measures will be implemented to minimise impacts of the proposal off-site. During construction, erosion and sediment control measures will be implemented to prevent the runoff of sediment into local waterways.

6.11.5.2. Groundwater

The PSM assessment concludes that the proposed development will have negligible impact on groundwater resources. Geotechnical investigations have shown that the groundwater levels beneath the site vary from between RL 34.9 and RL 37.9.

The proposed development comprises four levels. Due to the sloping nature of the site, the two lowest levels (Lower Ground and Ground) require a variable amount of excavation up to a maximum of approx. 8m. The Structural Finish Level (**SFL**) of lower ground and ground level are 34.8m AHD and 40.8m AHD.

The design of the excavation is unknown at this stage but is assumed to be drained. The predicted maximum long term groundwater inflows into the proposed drained excavation are less than 3 ML/year. The proposed excavation can thus be considered a 'minor aquifer interference activity' which are generally exempt from the full extent of the Water Management Act and therefore may not require a licence. This will be at the discretion of WaterNSW.

The proposed development is expected to have impacts that are less than the Level 1 minimum impact considerations, which according to the Aquifer Interference Policy minimal consideration requirements, would be considered as acceptable. The groundwater table at the site is contained within the fractured sandstone bedrock unit (i.e., not within the overlying soil units). On this basis, any minor drawdown resulting from a drained excavation at the site would be unlikely to result in settlements that would damage neighbouring properties or ecosystems.

Groundwater seepage into the excavation during construction and in perpetuity will need to be either re-used on site as grey water or for irrigation purposes or be disposed of either in the stormwater or sewer systems. When disposal is proposed this will need to be agreed with the appropriate authorities. The predicted yearly inflows are small and would not be expected to result in overloading of the stormwater system. Should capacity of the stormwater system be considered an issue this could be addressed by sizing of the sump and pump to allow collection and disposal at low flow rates during periods of dry weather.

Therefore, it's considered that the impact of a drained basement on the groundwater at the site is minimal.

6.11.5.3. Soil salinity

A geotechnical investigation has been undertaken for the site. The investigation identified that the soils within the site are classified as 'non-saline' to 'slightly saline'. A Soil Salinity Management Plan (**SMP**) has been prepared for the site.

The SMP sets out the following mitigation measures that are to be implemented during construction and in the design of the proposed development.

Earthworks

- Materials to be imported to site should be addressed for suitability for the intended use. Highly saline or contaminated soils should not be imported to site.
- Vegetation cover will be established and maintained on permanent batters upon completion to control erosion
- The final surface of all areas of the development will be graded to prevent the ponding of surface water
- Erosion control of temporary batters, stockpiles and disturbed areas will be planned prior to undertaking the earthworks and implemented during the earthworks. Consideration will be given to:
  - Grading and sealing partially completed surfaces
  - Installation of clearly visible fencing and traffic control measures to prevent unnecessary trafficking of areas and ensuring site disturbance
  - Establishing set vehicular access points and roads
  - Protecting stockpiles (temporary vegetation or mulching) where these are to be left in place for long durations
- Sediment control shall be implemented by means of sediment traps and silt fencing where considered necessary

Garden and Landscaped Areas

- Plant species have been selected with consideration to soil conditions.
- Potential for water logging will be minimised by:
  - Utilising plant species with minimal watering requirements
  - Adopting waterwise gardening principles
  - Minimising use of potable water in landscaped areas
  - Irrigation systems will be properly designed and implemented
  - Perennial plant species and deep rooted trees will be used where possible.

Roads, Footpath and Hardstand Areas

- Roads, footpath and hardstand surfaces will be graded (and the grades maintained at all times) to prevent ponding of surface water at locations where this can result in infiltration into the underlying soils (e.g. pavement joints)
- Connections between the roads, footpath and hardstand surfaces and the surface water and stormwater drainage infrastructure will be designed, constructed and maintained to restrict infiltration into underlying soils
- Where practical, services that are to be located below the roads, footpath and hardstand surfaces will be installed at the time of construction
- Provision for a damp-proof course or membrane beneath slabs will be considered

Surface water, stormwater and drainage

- Disturbance of natural drainage patterns will be reduced as far as possible. Appropriate artificial drainage will be installed as necessary as shown in the civil plans
- Stormwater and surface water will be managed to restrict infiltration
- Temporary water retaining structures used during construction will be managed to restrict infiltration
- Stormwater and surface water infrastructure will be designed and constructed to minimise the likelihood of leakage
- Guttering and down pipes will be connected and maintained
- Surface water run-off will be directed around all exposed surfaces, temporary stockpiles and landscaped areas.

Durability of Concrete structures in contact with the ground

- The design of structural concrete members in contact with the ground (excluding piles) will adopt an B1 exposure classification as defined in Australian Standard AS36000:2018.
- The design of concrete cast in situ piles will adopt a mild classification as fined in AS2159:2009

Implementation of the measures set out within the SMP will ensure that the risks associated with soil salinity can be appropriately managed.

Acid Sulfate Soils

Soil sampling has been undertaken by PSM to identify the presence of sulfates within the site and the pH of soils. The investigation identified soil pH ranging from 4.2 to 7.5 and an average of pH 5.6.

PSM's assessment concludes that the exposure classification for concrete piles in the soil is 'non-aggressive' to 'moderate'. The exposure classification for steel piles is 'Non-aggressive' to 'mild' given the pH testing and soil chlorides identified within the samples.

6.11.6. Waste Management

A Waste Management Plan (**WMP**) has been prepared by SLR and is enclosed in Appendix BB. The WMP is an overarching document that identifies all potential waste likely to be generated during the construction and operational phases of the proposed development. It includes best practice measures for waste management during construction and operation that should be incorporated into detailed construction and operational waste management plan to be implemented during construction and operation of the development.

6.11.6.1. Construction Waste Management

The demolition and construction activities are likely to generate the following broad waste streams:

- Demolition waste
- Construction waste
- Plant maintenance waste
- Packaging waste

- Work compound waste from on-site workers.

The Lane Cove DCP does not provide any advice on demolition waste quantities. Therefore, estimated demolition quantities have been generated using the rates identified in The Hills DCP. These rates are provided in the Appendix DD. Table 33 identifies the estimated types and quantities of demolition waste.

Table 32 Estimated types and quantities of demolition waste

Building	Use	Number of floors	Building footprint including floors (m^2)	Waste Types and Quantities (m^3)						
				Timber/ gyprock	Concrete	Bricks	Metal	Other	Sand/ soil	Vegetation
Building 1	Warehouse	1	3,208	13	1,437	658	74	58	-	-
Building 2	Offices	2	654	81	4,846	971	19	101	-	-
Building 3	Warehouse	1	3,339	13	1,496	684	77	60	-	-
	Offices	3	4,593	570	34,034	6,821	133	712	-	-
Building 4	Warehouse	1	4,799	595	35,561	7,127	139	744	-	-
	Offices	2	1,269	157	9,403	1,884	37	197	-	-
Building 5	Offices	2	6,480	26	2,903	1,328	149	117	-	-
Car parking and driveway	Hardstand	N/A	7,976	-	2,393	-	479	399	-	-
Vegetation	Vegetation	N/A	2,664	-	-	-	-	-	799	7,992
Total			**34,982**	**1,455**	**92,073**	**19,473**	**1,106**	**2,387**	**799**	**7,992**

The Lane Cove DCP does not provide waste generation rates for construction activities. The waste generation rates identified in The Hills Shire DCP have been used to estimate waste generated from construction of the proposed development. Table 34 identifies the estimated types and quantities of construction waste and this is based on the architectural plans provided at Appendix B.

Table 33 Estimated types and quantities of construction waste

Rate type	Area (m^2)	Timber (m^3)	Concrete (m^3)	Bricks (m^3)	Gyprock (m^3)	Sand or soil (m^3)	Metal (m^3)	Other (m^3)
Hardstand	4,073	-	8.6	-	-	19.5	2.4	2.0
Offices	1,996	10.2	37.5	17.0	17.2	17.6	5.5	10.0
All other areas	56,108	14.0	117.8	92.6	25.2	269.3	33.7	28.1
Total	**62,177**	**24.2**	**163.9**	**109.5**	**42.4**	**306.4**	**41.6**	**40.1**

The Waste Management Plan prepared by SLR nominates best practice measures for waste management during demolition and construction phase, including

- waste avoidance
- reuse, recycling and disposal
- waste storage and servicing
- site inductions
- waste storage signage
- monitoring and reporting
- roles and responsibilities

These recommendations are to be incorporated into a construction waste management plan to be prepared prior to commencement of construction. It will be implemented on site during site establishment, early works, demolition and construction phases.

6.11.6.2. Operational waste

There are no standard generation rates for data centres and as such waste generation rates from the Lane Cove DCP 'offices' rate has been adopted. The quantities of operational waste estimated to be generated by the proposed development are shown in Table 36.

Table 34 Estimated quantities of operational general waste and recycling

Project area	GFA (m^2)	Litres per week		
		Garbage	Paper and cardboard	Recyclable containers
Offices	2,563	1,794	1,663	131

Waste Storage Area

SLR has recommended 12.7m^2 for garbage and recycling bins, 8m^2 for bulky waste and a total area of 20.7m^3 for waste storage based on:

- A collection of 1 x per week for garbage and recycling. Recyclable containers will be collected every fortnight.
- Provisioning of 6 x 240L garbage bins, 2 x 1,100L paper and cardboard bins and 1 x 240L recyclable containers.

The architectural plans (provided at Appendix B) show a waste and storage area of 170m^2 on the ground level, exceeding the required waste storage area. It is located close to the loading dock to enable easy and safe collection.

E-waste

The Waste Management Plan anticipates that e-waste will be generated from time to time. This may include broken or upgraded computer hardware, circuits, electrical components and their associated packaging. Some e-waste contains toxic chemicals, such as lead, mercury and arsenic, but can also contain precious metals that can be recycled. Where possible, facility operators will extend the life of equipment and hardware by implementing a regular maintenance schedule and adopting other proactive care measures such as monitoring the efficiency of cooling solutions to reduce the risk of equipment being discarded before its time. Smart thermostats and inbuilt sensors may be used to balance temperature maintenance with energy efficiency.

Equipment will be re-used by implementing circular models for servers, and re-purposing older hardware as back-up equipment.

Disposal of e-waste will be the responsibility of equipment suppliers, who will collect obsolete equipment when new equipment is installed. Bulk bins, or other methods for transporting large quantities of e-waste will

be used at those times to remove it. Suppliers will use the loading dock as required. Once removed from the site it is expected that suppliers will sell-on any suitable hardware or recycle it lawfully through an approved recycler.

Waste collection

Waste collection contractors will take bins from the waste storage room to the loading dock where they will be emptied into the collection vehicle and then returned to the waste storage room.

The WMP establishes that during ongoing operation of the data centre, two collections for waste and one for paper and cardboard will be provided per week along with one collection for recyclable containers every month. This amounts to three vehicle movements per week and one additional vehicle every second week.

The Waste Management Plan prepared by SLR nominates best practice measures for waste management during operation phase, including

- waste avoidance
- reuse, recycling and disposal
- communication strategies
- waste storage signage
- roles and responsibilities

These recommendations are to be incorporated into an operational phase waste management plan to be prepared prior to commencement of operation of the development. It will be for implementation on the site during operation of the data centre development.

6.11.6.3. Cumulative impacts

The projected quantities of waste and recyclables, 3,588L each per week, are insignificant compared to the quantities of waste and recyclables generated in Sydney every day.

Allowance has been made for the separation of recyclables as much as possible, guided by the waste generation rates in the LCDCP. It is possible that further separation and recovery of waste materials will be made during the operational phase of the development.

6.11.7. Aboriginal Cultural Heritage

An Aboriginal Cultural Heritage Assessment Report (**ACHAR**) has been prepared by Artefact and is enclosed in Appendix HH. The ACHAR aims to identify and assess the Aboriginal heritage values of the site. A number of Registered Aboriginal Parties (**RAPs**) were consulted on the scope of the ACHAR and invited to provide feedback on the cultural significance of the area. A copy of the draft ACHAR was also issued to the RAPs in March 2025.

Previous archaeological investigations near to the site have focussed on the connection between the sites and the waterways of the Lane Cove River and the Stringybark Creek. These investigations have recorded sites that are associated with the waterways such as rock shelters, art sites, shell middens and engravings. However, these studies have also shown that historical ground disturbances have occurred across the area, which consistently yield no Aboriginal sites and are found to have low to nil archaeological potential.

A search of the Aboriginal Heritage Information Management System (**AHIMS**) identified 103 registered sites within a 2.25km x 2.25km area around the site (none are located within the application site itself) with the closest (Blackman Park 2) approximately 30 metres to the south. Blackman Park 2 consists of a ‘Shell; Artefact’ site that features a rock shelter with a slight midden deposit. Other registered sites within the vicinity of the site include Blackman Park 1, which is located approximately 160 metres to the west and consists of a rock shelter with a slight midden deposit, as well as Blackman Park 1 (a ‘Shell; Artefact; Art’ site located 215m to the south). The majority of the AHIMS registered sites within the study area comprise ‘Shell; Artefact’ sites that consist of rock shelters where middens have been found.

An archaeological survey of the site was completed by Artefact and a member of the Metropolitan Local Aboriginal Land Council (LALC) in November 2024. The site was examined over two survey units defined by landform and access.

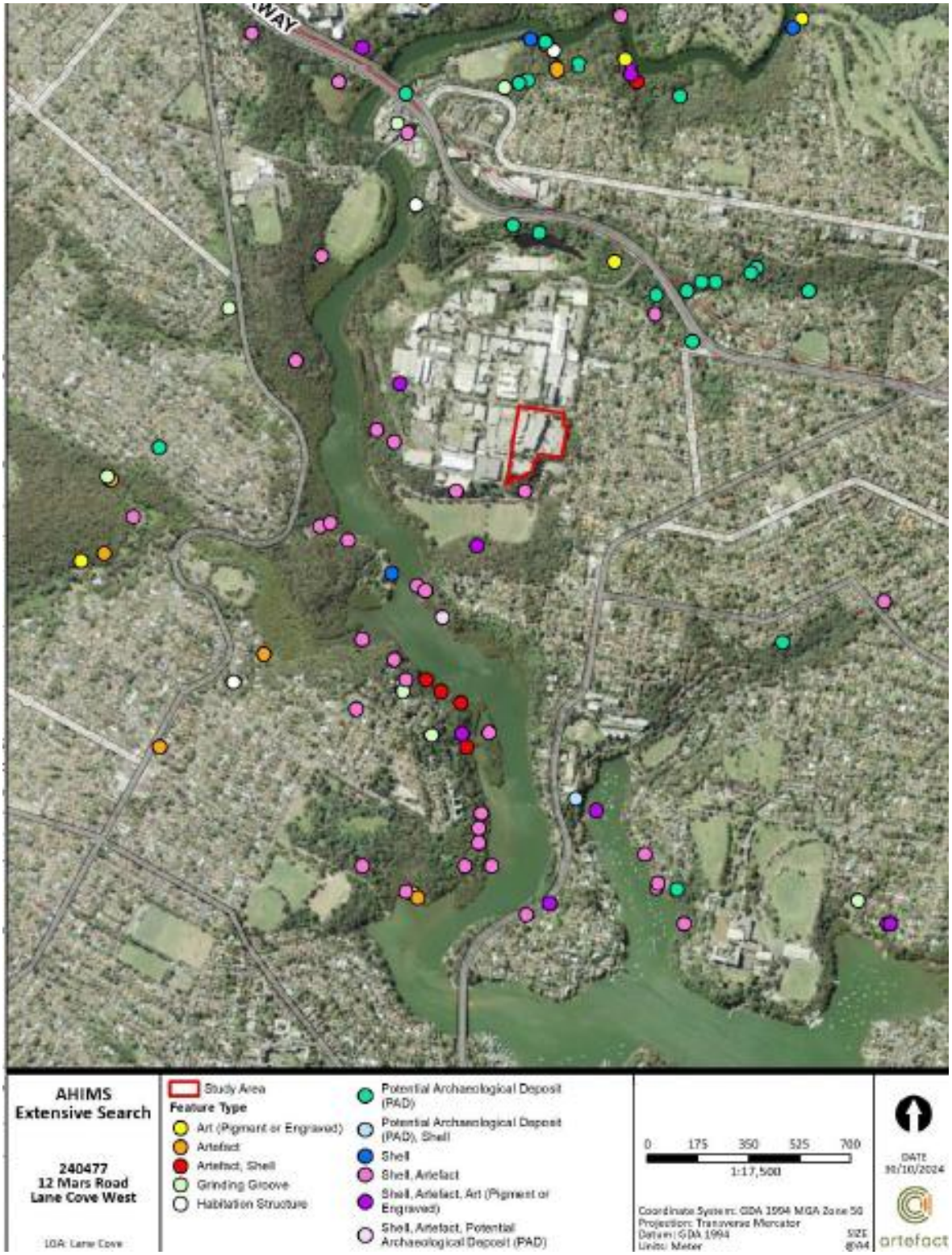
The survey found that the majority of the site (i.e. Survey Unit 1) was heavily disturbed by cutting into the natural landform and underlying sandstone. No Aboriginal objects were identified during the archaeological survey in Survey Unit 1.

Survey Unit 2 comprised the southern extent of the site as shown in Figure 45. This part of the site was not accessible during the archaeological survey due to the presence of dense vegetation, barbed wire fencing and the steeply sloping topography. However, this part of the site was identified as containing potential for rock shelters and Aboriginal objects given its minimal disturbance and location on landform conducive to containing Aboriginal objects, as well as its proximity to other Aboriginal sites with similar landforms. Accordingly, Artefact recommend that Survey Unit 2 is registered as a Potential Archaeological Deposit (**PAD**) with shelters.

Aboriginal cultural heritage values associated with the site are assessed within the ACHAR, which notes that the broader landscape has a long history of Aboriginal occupation and utilisation. However, no specific historic, aesthetic or socio/cultural values were identified.

The PAD has been identified in the south of the site as it demonstrates archaeological potential based on previous investigations in the area. However, the proposed works will be located entirely outside of the PAD area. Accordingly, the ACHAR concludes that the proposed development has no potential to impact Aboriginal objects and no further archaeological investigation is warranted.

Figure 44 AHIMS registered sites



Source: Artefact (2025)

Figure 45 PAD boundary

Source: Artefact (2025)

6.11.7.1. Mitigation Measures

The following ongoing management and mitigation measures will be implemented:

- The location of the PAD will be shown on the Environmental Control Maps contained within a future CEMP so that the extent of the potential archaeological deposit is known to all relevant construction staff, contractors and subcontractors.
- A fence or barrier will be installed around the PAD throughout the duration of construction works to avoid incidental harm.
- An unexpected finds procedure will be prepared and implemented during ground disturbing works in the event of any unexpected finds of Aboriginal sites, objects or archaeological deposits.
- Heritage inductions will be prepared and provided to contractors and site staff.
- Ongoing consultation with RAPs will continue.

6.11.8. Environmental Heritage

The site is not identified as containing any items of heritage significant under the Lane Cove LEP or the *Heritage Act 1977*.

The site is not located near any local heritage items or State heritage items. The proposed development is not anticipated to have any adverse impacts on the heritage significance on heritage items.

The ACHAR (Appendix HH) whilst specific to Aboriginal heritage, confirmed that the site has a history of extensive disturbance due to construction that has impacted the study area. Therefore, it is unlikely the areas of archaeological potential will be identified. Given the above and the continued use of the site for industrial and commercial use, it is highly unlikely that the site has the potential to contain any archaeological items or European heritage items. As such, a Statement of Heritage Impact is not required as the proposed development does not pose any direct or indirect impacts on the heritage significance of the area of any listed heritage items. As such, the proposal is not expected to have any impacts from a heritage perspective.

6.11.9. Social Impact

A Social Impact Assessment (SIA) has been prepared by Urbis and is enclosed in Appendix HH. The SIA identifies and analyses the potential positive and negative social impacts associated with the proposed development.

6.11.9.1. Potential positive impacts

- It was found that there would be low positive impact to way of life of Lane Cove's local community.
- The proposed development will generate approximately 200 jobs during construction and 26 jobs during operation, potentially attracting families to future local residential communities. The design aligns with the surrounding industrial character and is sensitive to nearby conservation and residential areas. Vegetation along the eastern boundary will be retained to enhance amenity and mitigate noise for adjoining residents, thereby ensuring the local community's amenity is maintained.
- It was found that there would be a high positive impact for access to workers amenities
- The proposed development includes a Preliminary Green Travel Plan which includes measures to support worker health and wellbeing by promoting active transport and intended or incidental physical activity.
- The incorporation of aboriginal design elements and features will provide a low positive impact to aboriginal culture and heritage.
- The report found the development will increase local and regional employment opportunities during construction and operation.

6.11.9.2. Potential negative impacts

- There are potential low negative impacts relating to access for local businesses and residents.

- It was found that there would be medium negative impacts during construction for the local population due the noise and vibration impact of the development. The NVIA acknowledges that despite implementing all feasible and reasonable mitigation measures, noise and vibration impacts are expected during construction at the nearest sensitive receivers when works are undertaken near the site boundaries.
- There are potential medium negative livelihood impacts on existing site tenants and customers relating to essential services and relocation.

6.11.9.3. Mitigation measures

A number of mitigation measures are suggested within the SIA. Many of the mitigation measures are detailed in the respective technical reports. Further mitigation measures below are proposed in the SIA:

- Implementing the findings from Biodiversity Development Assessment Report (**BDAR**) relating to the design and landscaping elements. Further, the BDAR notes that the following committed measures will further minimise the impacts on the biodiversity, including:
  - Reducing tree removal
  - Landscaping management
  - Bushfire management
  - Stormwater management
  - Fora and Fauna management
  - Monitoring of tree protection measures and tree health during construction
- Prepare a detailed CTMP will be prepared as part of the Construction Certificate Stage, including details related to on-site car parking availability and anticipated peak hour and daily construction vehicle movements to and from the site.
- Deliver the final GTP to encourage sustainable travel and reduce car dependency.
- Incorporate the findings and recommendations from the Connecting with Country (**CWC**) (TikaEQ, 2025) to integrate Indigenous values in the project.
- Prepare a construction noise and vibration management plan (**CNVMP**) as part of the broader Construction Management Plan prior to issue of the construction certificate. The CNVMP should reassess all construction noise on sensitive receivers based on the confirmed construction methods, including potential cumulative impacts, and provide appropriate mitigation measures. It should also contain complaint handling procedures and detail any compliance monitoring requirements.
- Implement the mitigation measures in the Air Quality Impact Assessment (**AQIA**) (SLR, 2025) that are either considered ‘highly desirable’ or ‘recommended’ for the demolition, earthworks and construction phases.
- Maintain ongoing consultation with existing tenants is essential to identify and address any key issues that may arise during the relocation process

6.11.10. Infrastructure Requirements

An Infrastructure Delivery, Management and Staging Plan (Appendix II) has been prepared by HDR to identify the services and utilities required to facilitate the operation of the proposed development.

The Infrastructure Delivery, Management and Staging Plan is accompanied by a feasibility letter from Sydney Water (dated 8 May 2025), which provides Sydney Water’s high level feasibility analysis of the available water and sewer infrastructure to service the proposed development and any upgrades that may be required to this infrastructure. This initial advice from Sydney Water has informed HDR’s infrastructure assessment as described below.

Electrical Infrastructure

An on-site substation is proposed to feed the site via a fully redundant, N-1 arrangement. Augmentation of the high voltage network is expected to supply the site, and the proponent is currently undergoing consultation with Ausgrid to determine the arrangement of feeders to the site.

Ausgrid will advise the final day supply capacity and route options from the STS to the proposed site. The feeder supply routes are outside the subject site boundary and will be approved under the utility authority's own permitted development rights.

Potable water

The existing Sydney Water potable supply is suitable to supply the combined water and wet fire services demand across the proposed development.

The required flow rate for the site is approximately 46L/s (TBC). The pressure and flow enquiry which was conducted indicates that the existing 250mm CICL water main is capable of delivering 118L.s at 21m head as a maximum flow.

A new pressure and flow enquiry will be conducted as part of detailed design with existing pressure and flow information provided as part of that report. The project will follow the Section 73 submission requirements to Sydney Water under detailed design. The proponent is also having early discussions with Sydney Water regarding the use of recycled water as a back up to service the potable water demands of the proposed development.

Sewerage

The site is serviced via existing 225mm sewer mains near the south and west boundary of the site. There is a 1500mm concrete-encased sewer which traverses a corner of the western boundary.

Sydney Water has provided a high-level assessment in the Feasibility Letter that the development site is located within the Lane Cove sub-system of the North Head sewerage system which currently has the capacity to service the development. It has been identified that the development can be connected to the existing 225mm sewer main.

The new connection and suitability to connect to existing would be carried out under the Section 73 process, with potable and wastewater modelling under the Water Servicing Coordinator (WSC) process in line with the latest advice from Sydney Water for new data centre developments. The discharge from the data centre shall also be advised by the WSC.

Telecommunications

Initial site location assessment via Before You Dig Australia (BYDA) indicates the presence of multiple Telco/ISP/Fibre service providers in the area, including NBN Co NswAct, FibreconX Pty Ltd, Fibrepath, TPG Telecom (NSW), Vocus Communications 2, Telstra NSW Central, Optus/Uecomm NSW.

It is anticipated that carrier services will be organised directly by Goodman. The preferred arrangement for fibre connection points to the site will be 2 preferably diverse paths.

Gas

Jemena BYDA plans indicate the presence of high and medium pressure gas mains along Mars Rd and the south boundary of the site. No natural gas supply is expected to be required for the proposed development, as all heating demands are to be met by electric powered equipment.

6.11.11. Bush Fire Risk

Land to the south of the site (on the southern side of Lloyd Rees Drive) is identified as Vegetation Buffer and Vegetation Category 2 land. At its closest point, the site is approximately 120m from this land. Vegetation Buffer and Vegetation Category 2 land is also located approximately 250m to the west of the site.

The site and the land immediately adjoining it is not identified as Category 1, 2 or 3 bushfire prone land and does not reside within the associated vegetation buffer area. Accordingly, a bush fire impact assessment is not required and has not been prepared as part of this SSDA.

6.11.12. Building Code of Australia and Access

Building Code of Australia

A Building Code of Australia (BCA) Report has been prepared by MBC Group and is enclosed in Appendix L. The purpose of the BCA report is to assess the current design proposal against the Deemed-to-satisfy provisions of the BCA. The report is based upon a desktop review of architectural details against the applicable provisions of the National Construction Code – Building Code of Australia Volume One 2022.

A number of items have been identified as requiring further investigation and resolution on a detailed design. These non-compliances can be addressed via performance solutions as part of the Construction Certificate process. Subject to the resolution of the above non-compliances, the report demonstrates that the proposed development can readily achieve compliance with the BCA.

Accessibility

An Access Report has been prepared by MBC Group to address the relevant SEARs and is eclosed in (Appendix M).

The report identifies a number of rooms and areas within the building that are exempt from accessibility standards due to their specific use under NCC/BCA D4D5. The Applicant will provide a letter detailing the exemption's applicability and clear locations as required, which will be assessed during the occupational certificate stage.

Following a desktop review of the Architectural Plans the report found that, subject to verification at the construction certificate stage, compliance with accessibility requirements in the National Construction Code (**NCC**) is achievable subject to adjustment to sanitary facilities.

6.11.13. Developer Contributions

The proposed development will be levied in accordance with the Lane Cove Section 7.11 Development Contributions Plan. The current applicable rate for industrial development is $52.78 per square metre of gross floor area.

The proposed development will also be subject to the Housing and Productivity Contribution.

7. Justification of the Project

This section of the report provides a comprehensive evaluation of the project having regard to its economic, environmental and social impacts, including the principles of ecologically sustainable development. It assesses the potential benefits and impacts of the proposed development, considering the interaction between the findings in the detailed assessments and the compliance of the proposal within the relevant controls and policies.

7.1. Project Design

The design of the project has been carefully considered to ensure that any potential impacts of the development are minimised. The development will deliver a state-of-the-art data centre and innovation hub at a strategic site that can help bolster the increasing demand for cloud-based data storage in Australia.

The proposed development will optimise the site's development potential whilst responding to existing constraints and providing a sensitive transition to adjoining C2 Environmental Protection zoned land and residential properties further afield.

The design of the proposed data centre responds to the site context by limiting the extent of the building façade and back-up generators near sensitive receivers to the east of the site. A generous setback is also proposed to the southern boundary with the building massing predominantly concentrated towards the centre of the site and near its interface with less sensitive adjoining industrial uses to the west. The bulk and scale of the proposed development is commensurate with contemporary industrial buildings within Sydney and responds to the existing topography to minimise visual impacts. Significant canopy cover will be retained on the site (existing trees have been retained as far as possible without unduly restricting development on the site), which will screen and soften the appearance of building and provide shading.

The ancillary office and front-of-house spaces will be located towards the northern boundary of the site, providing an interesting and welcoming appearance along the Mars Road frontage.

7.2. Strategic Planning Consistency

This EIS has demonstrated that the proposed development is consistent with the strategic framework and has been considered against key strategic planning policy and guidance including:

- Greater Sydney Region Plan: A Metropolis of Three Cities
- Our Greater Sydney 2056: North District Plan
- Lane Cove Local Strategic Planning Statement
- GANSW Better Placed 2017

The proposed development is consistent with state and local strategic planning policies. The proposal will deliver new employment opportunities, revitalise an existing industrial site that is currently vacant and entirely underutilised and support government investment in other high-tech infrastructure. The development will also incorporate a range of ESD initiatives.

7.3. Statutory Planning Consistency

The relevant State and local environmental planning instruments are listed in Section 4 and assessed in Appendix C. The assessment concludes that the proposal complies with the relevant provisions within the relevant instruments as summarised below:

- The proposed development has been assessed and designed in respect to the relevant objects of the EP&A Act as defined in Section 1.3 the Act and addressed in Appendix C.
- This EIS has been prepared in accordance with the SEARs as required by Schedule 2 of the EP&A Regulations.
- Consideration is given to the relevant matters for consideration under the BC Act and the SSD is supported by a BDAR accordingly.
- This SSDA pathway has been undertaken in accordance with the Planning Systems SEPP as the proposed development is classified as SSD.

- Concurrence from TfNSW will be required as per the T&I SEPP for 'traffic generating development'.
- The proposal complies with the majority of the relevant provisions under the LCLEP 2009. A variation to the height control is proposed and is fully justified within the accompanying clause 4.6 variation request The proposed development is consistent with the objectives of the E4 General Industrial zone.
- The proposed development has been assessed in accordance with the Resilience and Hazards SEPP, and the development complies with the relevant clauses.
- The proposal generally accords with the relevant provisions of the Cumberland DCP 2021 as outlined in **Appendix C**.

7.4. Community and Stakeholder Views

Community and stakeholder engagement has been undertaken in the preparation of the SSDA. This included direct engagement and consultation with:

- Surrounding landowners and occupiers
- Community groups including users of the Blackman Park Sporting Ground and local Bushcare user groups
- Registered Aboriginal Parties

The engagement was consistent with the community participation objectives in the Undertaking Engagement Guidelines for State Significant Projects and complied with the community engagement requirements.

Feedback obtained from Government agencies and utility stakeholders has been incorporated into the design and assessment in the EIS as far as possible.

7.5. Environmental Impacts

The proposed development has been assessed considering the potential environmental, economic and social impacts as outlined in the summary table below.

Table 35 Environmental Impact Summary

Matter	Summary
Impacts on the natural environment	The proposal addresses the principles of ecologically sustainable development **(ESD**) in accordance with the requirements at Clause 193 of the Regulations and as outlined below: Precautionary principle: The project seeks to recognise potential environmental risks and mitigate any dangers of significant or irreversible harm to the environment by following the Environmental Impact Statement process. A risk-based approach was adopted by treating issues for which risk could not be determined as requiring further detailed assessment. Risks posed by construction shall be addressed through the development of required management plans to identify potential hazards and aspects on the site and detail appropriate control measures to eliminate or reduce potential risks. Environmental risk factors have been identified in an ecological assessment, to identify any landscape features and native fauna and flora, assess their extent, type and presence of any threatened species, and to make recommendations on measure to avoid and minimise impacts on biodiversity on the site. The operation of a data centre has no inherent risk to the environment. However, datacentres do consume large amounts of electricity. Various sustainability measures covering aspects from energy and water consumption, and impact on environment will be targeted, including the optimisation of mechanical services design and requirement of energy efficient data centre equipment, which would minimise the impact of the development on the environment in the long term.

Matter	Summary
	Intergenerational equity: The proposed development aims to reduce energy and water usage whilst minimising waste. The building systems are optimised so that energy and water consumption is minimised through efficiency measures described in Section 4.6 and 4.7. The building has been designed to achieve the requirements of Section J of the National Construction Code, including the minimum standards outlined in Part J4 (Building Fabric) of the NCC 2022 for conditioned areas. The design will enhance the façade, reduce thermal loads, and minimise carbon emissions, ensuring that the development results in an environmentally sustainable building with energy-efficient operations. Waste produced during the construction and operational phases shall be diverted from landfill to be recycled. The measures outlined above ensures that the development minimises its impact on the health, diversity and productivity of the environment, thus maintaining it for the benefit of future generations. Conservation of biological diversity and ecological integrity: As demonstrated throughout the EIS and in the relevant appendices, the proposed development will not result in any significant impacts on the biological and ecological integrity of the surrounding land (including Prospect Creek Riparian Area) subject to the implementation of the identified mitigation measures. The planting of native and endemic vegetation on the site will support local ecology and biodiversity. Improved valuation, pricing and incentive mechanisms: A Waste Management Plan will be implemented to establish recycling and landfill waste streams during the construction phase of the proposed development. In addition, measures to reduce water and electricity consumption including procuring high-efficiency cooling systems, energy efficient IT equipment, rainwater capture and water reuse in the proposed design reduces consumption of resources by the development. The project's environmental objectives are by first implemented via passive design measures in the building fabric, including high performance glazing, wall insulation, and roof insulation. Subsequently, more cost-effective building systems are also considered.
Impacts on the built environment	**Built form:** The design of the built form is well considered and responds to the operational and spatial requirements of the proposed land use (i.e., a data centre) as well as the surrounding industrial uses to the north and west of the site. A range of high-quality materials and finishes are proposed to articulate the building and provide visual interest within the site and complement the character and appearance of the Lane Cove West Industrial Area. **Visual impacts:** The visual impacts of the proposed development range from nil to low. This takes into consideration the existing visual context and baseline factors, level of visual effects and additional weighting factors and the height exceedance of the proposed development. On this basis, the visual impacts of the proposed development are considered acceptable. **Trees and landscaping:** The proposed tree removal is required to facilitate the proposed development. Significant new and additional tree planting will be provided along all site boundaries. The majority of existing trees within the north-eastern corner, along the eastern boundary and southern part of the site have been retained. **Air quality:** the air quality impacts of the proposed construction and operational phases have been assessed. During construction the proposed development is considered acceptable from an air quality perspective. During operation exceedances would only occur during an emergency scenario for NO_2. The actual likelihood of an exceedance of air quality occurring during an emergency scenario is considered highly unlikely. **Noise and vibration:** the noise and vibration impact of the proposed construction and operational phases have been assessed. During construction, exceedances of NMLs are expected at the nearest sensitive receivers. The impacts are only when noisy works are undertaken close to site boundaries. The exceedances are acceptable with the implementation of construction noise mitigation measures. Feasible and reasonable construction vibration mitigation measures will be implemented to manage vibration impacts to surrounding receivers when works are being undertaken near site boundaries. During operation, the proposed development will comply with established noise criteria.
Social impacts	The proposal will have the following positive social impacts: • Access to worker amenities and services

Matter	Summary
	• Celebrate Indigenous culture through the incorporation of Designing with Country principles into the design of the proposed development • Increase local and regional employment opportunities.
Economic impacts	The proposed development will have the following positive economic impacts: • It will facilitate the orderly and economic development of an accessible brownfield site • The proposal will provide employment opportunities during both the construction and operational phases of the development. • The proposal will deliver critically needed data storage space in a highly suitable and accessible location.

The potential impacts can be mitigated, minimised or managed through the measures discussed in detail within Section 6 and as summarised in Appendix F to this EIS.

7.6. Suitability of the Site

The site is highly suitable for the proposed development for the following reasons:

- The is zoned E4 General Industrial. The proposed development is consistent with the objectives for the E4 Zone.
- The site is located within the Lane Cove West Industrial Area, which is characterised by industrial uses. It is also co-located with other data centres on adjacent sites to support business activity in the Eastern Economic Corridor and Greater Sydney.
- The site is a brownfield site that is available for development. Development of the site as proposed will optimise its development potential and revitalise an underutilised industrial site.
- The character and scale of the development is compatible and consistent with its existing and likely future context. There are no significant environmental constraints that would limit the project from being developed at the site.
- There are no significant environmental constraints that cannot be appropriately mitigated.

7.7. Public Interest

The proposed development is considered in the public interest for the following reasons:

- The proposal is consistent with relevant State and local strategic plans and complies with the relevant State and local planning controls.
- The proposal will provide a total of 200 jobs during construction and 26 jobs once operational.
- The proposed data centre will address a growing requirement for data storage infrastructure within western Sydney. In doing so, the proposal will support local businesses and support cybersecurity.
- The proposal comprises the redevelopment of an outdated and underutilised brownfield site. It will contribute to the Sydney economy and further strengthen Lane Cove West as an important industrial area.
- The proposal will incorporate landscaping and utilise a range of building materials and articulation, which will stimulate visual interest from outside the site.
- An extensive assessment of environmental impacts (including bulk and scale, overshadowing, visual impact, air quality, noise, traffic, flooding) has been undertaken to ensure any adverse environmental impacts of the proposed bulk and scale of the development on nearby land uses is minimised, and where required, managed through mitigation measures

Having considered all relevant matters, we conclude that the proposed development is appropriate for the site and approval is recommended, subject to appropriate conditions of consent.

8. Disclaimer

This report is dated March 2026 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Ltd **(Urbis)** opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Goodman **(Instructing Party)** for the purpose of a State Significant Development Application **(Purpose)** and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

Appendix A SEARs Compliance Table

Appendix B Architectural Plans

Appendix C Statutory Compliance Table

Appendix D Cost Summary Report

Appendix E Community Engagement Table and Engagement Report

Appendix F Mitigation Measures Table

Appendix G Owner's Consent

Appendix H Architectural Design Report

Appendix I Survey Plan

Appendix J Landscape Plans

Appendix K Landscape Report

Appendix L Building Code of Australia Compliance Report

Appendix M Accessibility Report

Appendix N Visual Impact Assessment

Appendix O Transport and Accessibility Impact Assessment

Appendix P ESD Report

Appendix Q NABERS Embodied Emissions Materials Form

Appendix R NABERS Agreement to Rate

Appendix S Biodiversity Development Assessment Report

Appendix T Air Quality Impact Assessment

Appendix U Noise and Vibration Impact Assessment

Appendix V Ground and Water Conditions Assessment

Appendix W Salinity Management Plan

Appendix X Integrated Water Management Plan

Appendix Y Civil Engineering Package

Appendix Z Flood Impact Assessment

Appendix AA Preliminary Site Investigation

Appendix BB Detailed Site Investigation

Appendix CC Remedial Action Plan

Appendix DD Waste Management Plan

Appendix EE Hazardous Materials Survey

Appendix FF Dangerous Goods Report

Appendix GG Resilience and Hazards SEPP Assessment

Appendix HH Aboriginal Cultural Heritage Report (ACHAR)

Appendix II Net Zero Commitment Letter

Appendix JJ Social Impact Assessment

Appendix KK Infrastructure Requirements Report

Appendix LL NABERS Commitment Letter

Appendix MM Arborist Report

Appendix NN Fire Safety Concept Strategy

Appendix OO Clause 4.6 Variation Request

Appendix PP Connecting with Country Report

Appendix QQ Groundwater Monitoring Letter

Appendix RR Pipeline Hazard Analysis

Appendix SS Geotechnical Assessment

Appendix TT Urban Heat Island Memo

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