



Environmental Impact Statement

Proposed Data Centre Development at 57
Station Road, Seven Hills

ON BEHALF OF

LEHR CONSULTANTS INTERNATIONAL (AUSTRALIA) PTY LTD

JUNE 2022



Project

Station Road Data Centre Expansion

DATE

15 June 2022

CONTACT

info@patchplanning.com

COPYRIGHT


© Patch Planning

All Rights Reserved. No part of this document may be reproduced, transmitted, stored in a retrieval system, or translated into any language in any form by any means without the written permission of Patch Planning (Patch Planners Pty Ltd).

All Rights Reserved. All methods, processes, commercial proposals and other contents described in this document are the confidential intellectual property of Patch Planning and may not be used or disclosed to any party without the written permission.

EIS Declaration

Project details	
Project Name	Station Road Data Centre Expansion
Application number	SSD-33781208
Address of the land in respect of which the development application is made	57 Station Road, Seven Hills Lot B DP 404669
Applicant Details	
Applicant name	Lehr Consultants International (Australia) Pty Ltd
Applicant address	Level 5, 73 Miller St, North Sydney
Details of person by whom this EIS was prepared	
Name	Mason Stankovic
Address	Level 1, 204 Clarence Street, Sydney
Professional qualifications	Bachelor of Development Studies Graduate Certificate Property & Planning
Name	Joe Bell
Address	Level 1, 204 Clarence Street, Sydney
Professional qualifications	Bachelor of Planning (Hons).
Declaration	
Declaration	<p>We declares that this EIS:</p> <ul style="list-style-type: none"> • has been prepared in accordance with Schedule 2 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 misleading;

Project details	
	<ul style="list-style-type: none"> 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.
Name	Mason Stankovic
Signature	
Date	9 June 2022
Name	Joseph Bell
Signature	
Date	9 June 2022

Abbreviations and Acronyms

ACHA	Aboriginal Cultural Heritage Assessment
AEP	Annual Exceedance Probability
BC Act 2016	<i>Biodiversity Conservation Act 2016</i>
BDCP 2015	<i>Blacktown Development Control Plan 2015</i>
BLEP 2015	<i>Blacktown Local Environmental Plan 2015</i>
BMCS	Building Management Control System
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
DPE	NSW Department of Planning and Environment
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPA	NSW Environment Protection Authority
EPI	Environmental planning instrument
GPT	Gross Pollutant Trap
ISEPP	<i>State Environmental Planning Policy (Infrastructure) 2007</i>
LEED	Leadership in Energy and Environmental Design
LCI	Lehr Consultants International (Australia) Pty Ltd (the Applicant)
LGA	Local Government Area
LoS	Level of Service
NCC	National Construction Code
NRAR	NSW Department of Natural Resources Access Regulator
OSD	On-site detention
Patch	Patch Planning
POEO Act 1997	<i>Protection of the Environment Operations Act 1997</i>
SEPP	State Environmental Planning Policy
SEPP (PS)	<i>State Environmental Planning Policy (Planning Systems) 2021</i>
SEPP (R&S)	<i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>
SEPP (T&I)	<i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>
SSD	State Significant Development
SSDA	State Significant Development Application
TTPP	The Transport Planning Partnership

The Regulations
VIA

Environmental Planning and Assessment Regulation 2021
Visual Impact Assessment

Table of Contents

Summary	1
1 Introduction.....	10
1.1 Project Overview.....	12
1.1.1 The Site.....	12
1.1.2 Site Description	14
1.1.3 Relevant Approvals	18
1.1.4 Project Summary	21
1.1.5 Project Alternatives	22
2 Strategic Context.....	24
2.1 Regional Context	24
2.2 Strategic Planning Context.....	25
2.2.1 Greater Sydney Region Plan	25
2.2.2 Central City District Plan	26
2.2.3 Blacktown LSPS.....	27
3 Project Description	28
3.1 Project Overview.....	28
3.2 Detailed Description	29
3.2.1 Project Area	29
3.2.2 Physical Layout and Design.....	30
3.2.3 Landscaping.....	33
3.2.4 Access and Parking	34
3.2.5 Uses and Activities	35
3.2.6 Construction Timing and Staging	35
3.2.7 Back-Up Power System	36
3.2.8 Operational Details	38
3.2.9 Cumulative Site Outcome.....	38
4 Statutory Context	39
4.1 Environmental Planning & Assessment Act 1979	39
4.1.1 Environmental Planning & Assessment Regulation 2021.....	41

4.2	Biodiversity Conservation Act 2016	41
4.3	Protection of the Environment Operations Act 1997	42
4.4	Environmental Planning Instruments	42
4.4.1	SEPP (Planning Systems) 2021.....	42
4.4.2	SEPP (Transport and Infrastructure) 2021.....	43
4.4.3	SEPP (Resilience and Hazards) 2021.....	44
4.4.4	Blacktown Local Environmental Plan 2015	44
4.5	Blacktown Development Control Plan 2015.....	54
5	Community and Stakeholder Engagement.....	55
5.1	Community Views.....	55
5.2	Government Agency Views	55
5.3	Blacktown City Council Feedback.....	56
5.4	Engagement to be Carried Out.....	62
6	Assessment of Impacts	63
6.1	Built Form and Urban Design	63
6.1.1	Overshadowing	64
6.1.2	Landscaping.....	66
6.2	Visual Impacts.....	67
6.2.1	Summary of Visual Impacts	71
6.2.2	Recommended Mitigations.....	72
6.3	Noise and Vibration	72
6.3.1	Construction Noise and Vibration.....	75
6.3.2	Potential Operational Noise Impacts.....	75
6.3.3	Road Traffic Noise Assessment	75
6.3.4	Recommended Mitigations.....	75
6.4	Hazards and Risks	77
6.4.1	Hazard Screening Assessment	77
6.4.2	Compliance with Standards.....	78
6.5	Air Quality	79
6.5.1	Construction Phase Impacts	80
6.5.2	Operational Emissions.....	81

6.5.3 Recommended Mitigations.....	83
6.6 Traffic and Transport.....	84
6.6.1 Construction Phase Traffic Impacts.....	84
6.6.2 Operational Phase Traffic Impacts.....	86
6.6.3 Car Parking.....	87
6.6.4 Green Travel Plan.....	88
6.7 Contamination and Remediation.....	89
6.8 Stormwater and Wastewater.....	90
6.8.1 Approved Development.....	90
6.8.2 Proposed Development.....	91
6.9 Flooding Risk.....	93
6.10 Infrastructure Requirements.....	95
6.10.1 Hydraulic and Fire Infrastructure.....	95
6.10.2 Electrical.....	95
6.10.3 Information and Communication Technology.....	95
6.11 Ecologically Sustainable Development.....	95
6.11.1 ESD Principles.....	96
6.11.2 Building Sustainability and Environmental Performance Standards.....	97
6.11.3 ESD Initiatives.....	97
6.12 Heritage.....	99
6.12.1 Aboriginal Cultural Heritage.....	99
6.12.2 Non-Aboriginal Heritage.....	101
6.13 Biodiversity.....	101
6.13.1 Recommended Mitigations.....	103
6.14 Social Impacts.....	103
6.14.1 Social Impacts.....	103
6.14.2 Recommended Mitigations.....	105
6.15 Waste Management.....	105
6.15.1 Construction Waste and Recycling Generation.....	105
6.15.2 Operational Waste and Recycling Generation.....	106
6.16 Crime Prevention.....	107
6.17 Ground and Water Conditions.....	108

6.17.1 Geotechnical and Groundwater	108
6.17.2 Salinity	109
6.18 Accessibility.....	109
6.19 BCA Compliance	109
7 Justification of the Project	110
7.1 Environmental Impacts	110
7.1.1 Summary	113
7.2 Social Impacts.....	114
7.3 Economic Impacts	115
7.4 Contributions and Public Benefit.....	115
7.5 Suitability of the Site.....	115
7.6 Justification.....	116
7.7 Conclusion and Recommendation.....	116

Figures

Figure 1: Site Context Map.....	12
Figure 2: Site Aerial.....	13
Figure 3: View of the site from Station Road (viewpoint 1).....	15
Figure 4: View of the site from Station Road (viewpoint 2).....	16
Figure 5: View along the side boundary as seen from the entrance to McCoy Park.....	16
Figure 6: Viewpoint looking along the boundary towards the northeastern rear corner of the site.....	17
Figure 7: Rear portion of the site.....	17
Figure 8: Approved Landscape Plan.....	18
Figure 9: Approved South (Station Road) Elevation.....	19
Figure 10: Approved East (McCoy Street) Elevation.....	19
Figure 11: Approved Cut and Fill Plan for Existing Approval.....	20
Figure 12: Area the subject of works under the SSDA.....	22
Figure 13: Illustrative figure depicting proposed data centre.....	22
Figure 14: Context Map.....	24
Figure 15: Three Cities Plan.....	25
Figure 16: Central City District Plan.....	26
Figure 17: Illustrative figure showing approved and proposed development.....	30
Figure 18: Site plan of proposed development.....	31
Figure 19: Typical Floor Plan.....	31
Figure 20: Elevations of proposed data centre.....	32
Figure 21: Landscape Plan.....	33
Figure 22: Parking Areas shown on Site Plan.....	35
Figure 23: Zoning map of subject site.....	51
Figure 24: Height map of subject site.....	52
Figure 25: FSR map of subject site.....	53
Figure 26: Illustrative figure depicting proposed data centre.....	64
Figure 27: Illustrative figure depicting proposed data centre.....	64
Figure 28: 9am overshadowing associated with proposal.....	65
Figure 29: 12pm overshadowing associated with proposal.....	65
Figure 30: 3pm overshadowing associated with proposal.....	66

Figure 31: Visual Sensitivity Rating Guide..... 68

Figure 32: Visual Impact Rating Guide..... 68

Figure 33: Viewpoint Locations..... 69

Figure 34: Photomontage of Viewpoint 05 (McCoy Street Car Park).....71

Figure 35: Photomontage of Viewpoint 05 (McCoy Street south).....71

Figure 36: Location of considered receivers surrounding the project site..... 74

Figure 37: Measured ambient noise level at 18 Edna Avenue, Toongabbie..... 74

Figure 38: Minimum Insertion Losses – Intake Louvres for Air Handling Units.....77

Figure 39: Receptors considered in air quality assessment..... 80

Figure 40: Approved heavy vehicle routes in vicinity of site..... 85

Figure 41: Stormwater Management Plan Approved Under DA-21-01058.....91

Figure 42: Location of Rainwater Tanks.....93

Figure 43: Flood Map of Site 94

Figure 44: Ecological Values of the Site102

Tables

Table 1. Applicant Details.....	10
Table 2. Appendix List.....	10
Table 3. Site Description.....	14
Table 4. Project Alternatives Considered.....	23
Table 5. Project Overview.....	28
Table 6. Proposed Testing Regime.....	37
Table 7. Cumulative Site Development Outcomes.....	38
Table 8. Alignment with the Objects of the EP&A Act.....	39
Table 9. BLEP 2015 - Clause 7.3 Assessment.....	46
Table 10. BLEP 2015 - Clause 7.8 Assessment.....	47
Table 11. BLEP 2015 - Clause 7.9 Assessment.....	49
Table 12. Government Agency Consultation Outcomes.....	56
Table 13. Response to Blacktown City Council feedback.....	57
Table 14. Visual Impact Summary.....	70
Table 15. Nearest Potentially Affected Receivers.....	72
Table 16. Summary of mitigation measures for construction noise.....	76
Table 17. List of Hazardous Materials.....	78
Table 18. Station Road Traffic Flows.....	86
Table 19. Car Parking Demand.....	88
Table 20. Site Storage and Permissible Site Discharge Requirements.....	91
Table 21. Water Demand Allowances for Proposed Data Centre.....	93
Table 22. ESD Initiatives.....	97
Table 23. Social Impacts.....	104
Table 24. Estimated Volume of Construction Waste.....	106
Table 25. Operational Waste and Recycling.....	107
Table 26. Summary of Environmental Considerations.....	110

Summary

Introduction

This Environmental Impact Statement (EIS) has been prepared by Patch on behalf of Lehr Consultants International (Australia) Pty Ltd (the Applicant) in support of a State Significant Development Application (SSDA) for a new 19.2MW data centre at 57 Station Road, Seven Hills (the site).

The EIS has been prepared to respond to Secretary's Environmental Assessment Requirements (SEARs) received under SSD-33781208 and with consideration given to the Department's Rapid Assessment Framework finalised on 12 December 2021.

Local Context and Site Description

The site is located on land known as 57 Station Road, Seven Hills, legally referred to as Lot B DP404669. It is within the Blacktown local government area (LGA), and borders the Parramatta LGA.

The site is in the Seven Hills Industrial Area, approximately 3.8km east of the Blacktown CBD and 6.8km west of the Parramatta CBD. Other nearby centres include the local centres of Toongabbie (around 900m south) and Seven Hills (around 1.3km northwest), the latter of which is identified as an Urban Renewal Area in the Central City District Plan.

The site is located adjacent to the Main Western Railway line. The M2 Motorway is 3.3km northwest by road, and the M4 Motorway is 6km south by road.

Surrounding development is mixed in nature, comprising varying industrial uses to the north and north-west, the Main Western Railway corridor to the south, Blacktown Creek to the north, and the McCoy Park accessway to the east. Beyond the accessway exists a small neighbourhood centre and low-rise residential typologies.

Relevant Approvals

The proposal represents the second stage of development intended to be undertaken at the site, with the first stage comprising development approved by Council on 10 January 2022 under DA-21-01058.

Development approved under DA-21-01058 is currently underway and provides for development on the front third of the site including a small scale 1.2MW data centre, site landscaping, parking, and internal roads. In addition, it provides for earthworks and site preparation works to be undertaken on the balance of the site to the rear, which will accommodate the proposal which is the subject of this EIS.

Upon completion, the two developments will operate as a single integrated data centre campus (although under separate consents).

Project Summary

This SSDA seeks approval for the construction and operation of a new data centre at the subject site. As described above, the proposal will be located to the rear of an interconnected 1.2MW smaller data. Upon completion the 2 developments will operate as a single integrated data centre campus.

The objective of the project is to provide for additional data storage capacity to account for increased demand in cloud storage services within the Greater Sydney Region, which have become increasingly apparent during the COVID-19 pandemic. Specifically, the SSDA seeks approval for the following:

- Construction of a new two-storey 19.2MW data centre at the rear of the site including ancillary office space comprising a total gross floor area (GFA) of 8,076sqm;
- Provision of external plant in plant yards to the west, north and south of the proposed data centre, as well as appropriately screened rooftop plant required to ensure the proper functioning of the facility;
- Provision of nine (9) backup diesel generators and associated fuel storage with a total capacity of 289,000 litres;
- Operation to take place 24 hours a day, 7 days a week;
- Internal road network provided via accessways already approved from Station Road under DA-21-01058;
- Parking for a total of 31 vehicles, which includes 16 car parking spaces approved under DA-21-01058;
- End of trip facilities including parking for four (4) bicycles and shower/change facilities; and
- Perimeter deep soil planting and other soft landscaping works.

The proposal will rely upon power supply from 33kV infrastructure, which will be created through a new connection to the Seven Hills substation. These works are to be undertaken through a separate agreement with Endeavour Energy and are not the subject of this SSDA.

Project Alternatives

Under Clause 192 the provisions of Environmental Planning and Assessment Regulation 2021 (EP&A Regs), and in accordance with the State Significant Development Guide prepared by DPE, there is a requirement to analyse any feasible alternatives for SSDAs.

It is considered that the proposal provides for an optimised outcome at the site in lieu of 'Do Nothing' and alternative design options as it will ensure valuable industrial land does not remain underutilised, and delivers a development outcome which achieves the following:

- Provides critical infrastructure that will support the economy and community alike, resulting in both economic and social benefits;
- Results in a development outcome which will have minimal adverse built form impacts and be compatible with the site and surrounds; and
- Provides a low intensity light industrial land use, which interfaces appropriately with urban and residential areas and will not result in any adverse environmental or amenity impacts like noise, emissions, dust, traffic, or other impacts.

Strategic Context

The proposal is located within the Central City District and the Blacktown LGA. A review of the District Plan and Blacktown Local Strategic Planning Statement (LSPS) identifies that the proposal is aligned with the respective strategic policies as detailed below.

The Central City District Plan

The District Plan identifies the site partway between the Blacktown Strategic Centre and the Greater Parramatta Metropolitan Centre. It is within an industrial area, just outside of the Seven Hills Local Centre and Urban Renewal Area.

The proposal helps to realise a number of planning priorities outlined within the plan, including:

- Planning Priority C11 – Maximising opportunities to attract advanced manufacturing and innovation in industrial and urban services land: The development will result in the renewal of what is currently underutilised industrial land into a more efficient 'high technology industry' use, which will contribute to the development of the digital economy.
- Planning Priority C13 – Protecting and improving the health and enjoyment of the District's waterways: The proposal will provide for sensitive and sustainable water cycle management outcomes.
- Planning Priority C16 – Increasing urban tree canopy cover and delivering Green Grid connections: The Proposal includes a detailed landscape plan which increases tree canopy cover across the site.

Blacktown LSPS 2020

The Blacktown LSPS is Council's primary strategic planning document and sets out planning priorities consistent with the Central City District Plan and the Greater Sydney Region Plan, providing a 20-year land use vision for the LGA. It directs how future growth and change will be managed across the LGA and informs changes to relevant environmental planning instruments and development control plans.

The LSPS identifies the broader precinct containing the site as the "Seven Hills" industrial area. It identifies the need to protect the LGA's 3,000ha of industrial land as areas providing work opportunities for Blacktown and Western Sydney residents, whilst also creating investment opportunities for local, national and multinational companies.

The Proposal is considered to align with the intent of the LSPS as it will ensure the ongoing use of the site for industrial purposes, and directly responds to the below planning priorities:

- Local Planning Priority 9 – Maximising opportunities to attract advanced manufacturing to, and innovation in, industrial and urban services land: The development provides a type of 'high technology industry' on the site, maximising industrial land that is currently underutilised.
- Local Planning Priority 11 - Protecting and improving the health and enjoyment of waterways: The Proposal adjoins Blacktown and Toongabbie Creeks, and has incorporated water sensitive urban design to ensure impacts to the health of the creek are avoided.
- Local Planning Priority 14 - Increasing urban tree canopy cover and Green Grid connections: The Proposal includes a detailed landscape plan which increases tree canopy cover across the site.

Statutory Context

The EIS addresses statutory planning process for the proposal along with relevant State and Local legislation and planning instruments which require consideration. The key relevant legislation, planning instruments and policies relating to the proposal are as follows:

- Environmental Planning and Assessment Act 1979 (EP&A Act);
- Environmental Planning and Assessment Regulation 2021 (EP&A Regulation);
- Protection of the Environment Operations Act 1997 (POEO Act 1997);
- Biodiversity Conservation Act 2016;
- State Environmental Planning Policy (Resilience and Hazards) 2021 (SEPP R&H 2021);
- State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP); and
- State Environmental Planning Policy (Transport and Infrastructure) 2021 (SEPP T&I 2021).

As summarised below, following consideration of the proposal against the requirements of the above listed legislation, planning instruments and policies, the EIS confirms the suitability of the site for the proposal and that the proposal is in the public interest.

EP&A Act 1979

Section 4.36(2) of the EP&A Act states that a SEPP may declare any development as State Significant Development (SSD). As such, the development constitutes SSD as identified under Schedule 1 of SEPP (*Planning Systems*) 2021. It is noted that the Minister is the consent authority for SSD, however, they may delegate this function to staff at the Department of Planning and Environment (DPE).

The EIS provides an assessment of the proposal against the matters of consideration listed in Section 4.15 of the EP&A Act 1979. The assessment undertaken provides that the site is suitable for the proposal and within the public interest.

EP&A Regulation 2021

This EIS has been prepared in accordance with the Regulations as relevant, with all necessary requirements being provided as required under Sections 24 and 190.

The development is not listed as a type of Designated Development under Schedule 3 of the Regulations.

POEO Act 1997

Schedule 1, Clause 17(2) identifies that general electricity works with a capacity to generate more than 30 megawatts of electrical power constitutes a Scheduled Activity under the POEO Act 1997. However, it is also noted that Clause 17(1A) under the Schedule identifies that this clause does not apply to the generation of electricity by means of electricity plant that is emergency stand-by plant operating for less than 200 hours per year.

Taking into consideration the above, the proposal does not constitute a Scheduled Activity as the testing and use of generators at the site is not anticipated to exceed 200 hours per year.

Biodiversity Conservation Act 2016

Under Section 7.9 of the BC Act 2016, a Biodiversity Development Assessment Report (BDAR) is required to be submitted for any SSD. However, Section 7.9(2) also allows for an exemption from the requirement to submit a BDAR under certain circumstances.

It has determined that the site has limited features of ecological value, is unlikely to support any threatened species, and unlikely to provide roosting habitat for threatened microbats. Subsequently, a BDAR waiver request is made requesting that the requirement for a BDAR be waived accordingly.

SEPP (Planning Systems) 2021

In accordance with Schedule 1, Clause 25 of the Planning Systems SEPP, the development is considered SSD as the power consumption of the facility exceeds 10MW. As such, an SSDA has been submitted accordingly.

SEPP (Transport and Infrastructure) 2021

In accordance with Clause 2.31 of SEPP (T&I) 2021, development for the purposes of a data centre is permissible in the IN1 General Industrial zone.

SEPP (T&I) 2021 also contains provisions related to development adjoining electricity transmission, development adjacent to rail corridors, and traffic generating development to be referred to Transport for NSW (TfNSW). As demonstrated in the EIS, these provisions have either been satisfactorily addressed by the development or are otherwise not relevant to the subject proposal.

Blacktown Local Environmental Plan 2015 (BLEP 2015)

The subject site is zoned IN1 – General Industrial under BLEP 2015 which permits data centres with consent. A 'data centre' is defined as a type of 'high technology industry', which in itself is a type of 'light industry' as defined under the standard instrument. Light industries are identified in the land use table as a use permitted with consent in the IN1 Zone. In addition, the proposal is consistent with the objectives of the IN1 zone.

As demonstrated within the EIS, the proposal provides for a development outcome which appropriately interfaces with nearby residential receivers as required under clause 7.8 of BLEP 2015.

In addition, the proposal is consistent with the relevant requirements of BLEP 2015 which relate to flood planning under clause 5.21, riparian land and watercourses under 7.3, and development with frontage to roads zoned SP2 under clause 7.9.

SEPP (Resilience and Hazards) 2021

An assessment of the proposal has been undertaken against the relevant chapters of SEPP (R&H) 2021.

Under Chapter 3, SEPP (R&H) 2021 provides criteria to confirm whether a development can be considered potentially hazardous or offensive and outlines how to reduce these impacts.

A risk screening assessment has been prepared in support of the EIS which confirms that there are no dangerous goods on the site that are included in the threshold values contained within the SEPP and the proposed development is therefore not a potentially hazardous industry.

Chapter 4 of SEPP (R&H) 2021 provides a state-wide approach to the remediation of contaminated land, to reduce the risk of harm to human health or the environment. Clause 4.6 of the SEPP requires that a consent authority not grant approval for the carrying out of development on land unless satisfied that the land is (or can be made) suitable for the intended use. Subsequently, a Phase 2 Contamination Assessment and Validation Report for removal of UPSTs supports the EIS, demonstrating the site is suitable for the proposal in its current state.

Community and Stakeholder Engagement

Community and stakeholder engagement has been undertaken in accordance with the SEARs and the DPE's *Undertaking Engagement for State Significant Projects* prior to lodgement. This has included consultation with:

- Surrounding landowners, occupants, and businesses;
- Blacktown City Council;
- The City of Parramatta Council;
- NSW Environment Protection Authority (EPA);
- NSW Department of Natural Resources Access Regulator (NRAR);
- NSW Department of Planning and Environment;
- Endeavour Energy; and
- Sydney Water.

Overall, there was very limited community interest in the project, with no attendees at the community information session offered.

In relation to Government stakeholders, feedback received prior to lodgement has been duly considered and is addressed within the EIS.

Assessment of Impacts

The EIS addresses a range of environmental matters which haven identified under the SEARs received in relation to the project. The assessment of relevant impacts is summarised below:

Built Form and Urban Design

The proposal provides for a high-quality architectural outcome whilst also meeting the bespoke design requirements for data centres. It is considered that the design of the facility is compatible with the height, scale, siting, and character of the surrounds.

The data centre is located centrally within the site away from the street and comprises façades with a combination of vertically modulated panels and other treatments which achieve an appropriate level of visual interest. Careful consideration has also been given to ensure that external plant is largely screened from nearby residential receivers and public viewpoints.

It is considered that the proposed design coupled with deep soil zones and site landscaping provide for an appropriate built form and urban design response at the site.

Visual Impact

A Visual Impact Assessment (VIA) has been prepared in support of the SSDA, which aims to identify and determine the value, significance, and sensitivity of the landscape, and assess the subsequent visual impact of the proposal.

The VIA finds that the depth of the lot and siting of the development to the rear will limit its overall visual impact, and the nature of surrounding development suggests that the proposal will integrate with existing built form. Existing vegetation on the northern and eastern boundaries also provides a buffer to the recreation areas, further limiting impacts.

In conclusion, the visual impact assessment finds that, with appropriate mitigations incorporated, the development will have minimal overall visual impact on the surrounding landscape.

Noise and Vibration

The impact of construction and operational noise and vibration on surrounding receivers, as well as the impact of road traffic on future occupiers, has been considered in the EIS and supporting reports.

Whilst no adverse impacts are expected on surrounding receivers or occupiers during the operational phase, construction activities are anticipated to have potential impacts on some residential receivers. These impacts are to be mitigated through a series of noise control measures and noise management measures, which can be imposed as conditions of consent.

Hazards and Risks

The operation of the data centre requires the storage of a quantity of diesel fuel (for generators), and lithium-ion batteries. A potentially hazardous development screening review of the proposed dangerous goods storage systems has confirmed that the development is not classed as a “potentially hazardous industry”. The development has also been shown to be compliant with relevant standards related to batteries and diesel storage.

Air Quality

An assessment into air quality impacts accompanies the EIS and considers emissions at both the construction and operational stage of the proposal.

The Air Quality Impact assessment finds that impacts are considered acceptable, with no further assessment recommended.

Traffic and Transport

Both construction and operational traffic and transport impacts have been assessed in relation to the proposal. The assessment has determined that traffic generation is unlikely to have a significant effect on the surrounding road network during the construction phase or once operational.

A first-principles parking assessment for the site has also been undertaken and recommends a total of 31 spaces to cater for the campus' parking demand. The development has responded by providing 31 car parking spaces in total.

Contamination and Remediation

A number of studies have previously been undertaken related to the site's contamination status, and the need for remediation. Underground petrol storage tanks have previously been removed from the site, with soil validation sampling undertaken following.

Subsequently, contamination advice accompanying the EIS determines that the site is suitable for industrial and commercial use.

Stormwater and Wastewater

The development will feed into 'future proofing' stormwater drainage works that were approved under DA-21-01058, which included an on-site detention (OSD) tank, rainwater tanks, in-ground pits and pipe systems, and a gross-pollutant trap to treat stormwater. In addition, in accordance with Blacktown City Council policy, 80% of the proposal's non-potable water demand is to be provided by rainwater reuse.

Flooding Risk

Part of the site is identified as being flood prone under mapping provided by Blacktown City Council. Subsequently, a detailed flood assessment has been undertaken which has identified that the development will not be adversely affected by flood events or pose significant additional flood risks immediately upstream or to the neighbouring properties.

Ecologically Sustainable Development

The proposed development responds to the principles of ecologically sustainable development (ESD), having been designed against Leadership in Energy and Environmental Design (LEED) category ratings and implementing initiatives to reduce greenhouse gas emissions, energy, and water. In addition, it is noted that the proposal appropriately responds to the ESD principles outlined in the Regulation as addressed in the EIS.

Aboriginal Cultural Heritage

A draft Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared in support of the SSDA, which will be finalised following the conclusion of Aboriginal consultation. The report has found that the site has highly prevalent disturbance, a lower likelihood for Aboriginal sites, and classes the site as holding low archaeological potential.

European Heritage

The site is not located on, or near, a heritage item or heritage conservation area, and thus is not expected to have any impact on environmental heritage.

Biodiversity

An assessment of the site's biodiversity qualities, and an accompanying request to waive the requirement for a full Biodiversity Development Assessment Report (BDAR) is provided with the EIS for the proposal. This is requested given the lack of biodiversity attributes associated with the site.

Social Impact

A Social Impact Assessment has been prepared for the development which has considered the rating of the social impacts associated with the development. The assessment has determined that the overall social impact rating of the development as 'low'.

Waste Management

Consideration of construction and operational phase waste generation has been undertaken as a part of the preparation of the proposal. A number of local facilities identified as capable of handling construction waste, while appropriate waste areas have been included within the site to manage waste once the proposal is operational.

Crime Prevention

A CPTED assessment has been undertaken within the EIS to ensure that the proposal is consistent with CPTED principles.

Ground and Water Conditions

The Geotechnical Assessment which supports the EIS provides an overview of the site's geotechnical, groundwater, and salinity conditions. The report identifies the site as being impacted by some geotechnical constraints and provides a number of recommendations for the sites development which are expected to be incorporated at the construction phase.

In addition, a preliminary salinity management assessment has also been undertaken which identifies that the site is located within an area of moderate salinity as identified on the *Salinity Potential in Western Sydney Map* prepared by DIPNR in 2002. Subsequently, a number of saline soil management strategies to be prepared at the construction certificate stage have also been recommended.

Accessibility

The proposal will appropriately respond to the applicable regulatory framework and is capable of meeting all access and adaptability requirements in accordance with the Relevant Codes, Premises Standards, and Australian Standards.

BCA Compliance

The proposal has been assessed against the relevant requirements of the BCA. The assessment determines that BCA compliance can be achieved, with a number of items to be resolved prior to construction.

Justification of the Project

It is considered that there is strong justification for the proposal for the following reasons:

- The proposal is permissible in the IN1 – General Industrial Zone and is consistent with the objectives of the zone. Furthermore, the proposal provides for a development outcome which appropriately interfaces with nearby residential land as required under clause 7.8 of BLEP 2015;
- The proposal generally complies with all other key legislation and environmental planning instruments which apply to the site and type of development proposed;
- The proposal is demonstrated to provide an acceptable outcome with respect to environmental, social, and economic impacts. Where there is the potential for negative impacts associated with the development, mitigation measures have been proposed to help minimise those impacts on the local community;
- The development will provide for the economic and orderly use of land, which is intended for industrial purposes and will see a formerly under-utilised site renewed to provide a development type which is considered critical infrastructure given the role it plays in supporting the digital economy;
- The proposal promotes the social and economic welfare of the community through the generation of 250 construction jobs and 36 FTE jobs once operational; and
- The proposal will promote social and economic welfare indirectly through the provision of infrastructure which is critical to the proper functioning of the economy.

Accordingly, the site is considered suitable for the proposed development and the development is considered to be in the public interest.

1 Introduction

This Environmental Impact Statement (EIS) has been prepared by Patch on behalf of Lehr Consultants International (Australia) Pty Ltd (the Applicant) in support of a State Significant Development Application (SSDA) for a new 19.2MW data centre at 57 Station Road, Seven Hills (the site). The applicant's details are provided in Table 1 below.

Table 1. Applicant Details	
Name	Lehr Consultants International (Australia) Pty Ltd
ABN	92 124 107 973
Address	Level 5/73 Miller St, North Sydney NSW 2060

The EIS has been prepared in response to the SEARs received under SSD-33781208 and contains the relevant information required to be provided in accordance with section 190 of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation 2021).

The EIS has been structured as below:

1. Introduction
2. Strategic Context
3. Project Description
4. Statutory Context
5. Community and Stakeholder Engagement
6. Assessment of Impacts
7. Justification of the Project.

Supporting documentation which forms Appendices of the EIS are outlined in Table 2 below:

Table 2. Appendix List	
Number and Item	Consultant
Appendix 1 SEARs Table	Patch
Appendix 2 Statutory Compliance Table	Patch
Appendix 3 Blacktown DCP Compliance Table	Patch
Appendix 4 Proposed Mitigation Measures	Patch
Appendix 5 Site Survey	Hill & Blume Surveyors
Appendix 6 Architectural Plans	DEM Architects

Table 2. Appendix List

Number and Item	Consultant
Appendix 7 Design Report	DEM Architects
Appendix 8 Landscape Plans	Studio IZ
Appendix 9 Civil Drawings	ACOR
Appendix 10 Traffic Impact Assessment	TTPP
Appendix 11 Construction Traffic Management Plan	TTPP
Appendix 12 Acoustic Report	PWNA
Appendix 13 Air Quality Report	Benbow Environmental
Appendix 14 Visual Impact Assessment	Moir
Appendix 15 Integrated Water Management Report	ACOR
Appendix 16 Flood Impact Report	ACOR
Appendix 17 Draft ACHAR	Biosis
Appendix 18 Waste Management Plan	Encycle
Appendix 19 BDAR Waiver Request	Biosis
Appendix 20 Hazardous Screening Assessment	ACOR
Appendix 21 Batteries and Diesel Storage Advice	LCI
Appendix 22 Contaminated Lands Report	Martens
Appendix 23 ESD Report	LCI
Appendix 24 Community Engagement Report	Astrolabe Group
Appendix 25 Social Impact Assessment	Astrolabe Group
Appendix 26 Building Services Infrastructure Report	LCI
Appendix 27 Accessibility Report	LCI
Appendix 28 BCA Report	LCI
Appendix 29 Geotechnical Assessment	Martens

Table 2. Appendix List	
Number and Item	Consultant
Appendix 30 Salinity Report	Martens
Appendix 31 Blacktown City Council Minutes	Blacktown City Council
Appendix 32 QS Report	Linesight

1.1 Project Overview

1.1.1 The Site

The subject site is located on land known as 57 Station Road, Seven Hills, described legally as Lot B DP404669. The Site is within the Blacktown local government area (LGA), on the boundary of the Parramatta LGA. An overview of the site is shown in Figure 2 below.

The site is in the Seven Hills Industrial Area, approximately 3.8km east of the Blacktown CBD and 6.8km west of the Parramatta CBD. Other nearby centres include the local centres of Toongabbie (around 900m south) and Seven Hills (around 1.3km northwest), the latter of which is identified as an Urban Renewal Area in the Central City District Plan.

The site is located adjacent to the Main Western Railway line. The M2 Motorway is 3.3km northwest by road, and the M4 Motorway is 6km south by road.

Surrounding development is mixed in nature, comprising varying industrial uses to the north and north-west, the Main Western Railway corridor to the south, Blacktown Creek to the north, and the McCoy Park accessway to the east. Beyond the accessway exists a small neighbourhood centre and low-rise residential typologies.

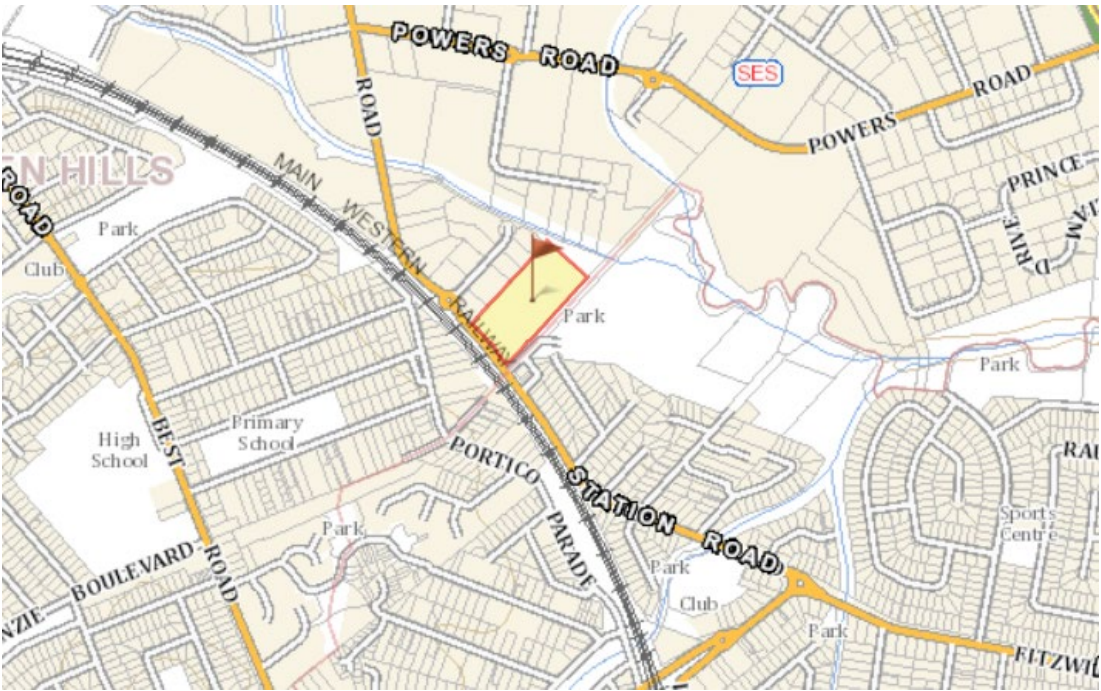


Figure 1: Site Context Map
Source: Six Maps



Figure 2: Site Aerial
 Source: Patch using Metromap imagery

1.1.2 Site Description

A description of the site and key site characteristics are provided in Table 3.

Table 3. Site Description	
Item	Description
Legal Description	The site is legally described as Lot B in DP404669.
Site Area	The site has a total area of approximately 2.57 hectares.
Street Frontage	Southwest – Approximately 111m to Station Road Southeast – Approximately 242m to McCoy Street (80m to the formed component, 162m to the unformed component)
Topography	The Site falls from south to north from approximately 36m AHD to 28m AHD. However, earthworks across the site will be undertaken in the near future in accordance with a local DA approval granted under DA-21-01058. Earthworks approved will alter the current topographical features of the site and provide for a generally level site. DA-21-01058 is discussed further in Section 1.1.3 of the EIS.
Easements / Restrictions	Easement for electricity transmission benefitting Endeavour Energy.
Previous Uses	The front half of the Site was previously used for an auto parts yard, known as 'Challenger Auto Parts'. One two-storey and one single-storey building were associated with this use. The northern (rear) part of the site was used as a timber yard known as 'Fraser Timber' which comprised a central two-storey building a second two-storey building wrapping around it.
Services	The site is served by existing services connections for power, water, sewer, and telecommunications.
Current Access	Ingress and egress to the site is provided via Station Road.
Flooding	In its current state, the site is identified by Council's interactive flooding mapping (MapsOnline) as being impacted by flooding. The flooding risk ranges from low risk around the middle of the site, to medium and high risk towards the rear of the site as it approaches Blacktown Creek. Works being undertaken under DA-21-01058 will ensure the approved, and proposed, development will not be affected by flood.

Table 3. Site Description

Item	Description
Flora and Fauna	The site is largely cleared and contains little native vegetation. However, it is noted that extensive vegetation exists along the side boundary adjacent to McCoy Park and rear boundary. This vegetation will not be impacted as a result of the proposal.
Bushfire prone land	The site is not identified as bushfire prone.
Aboriginal Heritage	The site is heavily disturbed and considered to have low Aboriginal archaeological potential.
European Heritage	The site is not located in proximity to any identified heritage items or within a conservation area.

The site is represented further in the photographs provided as figures 3 to 7 below.



Figure 3: View of the site from Station Road (viewpoint 1)

Source: Patch



Figure 4: View of the site from Station Road (viewpoint 2)
Source: Patch



Figure 5: View along the side boundary as seen from the entrance to McCoy Park
Source: Patch



Figure 6: Viewpoint looking along the boundary towards the northeastern rear corner of the site
Source: Patch



Figure 7: Rear portion of the site
Source: Patch

1.1.3 Relevant Approvals

On 10 January 2022, development consent was granted under DA-21-01058 by Blacktown City Council for site clearing, bulk earthworks, stormwater drainage works, construction of a small scale 1.2MW data centre comprising 630sqm of GFA, on-site parking and associated landscaping.

The subject approval results in approximately the front one-third of the site being redeveloped for the purposes of a data centre, site landscaping, parking, and internal roads, with the balance of the site to the rear left undeveloped to accommodate the proposal which is the subject of this EIS.

Development approved under DA21-01058 is depicted in the figures below.

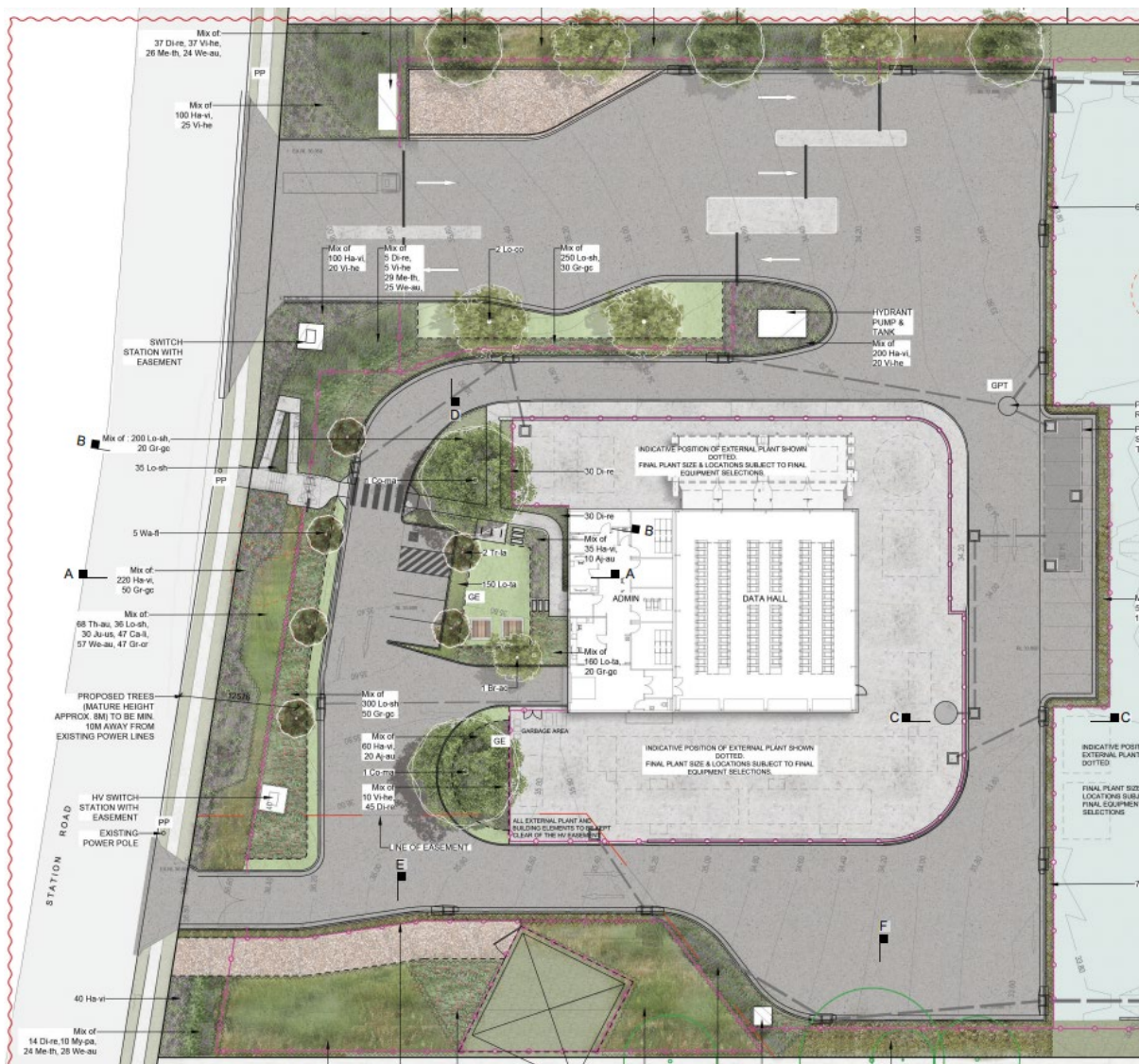


Figure 8: Approved Landscape Plan

Source: Studio IZ

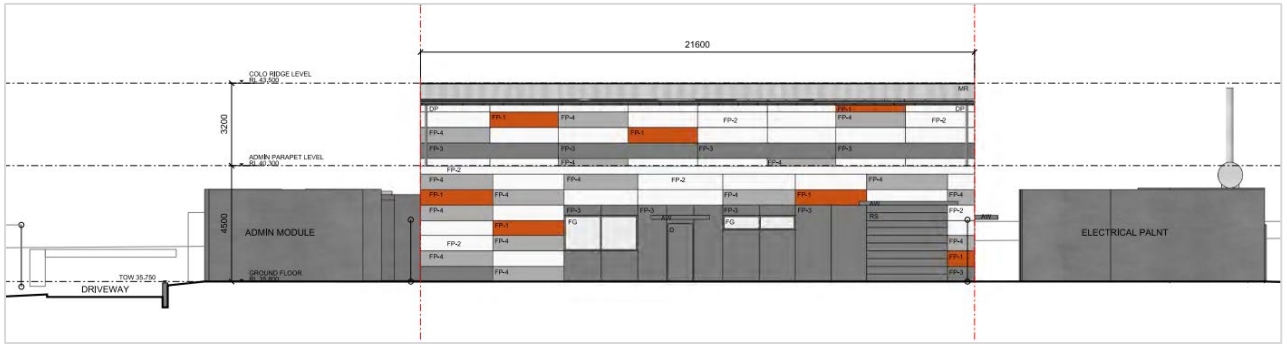


Figure 9: Approved South (Station Road) Elevation
Source: dem Architects

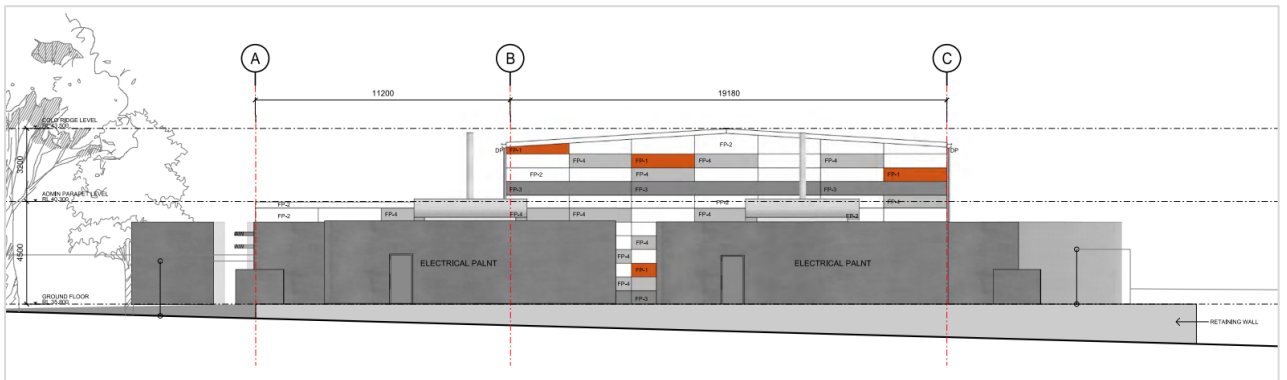


Figure 10: Approved East (McCoy Street) Elevation
Source: dem Architects

It is noted that the subject approval also allows for bulk earthworks over the entirety of the site, which will see the site benched and prepared for the subject proposal. Subsequently, the consent for earthworks sought under the SSDA is minor as enabling works will primarily be undertaken under DA-21-01058.

Cut and fill has been approved under DA-21-01058 generally with more cut to take place at the front of the site, and more fill to take place at the rear of the site, with a net 42,865m³ of fill overall. The approved cut and fill plan under DA-21-01058 is shown in Figure 11.

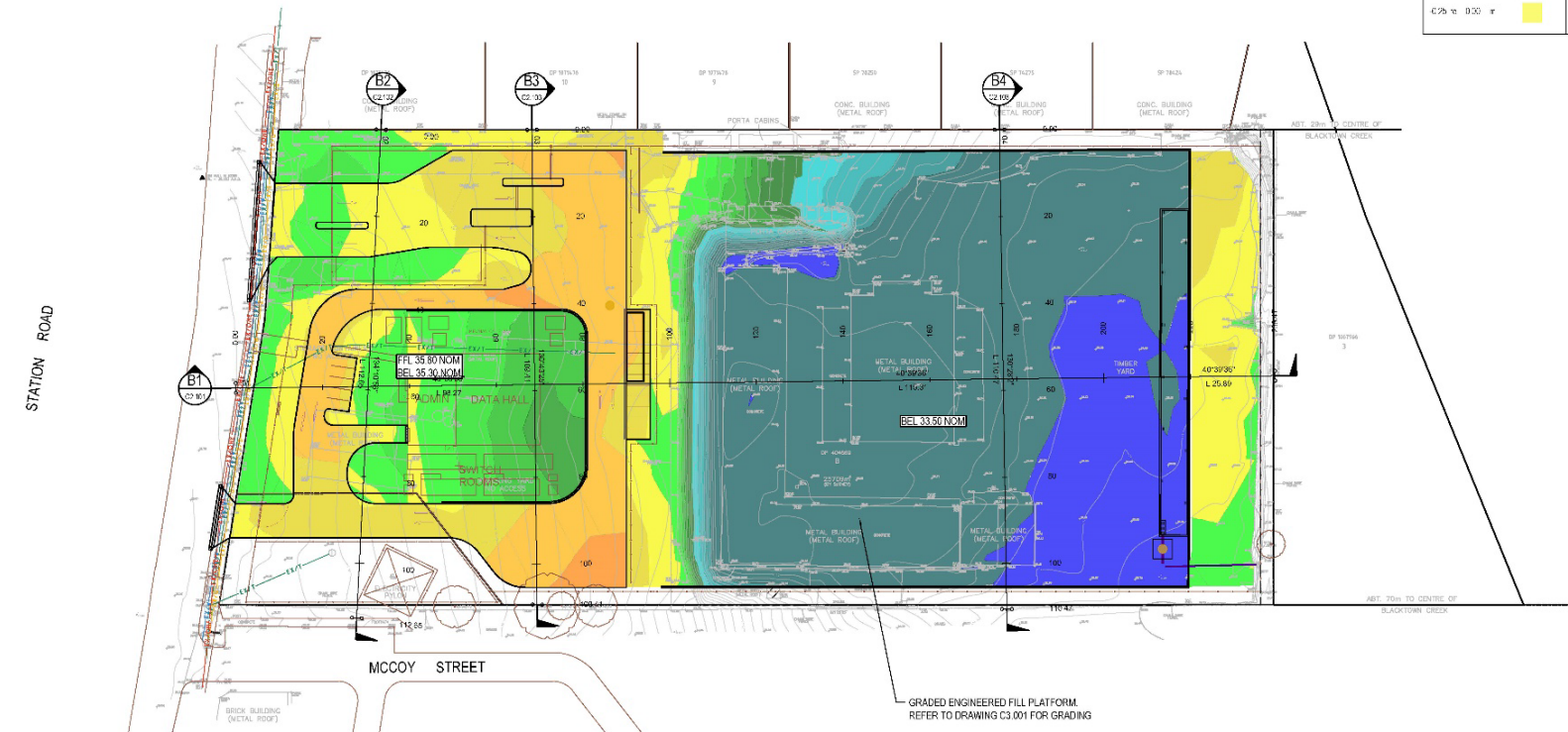
Stormwater drainage works approved under DA-21-01058 will result in the construction of drainage swales and water-quality infrastructure (such as gross pollutant traps), a new on-site detention (OSD) tank towards the rear of the site, and the establishment of a 3m wide easement to benefit the upstream lot at the rear of the site.

ASSUMPTIONS:

1. A NOMINAL 150mm DEPTH ALLOWANCE FOR STRIP TOPSOIL HAS BEEN INCLUDED IN THE CUT AND FILL ASSESSMENT.
2. BULKING AND COMPACTION FACTORS HAVE NOT BEEN APPLIED TO THE CUT AND FILL QUANTITIES.
3. A BOXING OUT OF 500mm FOR THE DATA CENTRE FLOOR SLAB HAS BEEN ALLOWED FOR IN THE CUT AND FILL CALCULATIONS.
4. A BOXING OUT OF 300mm FOR PAVEMENTS HAS BEEN ALLOWED FOR IN THE CUT AND FILL CALCULATIONS.
5. DETAILED BUILDING AND CUT/FILL QUANTITIES FOR FOOTINGS, TRENCHING AND THE LIKE HAS NOT BEEN INCLUDED IN THE CUT AND FILL ASSESSMENT.
6. NO ALLOWANCE FOR TOPSOIL AND FRIABLE SOIL LAYERS HAS BEEN ALLOWED FOR IN LANDSCAPED AREAS. REUSE OF STRIPPED TOPSOIL HAS BEEN ASSUMED.
7. ALL TOPSOIL SHALL BE RETAINED ON THE DEVELOPMENT SITE AND UTILISED EFFECTIVELY TO ENCOURAGE APPROPRIATE RE-VEGETATION.

CUT / FILL QUANTITIES	
TOTAL CUT	-1110 m ³
TOTAL FILL	44005 m ³
TOTAL BALANCE	42895 m ³ (FILL)
FILL WITHIN 1% AEP FLOOD PLAN	2035 m ³

LEGEND	
CUT	FILL
≥ 4 to -3.5 m	0.00 to 0.25 m
4.5 to -5 m	0.25 to 0.5 m
5.0 to -5.5 m	0.50 to 0.75 m
5.5 to -6.0 m	0.75 to 1.00 m
6.0 to -6.5 m	1.00 to 1.50 m
6.5 to -7.0 m	1.50 to 2.00 m
7.0 to -7.5 m	2.00 to 2.50 m
7.5 to -8.0 m	2.50 to 3.00 m
8.0 to -8.5 m	3.00 to 4.00 m
8.5 to -9.0 m	4.00 to 5.00 m
9.0 to -9.5 m	5.00 to 6.5 m
9.5 to -10.0 m	6.5 to 8 m



<p>© COPYRIGHT of this design and plan is the property of ACOR Consultants Pty. Ltd. ACN 079 300 210. ALL RIGHTS RESERVED. IT IS NOT TO BE USED, REPRODUCED, COPIED OR OTHERWISE TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF ACOR CONSULTANTS PTY. LTD.</p>		Client	<p>ACOR CONSULTANTS</p>	<p>ACOR CONSULTANTS</p>	<p>SYDNEY DC</p>	<p>67 STATION ROAD SEVEN HILLS NSW 2147</p>	<p>67 STATION ROAD SEVEN HILLS NSW 2147</p>	<p>67 STATION ROAD SEVEN HILLS NSW 2147</p>	<p>67 STATION ROAD SEVEN HILLS NSW 2147</p>
		<p>RESUBMIT FOR DEVELOPMENT APPROVAL 20/12/21</p> <p>DESIGN FOR DEVELOPMENT APPROVAL 18/12/21</p>	<p>DATE 19/12/21</p>	<p>CONTRACT NO. 153</p>	<p>PROJECT NO. 153</p>	<p>PROJECT NO. 153</p>	<p>PROJECT NO. 153</p>	<p>PROJECT NO. 153</p>	<p>PROJECT NO. 153</p>

Figure 11: Approved Cut and Fill Plan for Existing Approval
Source: ACOR

1.1.4 Project Summary

This SSDA seeks approval for the construction and operation of a new data centre at the subject site. The proposal will be located to the rear of an interconnected 1.2MW smaller data approved by Council on 10 January 2022 under DA-21-01058 described in 1.1.3 above. Upon completion the 2 developments will operate as a single integrated data centre campus.

The objective of the project is to provide for additional data storage capacity to account for increased demand in cloud storage services within the Greater Sydney Region. Specifically, the SSDA seeks approval for the following:

- Construction of a new two-storey 19.2MW data centre at the rear of the site including ancillary office space comprising a total Gross Floor Area (GFA) of 8,076sqm;
- Provision of external plant in plant yards to the west, north and south of the proposed data centre, as well as appropriately screened rooftop plant required to ensure the proper functioning of the facility;
- Provision of 9 backup diesel generators and associated fuel storage with a total capacity of 289,000 litres;
- Operation to take place 24 hours a day, 7 days a week;
- Internal road network provided via accessways already approved from Station Road under DA-21-01058;
- Parking for a total of 31 vehicles, which includes 16 car parking spaces approved under DA-21-01058;
- End of trip facilities including parking for four (4) bicycles, and shower / change facilities; and
- Perimeter deep soil planting and other soft landscaping works.

The proposal will rely upon power supply from 33kV infrastructure, which will be created through a new connection to the Seven Hills substation. These works are to be undertaken through a separate agreement with Endeavour Energy and are not the subject of this SSDA.

The SSDA site footprint and design of the development is shown in the figures below.

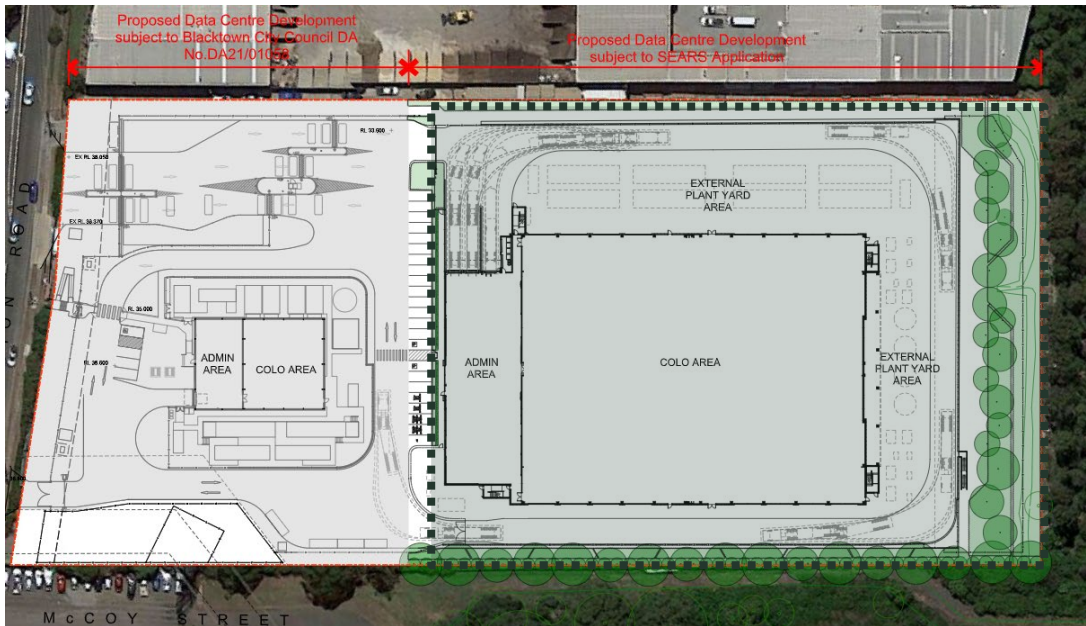


Figure 12: Area the subject of works under the SSDA
Source: DEM



Figure 13: Illustrative figure depicting proposed data centre
Source: DEM

1.1.5 Project Alternatives

Under Clause 192 the provisions of Environmental Planning and Assessment Regulation 2021 (EP&A Regs), and in accordance with the State Significant Development Guide prepared by DPE, there is a requirement to analyse any feasible alternatives for SSDAs.

Table 4 outlines three feasible alternatives: 'Do Nothing', alternative design and the proposed design.

Table 4. Project Alternatives Considered

<p>'Do Nothing'</p>	<p>The 'Do Nothing' option would result in the site remaining in an underutilised, derelict state, and represents a poor site outcome. Furthermore, it would result in a missed opportunity to deliver a data centre development, which is considered highly compatible with the site and surrounding context of the locality.</p> <p>It is noted that data centres are considered critical infrastructure needed for the proper day to day functioning of the economy which is increasingly reliant on digital systems. Data centres play an important role in ensuring network security and for making sure that there is data back-up and recovery available in an emergency such as a power outage or some form of disaster.</p> <p>Subsequently, where site compatibility is able to be demonstrated, development for the purposes of a data centre should be encouraged and is considered a better option than a 'Do Nothing' Option.</p>
<p>Alternative Design</p>	<p>A range of alternative design options were considered prior to the design of the proposed data centre being selected to proceed. This included a design with ground mounted plant as opposed to plant located on the rooftop of the building.</p> <p>Ultimately, ground mounted plant design options did not proceed as the design and planning team advised the operator of the site it would not result in a good design outcome as it would present poorly to neighbouring properties and reduce the amount of landscaped area able to be provided across the site.</p>
<p>Proposed Design</p>	<p>It is considered that the proposal provides for an optimised outcome at the site in lieu of 'Do Nothing' and alternative design options.</p> <p>It is considered that the proposed development provides the following:</p> <ul style="list-style-type: none"> • Provides critical infrastructure that will support the economy and community alike, resulting in both economic and social benefits; • Results in a development outcome which will have minimal adverse built form impacts and be compatible with the site and surrounds; and • Provides a low intensity light industrial land use, which interfaces appropriately with urban and residential areas and will not result in any adverse environmental or amenity impacts like noise, emissions, dust, traffic, or other impacts.

2 Strategic Context

2.1 Regional Context

The subject site is located in the Seven Hills Industrial Area within the Blacktown LGA, in Sydney's Central District. It is approximately 3.8km east of the Blacktown CBD and 6.8km west of the Parramatta CBD. Other nearby centres include the local centres of Toongabbie (around 900m south) and Seven Hills (around 1.3km northwest), the latter of which is identified as an Urban Renewal Area in the Central City District Plan.

The site is located adjacent to the Main Western Railway line. The M2 Motorway is 3.3km northwest by road, and the M4 Motorway is 6km south by road.

Surrounding development is mixed in nature, comprising varying industrial uses to the north and north-west including industrial unit complexes and landscaping material supplies, the Main Western Railway corridor to the south, Blacktown Creek to the north, and the McCoy Park access handle to the east. Beyond the access handle to the east exists a small neighbourhood centre and low-rise residential typologies.

The site is approximately 1km (a 12-minute walk) from Toongabbie Station and about 1.7km (a 20-minute walk) from Seven Hills Station and bus interchange. The closest bus stop to the site is in Carter Street, approximately 300m to the south-west, on the other side of the rail corridor but accessible via a pedestrian bridge. This bus stop is serviced by bus routes 705 and 711 which provide connections to Blacktown and Parramatta.

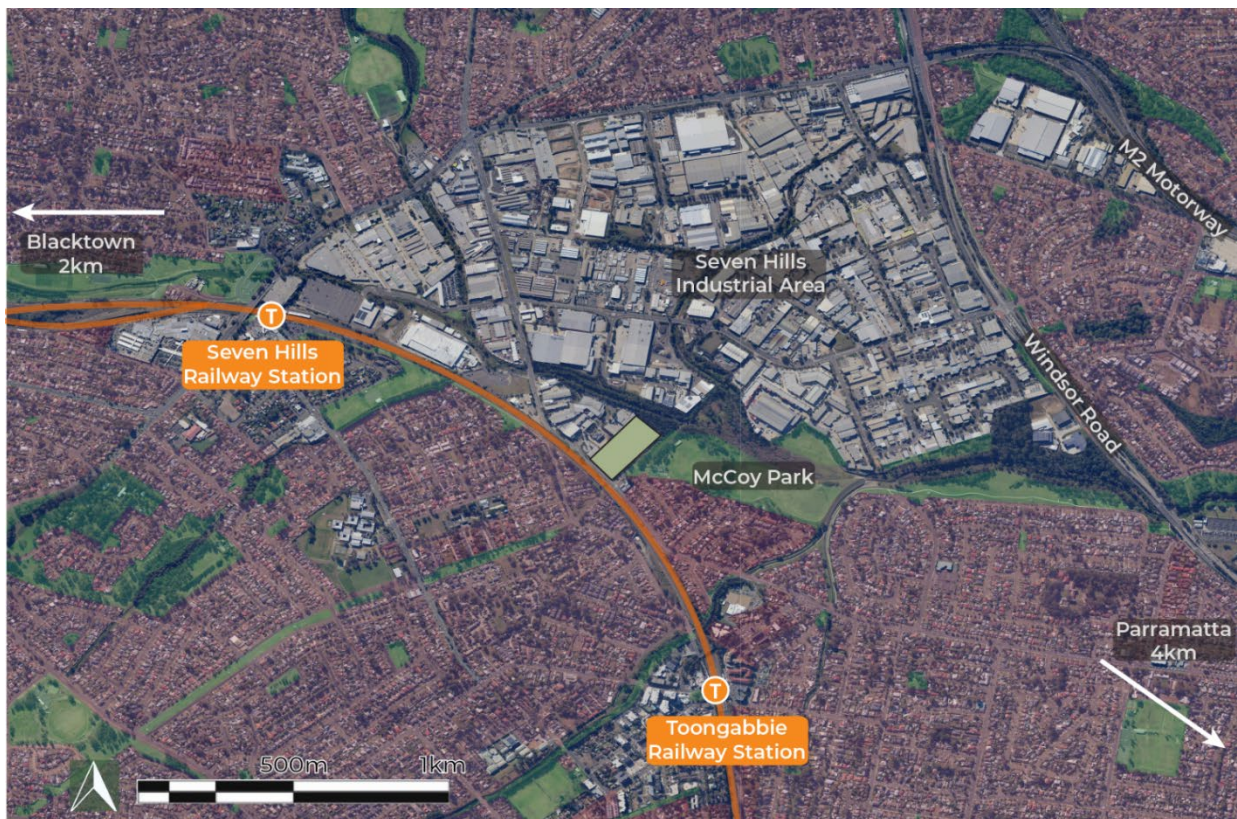


Figure 14: Context Map

Source: Patch

2.2 Strategic Planning Context

2.2.1 Greater Sydney Region Plan

A *Metropolis of Three Cities* is the current region plan applying to Sydney, released by the Greater Sydney Commission in 2018. It sets a 40-year vision for the entirety of the Sydney metropolitan area, based on the establishment of three 'cities' where most residents will live within 30 minutes of their jobs, education and health facilities, services and great places. Shown in Figure 15, the three cities are:

- The Western Parkland City, an emerging city focused around the new Western Sydney International Airport;
- The Central River City, developing around Greater Parramatta; and
- The Eastern Harbour City, largely established and centred around the Sydney CBD.



Figure 15: Three Cities Plan

Source: Greater Sydney Commission

The plan also gives effect to five underlying 'District Plans', which provide 20-year frameworks to manage growth. The subject site is located within the Blacktown LGA, which is captured under the 'Central City District Plan', discussed further in Section 2.2.2.

Whilst the purpose of the Region Plan is to guide strategic planning decisions by authorities, the subject proposal is not inconsistent with its vision, particularly where it relates to the provision of more jobs within the Central City District.

2.2.2 Central City District Plan

The *Central City District Plan* provides a 20-year plan to manage growth in the Blacktown, Cumberland, Parramatta and The Hills LGAs. It sets a number of planning priorities for the precinct and helps inform local councils prepare Local Strategic Planning Statements (LSPS), develop local environmental plans (LEPs), and assess planning proposals.

The site's location within the Central City District Plan is shown in Figure 16. The District Plan identifies the site partway between the Blacktown Strategic Centre and the Greater Parramatta Metropolitan Centre. It is within an industrial area, just outside of the Seven Hills Local Centre and Urban Renewal Area.

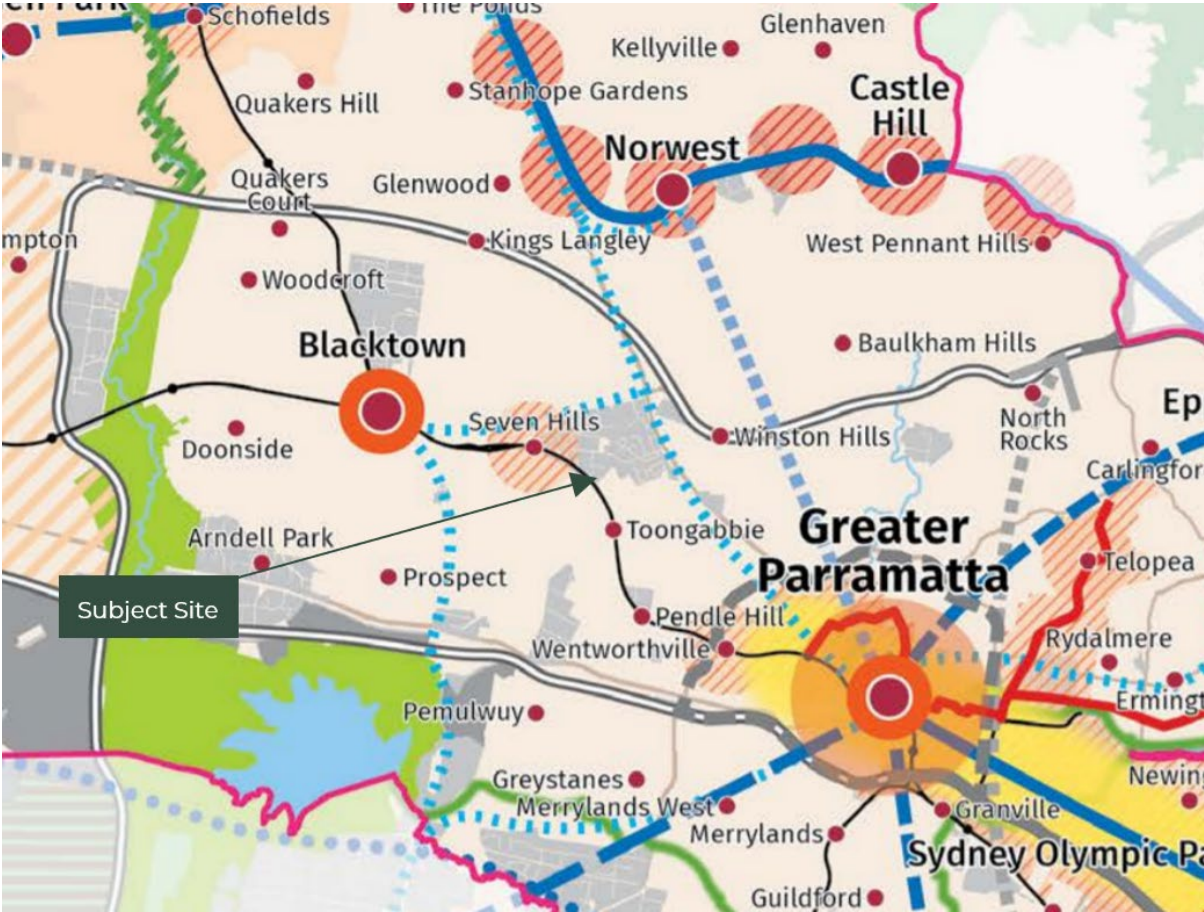


Figure 16: Central City District Plan
Source: Greater Sydney Commission, modified by Patch

The proposal helps to realise a number of a number of planning priorities outlined within the plan, including:

- Planning Priority C11 – Maximising opportunities to attract advanced manufacturing and innovation in industrial and urban services land: The development will see the renewal of what is currently underutilised industrial land into a more efficient 'high technology industry' use, which will contribute to the development of the digital economy.
- Planning Priority C13 – Protecting and improving the health and enjoyment of the District's waterways: The proposal will provide for sensitive and sustainable water cycle management outcomes.
- Planning Priority C16 – Increasing urban tree canopy cover and delivering Green Grid connections: The Proposal includes a detailed landscape plan which increases tree canopy cover across the site.

2.2.3 Blacktown LSPS

The *Blacktown Local Strategic Planning Statement 2020* (LSPS) is Council's primary strategic planning document and sets out planning priorities consistent with the Central City District Plan and the Greater Sydney Region Plan, providing a 20-year land use vision for the LGA. It directs how future growth and change will be managed across the LGA and informs changes to relevant environmental planning instruments and development control plans.

The vision for the LGA outlined in the LSPS is for the City of Blacktown to be a "City of Excellence – diverse, dynamic, progressive'. Its 20-year planning vision is a planned city of sustainable growth, supported by essential infrastructure, efficient transport, a prosperous economy, and equitable access to a vibrant healthy lifestyle.

The LSPS identifies the broader precinct containing the site as the "Seven Hills" industrial area. It identifies the need to protect the LGA's 3,000ha of industrial land as areas providing work opportunities for Blacktown and Western Sydney residents, whilst also creating investment opportunities for local, national and multinational companies.

The Proposal is considered to align with the intent of the LSPS, and directly responds to the below planning priorities:

- Local Planning Priority 9 – Maximising opportunities to attract advanced manufacturing to, and innovation in, industrial and urban services land: The development provides a type of 'high technology industry' on the site, maximising industrial land that is currently underutilised.
- Local Planning Priority 11 - Protecting and improving the health and enjoyment of waterways: The Proposal adjoins Blacktown and Toongabbie Creeks, and has incorporated water sensitive urban design to ensure impacts to the health of the creek are avoided.
- Local Planning Priority 14 - Increasing urban tree canopy cover and Green Grid connections: The Proposal includes a detailed landscape plan which increases tree canopy cover across the site.

3 Project Description

3.1 Project Overview

The Proposal comprises the construction and operation of a new 19.2MW data centre, at the rear of the site on which another data centre is currently approved and under construction. The proposed data centre will be two-storeys in height, reaching approximately 22m above ground level. Associated vehicular circulation, parking, driveways, fencing, landscaping and servicing will also be provided, though broader earthworks will be minimal as these have already been approved for the site under a separate application. The Proposal would operate on a 24 hour, seven day a week basis once operational, however it is noted that after hours staff will largely comprise maintenance staff who ensure the proper functioning of the site is maintained outside of regular work hours and security personnel.

An overview of the project is provided in Table 5.

Table 5. Project Overview	
Item	Description
Proposed Use	Data centre (24/7 use)
Built Form	<p>2 storey structure with associated vehicular circulation, parking, and landscaping areas.</p> <p>The main elements of the structure include the following maximum heights above ground level:</p> <ul style="list-style-type: none"> • 22m to the top of the lift shaft, towards the front of the building; • 20m (approximate) for support structures to services flues, to be located on the side of the building fronting industrial land; • 19.7m to mechanical air riser structure at the rear of the building; • 16.9m to the main roof line of the data storage hall; and • 13.6m to the roof line of the administration hall, at the front of the site.
Gross Floor Area	8076sqm
Floor Space Ratio	0.34:1 (when considered in conjunction with existing approval)
Proposed Development	Data centre with ancillary office space.
Operations	Total power consumption capacity up to 19.2 MW with operation to take place 24 hours a day, 7 days a week.
Fuel Storage	Capacity for up to 289,000L of diesel fuel storage.

Table 5. Project Overview	
Item	Description
Tree Removal	No tree removal is proposed under the SSDA. This is to be undertaken as a part of the works under DA-21-01058.
CIV	\$167,632,802 (Excl. GST)
Access	Access will be provided via Station Road. The development will utilise vehicular crossings approved under DA-21-01058.
Bulk Earthworks	No bulk earthworks are proposed. This is to be undertaken under DA-21-01058.
Demolition	No demolition is proposed.
Car Parking	31 spaces for the site as a whole, comprising: <ul style="list-style-type: none"> • 23 x regular car parking spaces; • 3 x DDA compliant car parking spaces; • 2 x spaces to be reserved for car pool trips; • 2 x spaces to be reserved for low emissions vehicles; and • 1 x space to be reserved for electric vehicle charging.
Employment Generation	Up to 250 construction jobs, and 36 operational full time employees.
Services and Infrastructure	The site will be provided with the necessary electrical, sewer, and telecommunications services.

3.2 Detailed Description

3.2.1 Project Area

The proposed works are wholly located within the subject site at 57 Station Road, Seven Hills (Lot B DP 404669).

The site is already subject to an existing development approval under DA-21-01058 which will see approximately the front third redeveloped for the purposes of a smaller data centre, with associated civil works, landscaping, parking, and traffic circulation areas.

The extent of works related to the subject SSDA will be largely contained within the rear two thirds of the site as indicatively shown in Figure 17 below.



Figure 17: Illustrative figure showing approved and proposed development
 Source: Nearmap modified by Patch

3.2.2 Physical Layout and Design

The proposed development responds to the specific functions of a data centre, the requirements for plant and equipment storage, and the high level of security necessary for the facility. The proposed building is located centrally within the site and provides setbacks for landscape screening, truck manoeuvring and noise attenuation.

A two storey administration office building is to be located at the southwestern end of the development. The data storage hall is located centrally within the heart of the building complex connected to the administration block and surrounded by plant and equipment.

Access and building maintenance systems will be incorporated into the facade and roof, to allow for future cleaning and maintenance in compliance with Workplace Health and Safety requirements, statutory regulations, and relevant Australian Standards.

All external plant areas servicing the various components of the building will be set on grade and will be located on the northern and western sides of the data hall where there are limited views into the site. This includes a total of nine backup diesel generators as well as water tanks.

An overview of the development in the context of the site and surrounds are shown in Figure 18 (site plan), Figure 20 (elevations), and Figure 26 (illustration).

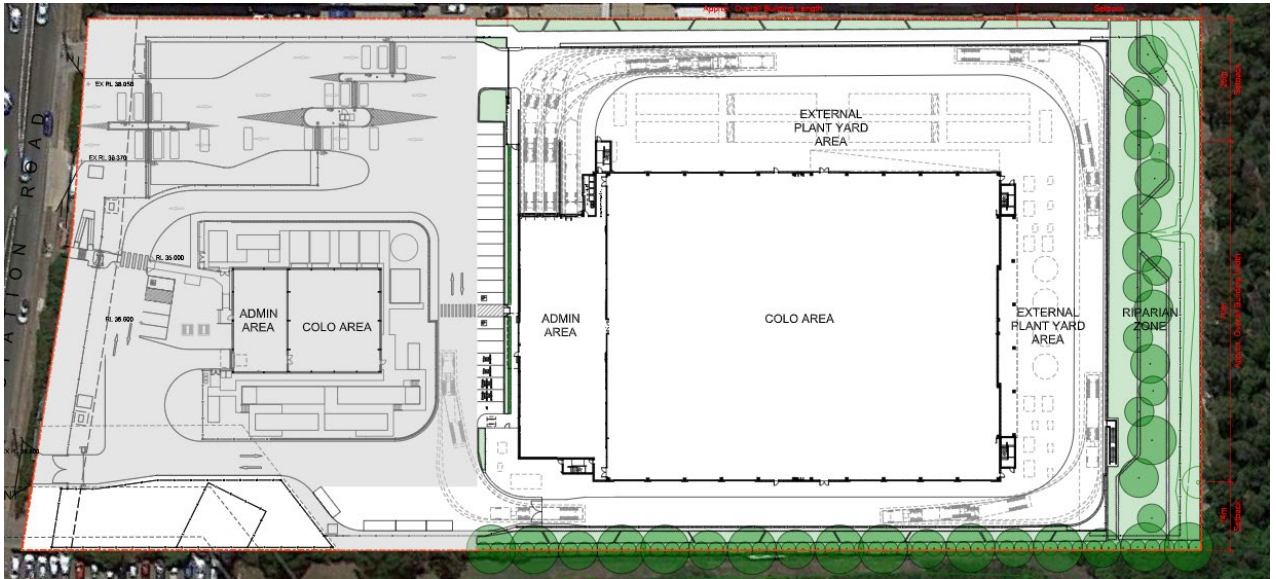


Figure 18: Site plan of proposed development
Source: DEM

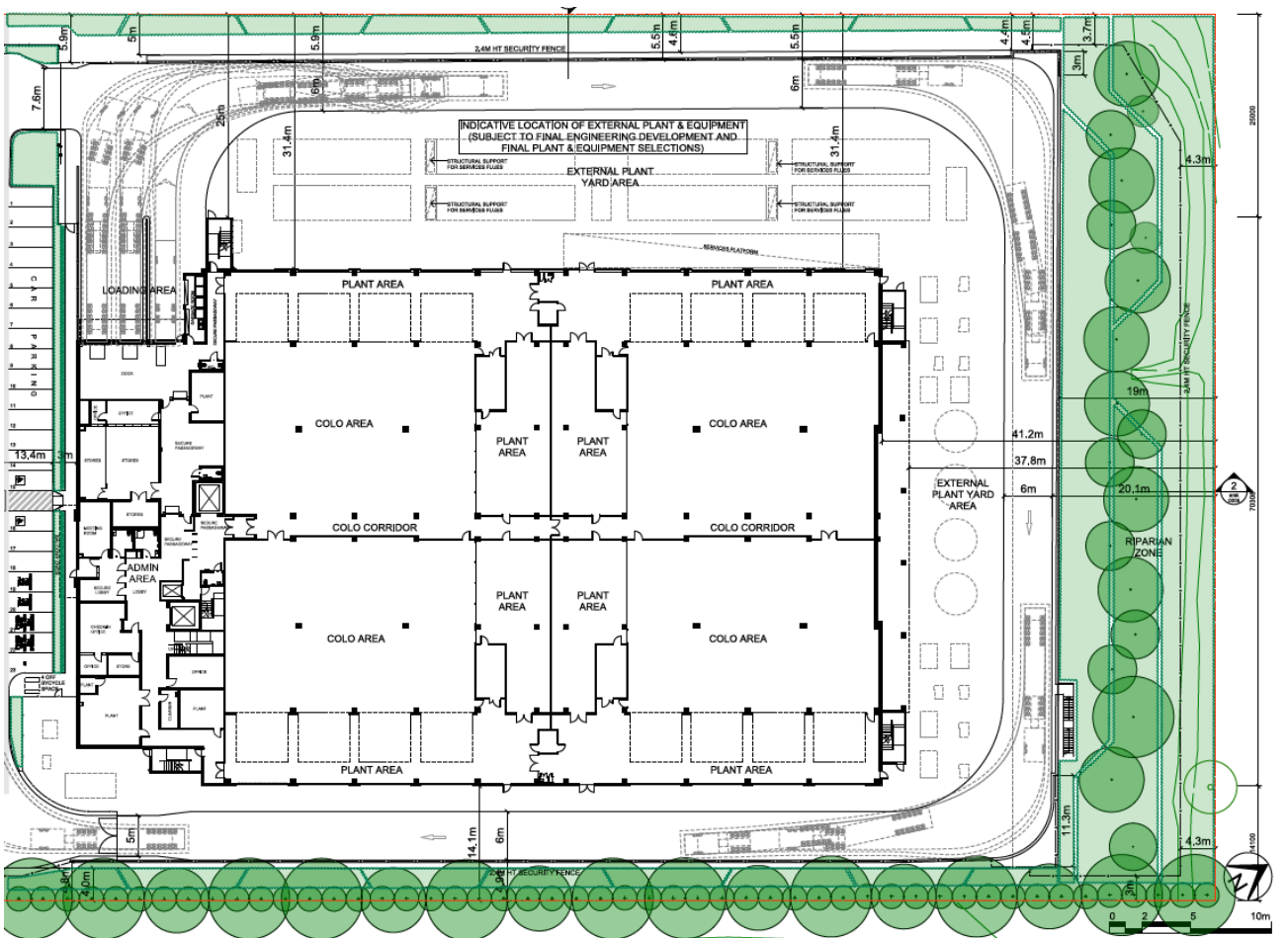
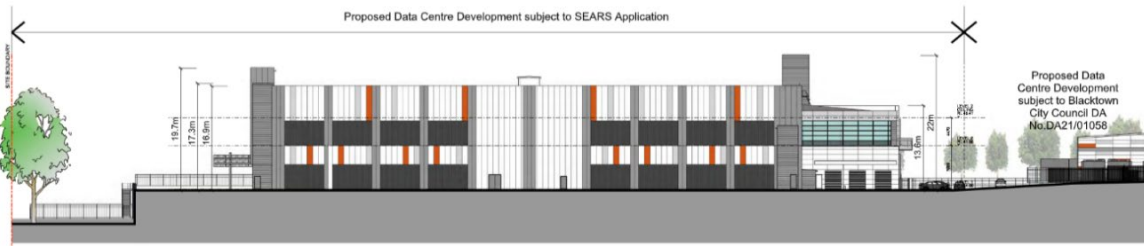
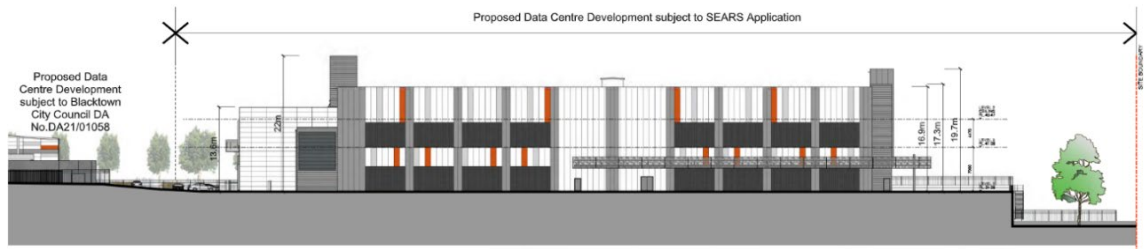


Figure 19: Typical Floor Plan
Source: DEM



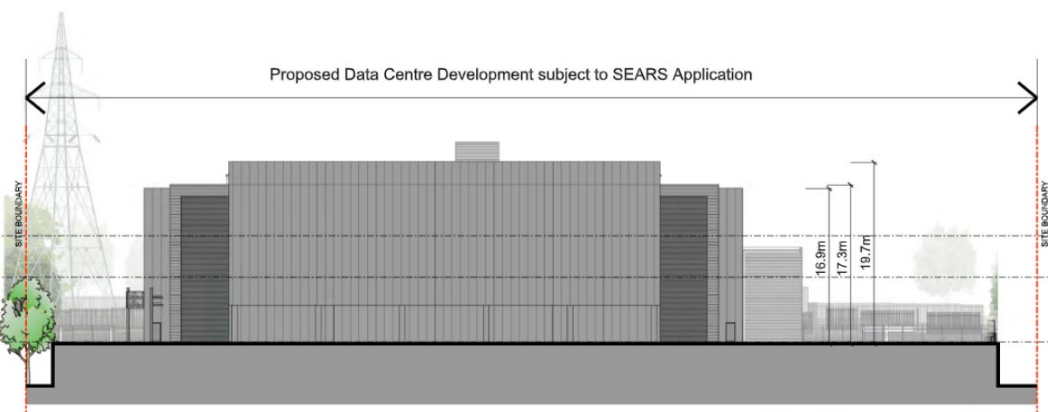
1 NORTH-WEST ELEVATION
SCALE 1:250



2 SOUTH-EAST ELEVATION
SCALE 1:250



1 SOUTH-WEST ELEVATION
SCALE 1:250



2 NORTH-EAST ELEVATION
SCALE 1:250

Figure 20: Elevations of proposed data centre

Source: DEM

3.2.3 Landscaping

The landscaping concept for the site has been prepared by Studio IZ (refer Appendix 8). The landscaping concept applies to the rear portion of the site, with landscaping associated with the front of the site already approved under DA-21-01058.

The landscape design features a mix of trees, shrubs, and groundcovers which provide for:

- A mix of large to medium screening trees and ground covers within the rear setback (outside of the swale), which will provide a vegetated barrier between the site and the adjoining creek;
- A mix of trees and shrubs in the side setback to the McCoy Street road reserve, including Rough Barked Apple trees with a mature height of 20m which will provide a visual screening to McCoy Park; and
- A mix of groundcovers within the side setback to adjoining industrial properties.

A total planting of 32 trees is proposed in the application, significantly greater than the five trees approved for removal from the site under DA-21-01058. The proposed landscape plan is shown in Figure 21.

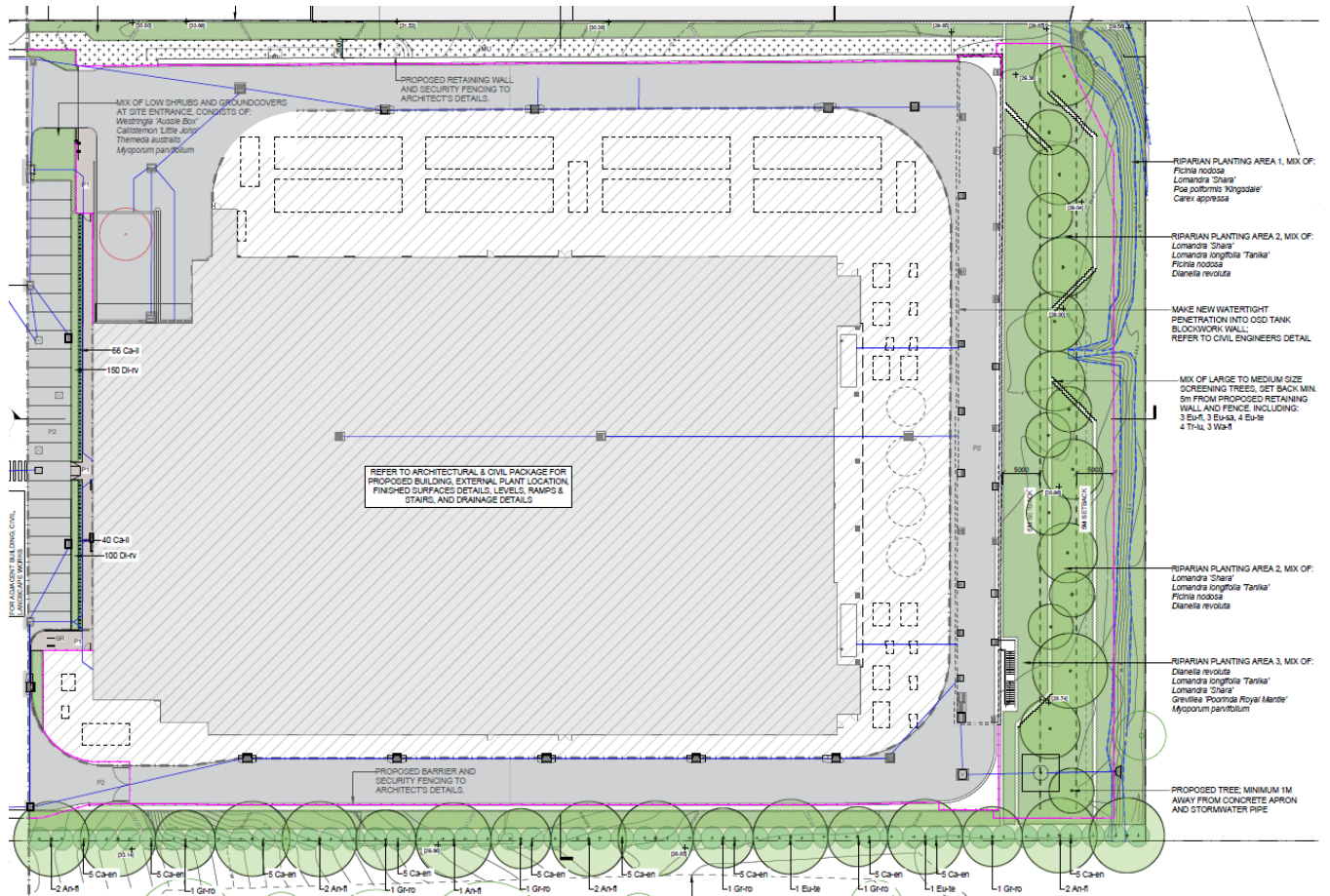


Figure 21: Landscape Plan
Source: Studio IZ

3.2.4 Access and Parking

Access and Circulation

Two access driveways are provided for the subject site from Station Road, which are to be constructed as part of the approved DA-21-0108. All vehicular access to the site will use these driveways.

Main site access is to be provided by a two-way driveway located alongside the northern site boundary. As part of day-to-day operations, vehicles would enter and exit the site using this driveway.

The driveway will be controlled via boom gates, accessible via swipe card. Visitors and delivery drivers will have access provided via security at the gatehouse. The second site access driveway will be a gated emergency access.

A concrete hardstand area is to be extended around the perimeter of the benched portions of the site, encircling SYD08 and SYD09. This will allow the movement of large rigid vehicles, as well as small private vehicles accessing car parking.

Car Parking

The proposal acts as an expansion of the approved SYD09 datacentre, ultimately providing the same function and expanding data storage for the same operator. As a result, many services including car parking will be shared amongst the campus.

Thirty-one (31) car parking spaces in total are to be provided within the development site, which is an additional 15 spaces above the 16 spaces currently approved under DA-21-01058. The car parking spaces include:

- Twenty-three (23) spaces between the approved data centre and the proposed data centre;
- Four (4) spaces in front of the approved data centre fronting Station Road, including one EV charging space;
- Four (4) spaces on the site's southern boundary; and
- Of the above, a total of three (3) accessible spaces, one (1) electric vehicle charging space, two (2) spaces for carpool, and two (2) spaces for low emission vehicles will be provided.

The location of proposed car parking is shown in Figure 22.

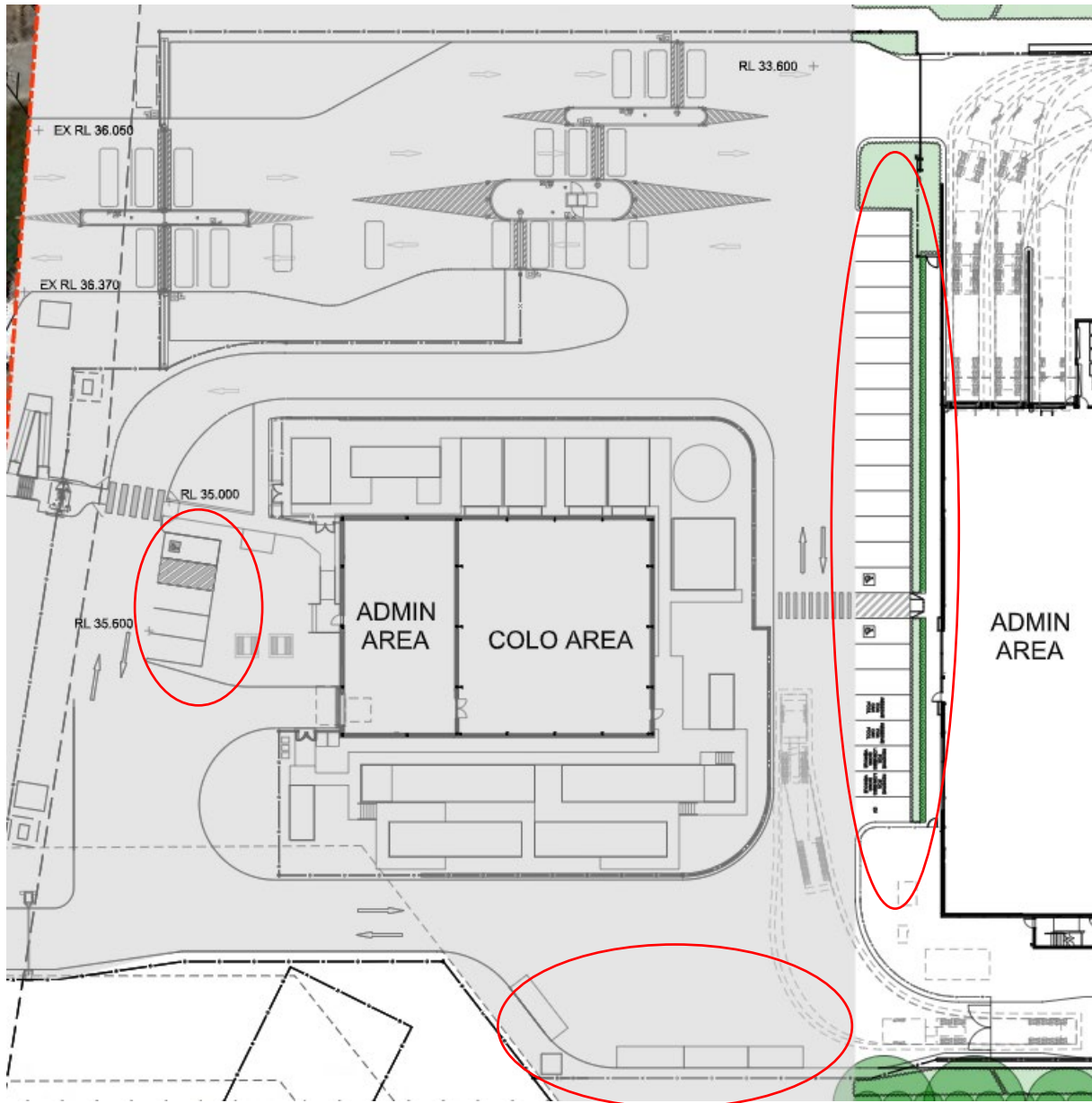


Figure 22: Parking Areas shown on Site Plan
 Source: DEM modified by Patch

3.2.5 Uses and Activities

This SSDA seeks approval for the ongoing use of the proposed building as a data centre, which will include ancillary uses for office administration purposes. A total gross floor area of 8,076m² is proposed, which is split between 6,654m² of data storage space (COLO areas, and associated mechanical and corridor spaces) (82%), and 1,422m² of circulation, storage, amenity, and administrative space (18%).

3.2.6 Construction Timing and Staging

Staging of construction is anticipated to be broken into two parts:

- Construction of the building structure and its associated plant; and
- Installation of services and internal fit-out finishes

Broader demolition, earthworks, and installation of retaining walls and benched platforms will be undertaken in works associated with SYD09 (which has an existing DA approval). These works have commenced.

Access to and from the construction site will need to occur through a shared driveway from Station Road, to be constructed under the approved DA. Construction for the rear development will not disturb or interrupt the operation of the existing front data centre development. There will typically be around 100 construction workers on site daily with a peak of up to 250 workers per day.

Construction hours will generally be limited to:

- 7:00am – 6:00pm Monday to Friday;
- 8:00am – 5:00pm on Saturdays; and
- No work on Sunday or Public Holidays.

It is envisaged that construction of the proposed data centre would commence as soon as practicable after the issuing of a consent. This is currently expected to start in January 2023 and be finalised in September 2024.

3.2.7 Back-Up Power System

The proposed data centre is a 'mission critical' facility which requires redundancy in its utility servicing, including back-up electrical generation. This backup power supply provides continuous power to enable critical data services to operate.

The proposal contains:

- Eight (8) 3360kVA dry-type transformers and eight (8) 3000kW diesel generators to the data halls; and
- One (1) 750kVA dry-type transformer and one (1) 500kW diesel generator supplying power to the admin building.

The purpose of the generators is to eliminate the impact of a loss or failure of a major piece of equipment or system. Dedicated incoming electricity feeders are designed to ensure that backup is available in the event that one high voltage feeder becomes unavailable. However, as the utility service is outside the control of the data centre operator, on-site power generating systems are needed to support the main electrical systems in the case of complete utility failure for an extended period of time.

The back-up system is comprised of diesel generators with sufficient on-site fuel storage to cater for 36 hours of continuous running at full site load. Diesel generators are proposed as diesel fuel is readily available and diesel generators can withstand the load step required for the facility's electrical demand.

Administrative Operations

In emergency mode where there is failure of the primary transformer power, input power for the admin building is automatically transferred through a transfer control panel to a 500kW diesel generator. The generator has a 9,000L fuel tank with a running time of 48 hours at 75% of the 500kW rating.

Data Halls

In emergency mode, input power is automatically transferred through a transfer control panel to the 3000kW diesel generator that is dedicated for that cell. Each generator has a 35,000L fuel tank, with a running time of 48 hours at 75% of the 3000kW rating.

Generator Testing

Maintenance testing of emergency plant is anticipated to occur during the daytime period (from 7am to 6pm Monday to Saturday; or 8am to 6pm on Sundays and public holidays). The annual testing regime is shown in Table 6.

Table 6. Proposed Testing Regime							
Client Global Standards		Alternate Test Plan		Proposal			
Month	% Load	Test	Run Duration (Mins)	COLO Generator	Admin Generator	Mechanical Generator	Total Mins.
1	No-Load	Monthly	10	8	1	0	90
2	No-Load	Monthly	10	8	1	0	90
3	70	Quarterly	35	8	1	0	315
4	No-Load	Monthly	10	8	1	0	90
5	No-Load	Monthly	10	8	1	0	90
6	70	Quarterly	35	8	1	0	315
7	No-Load	Monthly	10	8	1	0	90
8	No-Load	Monthly	10	8	1	0	90
9	70	Quarterly	35	8	1	0	315
10	No-Load	Monthly	10	8	1	0	90
11	No-Load	Monthly	10	8	1	0	90
12	100	Annual	65	8	1	0	585
Total (Mins)							2,250
Total (Hrs)							37.50
<i>Source: LCI</i>							

3.2.8 Operational Details

Consent is sought to operate 24 hours a day, 7 days a week, which would include allowance for loading and unloading and office and data centre operations.

It is estimated that full time staff at the site will comprise 36 operational staff and 4 visitors/contractor staff (e.g. security guards).

Relationship with Existing Approval

The approved data centre at the front of the site is known as a Rapid Deployment data centre. These are smaller structures which enable an operator to provide a service in a particular geography as quickly as possible, with shorter approval and construction timeframes. The approved data centre has a data storage capacity of 1.2MW, though ultimately a much greater capacity is required by the operator.

The proposed development will act as an expansion of the approved data centre, providing the same function by supporting data storage for the same operator. The approved data centre will rely heavily on the proposed building for operational support, ultimately resulting in the site operating as a single campus with shared facilities such as carparking.

3.2.9 Cumulative Site Outcome

Table 7 outlines how the two data centre developments on the site relate to each-other from a cumulative outcomes perspective.

Table 7. Cumulative Site Development Outcomes			
Item	Existing Approval (DA-21-01058)	SSDA Proposal	Site Total
Power Consumption (MW)	1.2MW	19.2MW	20.4MW
Gross Floor Area (m ²)	630m ²	8,076m ²	8,706m ²
Number of Back-Up Generators	2 x 1.5MW generators 1 x 1MW generator	8 x 3MW generators 1 x 0.5MW generator	12 generators
Diesel Fuel Storage Capacity (L)	40,000L	289,000L	329,000L
Staff	4 staff	32 staff and 4 contractors / visitors	36 staff and 4 contractors / visitors (40 total)

4 Statutory Context

This chapter describes the statutory planning process and addresses relevant State and Local legislation and planning instruments which apply to the proposal.

The relevant legislation, planning instruments and policies relating to the site are as follows:

- Environmental Planning and Assessment Act 1979 (EP&A Act);
- Environmental Planning and Assessment Regulation 2021 (EP&A Regulation);
- Biodiversity Conservation Act 2016;
- State Environmental Planning Policy (Resilience and Hazards) 2021;
- State Environmental Planning Policy (Planning Systems) 2021; and
- State Environmental Planning Policy (Transport and Infrastructure) 2021.

The above legislation and EPIs are addressed throughout this chapter of the EIS and in the Pre-Conditions to Approval table and Mandatory Considerations Table provided in Appendix 2 of the EIS.

4.1 Environmental Planning & Assessment Act 1979

Section 4.36(2) of the EP&A Act states that a SEPP may declare any development as State Significant Development (SSD). As outlined in Section 4.4 of this EIS, the development constitutes SSD as identified under Schedule 1 of SEPP (*Planning Systems*) 2021.

The Proposal is otherwise considered to be consistent with the objects of the Act addressed in Table 8 below.

Object	Description
(a)	<p><i>To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,</i></p> <p><u>Response</u></p> <p>The proposal promotes the social and economic welfare of the community through the generation of direct employment, including 250 construction jobs and 36 FTE jobs once operational. In addition, the proposal will promote social and economic welfare of the community indirectly through the provision of infrastructure critical to the proper functioning of the economy.</p> <p>The Proposal provides for an improved environmental outcome compared to the former use with new landscaping, improved stormwater management, and the implementation of modern operational practices.</p>
(b)	<p><i>to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,</i></p>

Table 8. Alignment with the Objects of the EP&A Act

Object	Description
	<p><u>Response</u></p> <p>As outlined in detail within this EIS, the proposal has considered a number of economic, environmental, and social considerations and will provide an ecologically sustainable development outcome.</p>
(c)	<p><i>to promote the orderly and economic use and development of land,</i></p> <p><u>Response</u></p> <p>The proposal will better utilise the site, zoned for industrial purposes, to a higher and better value than used currently and prior to the approval of DA-21-01058.</p> <p>The provision of a second data centre on the site is in accordance with the objectives of the IN1 – General Industrial zoning, creates employment opportunities, utilises underused land for economic purposes, and will provide with a sensitive and appropriate built form response.</p>
(d)	<p><i>to promote the delivery and maintenance of affordable housing,</i></p> <p><u>Response</u></p> <p>Not Applicable. The site is zoned for industrial, not residential, purposes.</p>
(e)	<p><i>to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,</i></p> <p><u>Response</u></p> <p>The site will be largely cleared as a result of DA-21-01058 and contains little remaining vegetation of ecological value.</p>
(f)	<p><i>to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),</i></p> <p><u>Response</u></p> <p>The proposal does not impact upon built or cultural heritage items.</p>
(g)	<p><i>to promote good design and amenity of the built environment,</i></p> <p><u>Response</u></p> <p>The proposal has been designed with consideration of Better Placed (Government Architect 2017) and Greener Places (Government Architect 2020), and provides a high quality design outcome which will contribute towards the amenity of the built environment.</p>

Table 8. Alignment with the Objects of the EP&A Act

Object	Description
(h)	<i>to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,</i>
	<p><u>Response</u></p> <p>The proposal has been designed in accordance with relevant standards and requirements and will ensure the protection of the health and safety of occupants.</p>
(i)	to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,
	<p><u>Response</u></p> <p>As an SSD, the proposal will be assessed and determined by State government, informed by consultation with Blacktown City Council.</p>
(j)	to provide increased opportunity for community participation in environmental planning and assessment.
	<p><u>Response</u></p> <p>A community engagement session was organised prior to the finalisation of this EIS. Further, the community will be provided with additional opportunity to review and comment on the proposal as a part of the SSDA process.</p>

4.1.1 Environmental Planning & Assessment Regulation 2021

The *Environmental Planning and Assessment Regulation 2021* (the Regulations) is relevant in the assessment of this SSDA in that:

- It outlines the form of all development applications in Section 24;
- It provides the form of an Environmental Impact Statements in Section 190; and
- It classifies what development is designated development under Schedule 3.

This EIS has been prepared in accordance with the Regulations as relevant, with all necessary requirements being provided as required under Section 24 and Section 190.

The development is not listed as a type of Designated Development under Schedule 3 of the Regulations.

4.2 Biodiversity Conservation Act 2016

The Biodiversity Conservation Act 2016 (BC Act 2016) aims to maintain a healthy, productive, and resilient environment of the wellbeing of the community.

Under Section 7.9 of the BC Act 2016, a biodiversity development assessment report (BDAR) is required to be submitted for any SSD. However, Section 7.9(2) allows for an exemption from the requirement to submit a BDAR where the Planning Agency Head and the Environment Agency Head agree that the proposed development is not likely to have any significant impact on biodiversity values.

In accordance with the provisions of the BC Act 2016, an assessment has been undertaken to which has determined that the site is considered to have limited features of ecological value, is unlikely to support any threatened species, and unlikely to provide roosting habitat for threatened microbats. Hence, a waiver request is submitted seeking exemption from a full BDAR being required.

The findings of Biosis' assessment is discussed in Section 6.13 of this EIS, with the full report contained at Appendix 19.

4.3 Protection of the Environment Operations Act 1997

Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act 1997) lists 'scheduled activities' for which an environment protection license is required. Clause 17 of Schedule 1 lists *general electricity works* as a scheduled activity, being the generation of electricity by means of electricity plant other than wind or solar power.

Pursuant to Clause 17(A) of the POEO Act 1997, the generation of electricity by means of electricity plant that is emergency stand-by plant operating for less than 200 hours per year is not considered a scheduled activity.

Periodic testing of back-up generators is proposed to take place across the year, which as outlined in Section 3.2.7 of this EIS is proposed to be in the order of 37.5 hours per year. Outside of periodic testing, it is unlikely that emergency generators would be required to operate for more than 200 hours per annum in a power outage.

As such, the general electricity works associated with the testing and potential running of generators does not trigger the need for an environment protection license pursuant to the POEO Act 1997.

4.4 Environmental Planning Instruments

4.4.1 SEPP (Planning Systems) 2021

SEPP (PS) 2021 identifies development which is SSD, State significant infrastructure (SSI), critical State significant infrastructure (CSSI), and regionally significant development.

Development types which are State Significant Development are identified in Schedule 1 of the SEPP, and include the following:

25 Data Storage

"(1) Development for the purpose of storage premises used for the storage of data and related information technology hardware that has a total power consumption of more than the relevant amount.

(2) In this section—

relevant amount means—

(a) 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

(b) for any other development—15 megawatts.”

Taking into consideration the above, the proposal is SSD as the total power consumption is 19.2MW, which is more than the relevant amount of 10MW.

4.4.2 SEPP (Transport and Infrastructure) 2021

Permissibility

Notwithstanding the permissibility under the relevant local environmental plan (see Section 4.4.4), SEPP (T&I) 2021 also contains specific provisions under cl. 2.31 relating to the permissibility of data centres. The clause permits data centres in IN1 General Industrial Zones, making the proposal a permissible use under SEPP (T&I).

Adjacency to electricity transmission

The site is located adjacent to a 33kV High Voltage Aerial Transmission Line which runs along Station Road. The site also contains a transmission tower in at its southeastern corner, with an easement favouring Endeavour Energy for electricity supply.

Pursuant to cl. 2.48 of SEPP (T&I) 2021, DPE must give written notice to the electricity and consider any response received within 21 days after that notice is given.

Development adjacent to rail corridors

Clause 2.97 of the ISEPP applies to development on land adjacent to a rail corridor. Although the site is located immediately adjacent to the Main Western Line, the development works are limited to the middle and rear of the site, around 100m from the forward site boundary.

As such it is considered that the subject SSDA does not trigger the provisions of cl. 2.87 of SEPP (T&I) 2021.

Traffic generating development

Clause 2.121 of SEPP (T&I) 2021 requires for development of a certain size or capacity to be referred to Transport for NSW and give consideration to any submission that is made, the accessibility of the site concerned, and any potential traffic safety, road congestion, or parking implications of the development.

The triggers for referral are contained within Schedule 3 of SEPP (T&I) 2021. Whilst data centres are not a specified use, the triggers for any other purpose not specified are:

- 200 or more motor vehicles per hour for sites adjoining any road; and
- 50 or more motor vehicles per hour for sites with access to a classified road, or within 90m of a classified road.

The site does not adjoin, nor is within 90m of connection to, a classified road, hence the trigger for Clause 2.121 is 200 or more motor vehicles per hour. According to the Traffic Impact Assessment accompanying this SSDA (Appendix 10), the proposal is expected to generate a total of 26 trips in the peak hour. Accordingly, Clause 1.121 of SEPP (T&I) 2021 does not apply.

4.4.3 SEPP (Resilience and Hazards) 2021

Chapter 3 – Hazardous and Offensive Development

SEPP (R&H) 2021 provides criteria to confirm whether a development can be considered potentially hazardous or offensive, and outlines how to reduce these impacts.

A preliminary risk screening assessment has been undertaken by ACOR to determine the applicability of SEPP (R&S) 2021 is provided as Appendix 20 with a summary of the findings provided in Section 6.4.1 of this EIS.

The risk screening assessment confirms that there are no dangerous goods on the site that are included in the threshold values contained within SEPP33 and the proposed development is therefore not a potentially hazardous industry. As such, no Preliminary Hazard Analysis is required to be conducted.

Chapter 4 - Remediation of Land

Chapter 4 of SEPP (R&H) 2021 provides a state-wide approach to the remediation of contaminated land, in order to reduce the risk of harm to human health or the environment.

Clause 4.6 of the SEPP requires that a consent authority not grant approval for the carrying out of development on land unless:

- a) *It has considered whether the land is contaminated;*
- b) *If the land is contaminated, it is satisfied that it is suitable for the proposed development; and*
- c) *If remediation is required to be made suitable for the proposed development, that the land will be remediated before the land is used for that purpose.*

Under DA-21-01058, a Phase 2 Contamination Assessment and Validation Report for removal of UPSTs was submitted, with Council deeming the site to be suitable in its current state for commercial development. These reports have been re-attached to this EIS at Appendix 22 with a detailed overview of the findings discussed in Section 6.7.

Taking into consideration the above, it can be considered that cl. 4.6 of SEPP 55 has been satisfactorily addressed.

4.4.4 Blacktown Local Environmental Plan 2015

The BLEP 2015 is the primary EPI which applies to the site. An overview of the Proposal's response to key relevant provisions is provided below.

Zoning and permissibility

As shown in Figure 23, the site is zoned IN1 – General Industrial under BLEP 2015 which permits data centres with consent. A 'data centre' is defined as a type of 'high technology industry', which in itself is a type of 'light industry'. Light industries are listed as a permitted use in the IN1 Zone.

In addition, it is considered that the proposal provides for a development outcome which is consistent with the objectives of the zone as addressed below:

To provide a wide range of industrial and warehouse land uses.

Response: The proposal is consistent with this objective, as data centres are a form of light industry.

To encourage employment opportunities.

Response: The proposal will facilitate the generation of up to 250 during construction and 36 jobs once operational. Furthermore, it will indirectly support other employment opportunities through the provision of infrastructure which supports the proper functioning of the economy.

To minimise any adverse effect of industry on other land uses.

Response: The proposal provides for a low intensity type of industry at the site which will result in minimal impacts on the nearest sensitive receivers. In addition, as outlined in this EIS, a number of mitigation strategies have been adopted to ensure the impacts of the proposal on the surrounding environment are minimised.

To support and protect industrial land for industrial uses.

Response: The proposal will see the subject site used for an industrial land purpose.

To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.

Response: The proposal will not inhibit surrounding industrial sites from providing facilities or services that meet the day to day needs of local workers.

To minimise adverse impacts on the natural environment.

Response: As outlined in this EIS, a thorough analysis of the proposal's potential impacts on the surrounding natural environment have been considered with a number of strategies implemented to ensure impacts are mitigated.

Clause 4.3 - Height of Building

As shown in Figure 24, the site is not subject to any height of building control under cl. 4.3 of BLEP 2015.

Clause 4.4 - Floor Space Ratio

As shown in Figure 25, the site is not subject to any floor space ratio (FSR) control under clause 4.4 of BLEP 2015.

Clause 5.21 - Flood Planning

Cl. 5.21 applies to land within a flood planning area and provides matters a consent authority must give consideration to before providing development consent. The clause is relevant given the site is identified as being flood prone.

The flood prone nature of the site is to be dealt with through DA-21-01058. See Section 6.5 of this EIS for greater discussion.

Clause 7.3 Riparian land and watercourses

Clause 7.3 of BLEP 2015 aims to protect and maintain the water quality, stability of beds and banks, and aquatic and riparian habits within watercourses and associated riparian areas.

It applies to land within 40m of the top of the bank of any watercourse, which makes it an applicable clause given the presence of Blacktown Creek to the immediate north of the property.

The matters for consideration are assessed in Table 9 below.

Table 9. BLEP 2015 - Clause 7.3 Assessment

Item	Response
<p><i>(3) In deciding whether to grant development consent for development on land to which this clause applies, the consent authority must consider—</i></p>	
<p>(a) whether or not the development is likely to have any adverse impact on the following—</p> <p>(i) the water quality and flows within the watercourse,</p> <p>(ii) aquatic and riparian species, habitats and ecosystems of the watercourse,</p> <p>(iii) the stability of the bed and banks of the watercourse,</p> <p>(iv) the free passage of fish and other aquatic organisms within or along the watercourse,</p> <p>(v) any future rehabilitation of the watercourse and riparian areas, and</p>	<p>As outlined in ACOR's Integrated Water Management Report (Appendix 15) and Biosis' BDAR Waiver Request (Appendix 19), water quality management has been designed in accordance with Council's BDCP (Part J) requirements, and no adverse impacts on the nearby watercourse are expected.</p>
<p>(b) whether or not the development is likely to increase water extraction from the watercourse, and</p>	<p>No increase in water extraction will result from the development.</p>
<p>(c) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.</p>	<p>Stormwater quality and quantity measures have been implemented into the proposal to both reduce peak flows and improve the quality of flows in the vicinity of the watercourse. Refer to ACOR's Integrated Water Management Report (Appendix 15) and Section 6.8 of this EIS.</p>
<p><i>(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that—</i></p>	
<p>(a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or</p>	<p>Biosis' BDAR Waiver Request (Appendix 19) confirms that the proposed development is unlikely to have any biodiversity impact, including any aquatic impacts.</p>
<p>(b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or</p>	
<p>(c) if that impact cannot be minimised—the development will be managed to mitigate that impact.</p>	

Clause 7.8 – Development of certain land in Zone IN1

This clause applies to any land within Zone IN1 General Industrial that is within 250 metres of land in a residential zone. As such, It applies to the subject site given the presence of residential land to the south and west, which are within 250m.

The matters DPE must take into consideration under cl. 7.8 are responded to in Table 10.

Table 10. BLEP 2015 - Clause 7.8 Assessment	
Item	Response
<i>(2) Development consent must not be granted to development on land to which this clause applies unless the consent authority has considered the following—</i>	
(a) whether any proposed buildings are compatible with the height, scale, siting and character of existing residential buildings in the vicinity,	<p>The proposal provides an appropriate built form outcome which is compatible with the scale of nearby development, including residential located to the south.</p> <p>The building is set back a significant distance from all boundaries, is screened by vegetation and other development, and has been architecturally treated to ensure bulk and scale impacts are minimised.</p> <p>It is considered that the development will have a minor visual impact on nearby residential receivers as demonstrated in the Visual Impact Assessment at Appendix 14 and discussed further in Section 6.1.2 of the EIS.</p>
(b) whether goods, plant, equipment and other material resulting from the development are to be stored within a building or will be suitably screened from view from residential buildings and associated land,	<p>Goods, plant, equipment, and other materials will be stored at-grade and on rooftop areas. It is noted that where possible plant and equipment have been intentionally sited to be screened from residential and public viewpoints by the building, perimeter landscaping, and rooftop parapets.</p>

Table 10. BLEP 2015 - Clause 7.8 Assessment

Item	Response
<p>(c) whether the elevation of any building facing, or significantly exposed to view from, land on which a dwelling house is situated has been designed to present an attractive appearance,</p>	<p>No elevation will be significantly exposed to land on which a dwelling house is located, as the nearest dwelling houses (southwest and southeast) will have views to the site generally screened by a combination of onsite landscaping, vegetation within McCoy Park, or the smaller SYD09 data centre approved under DA-21-01058.</p> <p>Nevertheless, it is considered that the respective elevations of the proposal have been designed to present an attractive appearance to residential receptors nearby.</p>
<p>(d) whether noise generation from fixed sources or motor vehicles associated with the development will be effectively insulated or otherwise minimised,</p>	<p>Operational noise impacts have been shown to be within the relevant standards as discussed in Section 6.3.</p>
<p>(e) whether the development will otherwise cause a nuisance to residents, by way of hours of operation, traffic movement, parking, headlight glare, security lighting or the like,</p>	<p>The development is not anticipated to cause nuisance to residents during once operational. Whilst the development will operate 24/7, it is noted that data centres are an extremely low intensity industrial land use, which interfaces appropriately with urban and residential areas.</p>
<p>(f) whether the development will provide adequate off-street parking, relative to the demand for parking likely to be generated,</p>	<p>An assessment of the parking need has been undertaken in support of the SSDA and is discussed at Section 6.6 of this EIS. The assessment finds the provision of 31 car parking spaces for the development will exceed the demand for parking generated by the site.</p>
<p>(g) whether the site of the proposed development will be suitably landscaped, particularly between any building and the street alignment.</p>	<p>Landscaping to the site along the Station Road frontage will be provided for under DA-21-01058 and will include a mix of groundcover vegetation, shrubs, and trees.</p>

Table 10. BLEP 2015 - Clause 7.8 Assessment

Item	Response
	<p>Additional landscaping is proposed under the subject SSDA around the perimeter of the site, as discussed at Section 3.2.3 of this EIS.</p> <p>The landscaping proposed provides an appropriate design response which will contribute to the amenity of the site and act to soften the built form of the development proposed.</p>

Clause 7.9 - Development with frontage to roads zoned SP2

Clause 7.9 applies to land that has frontage to a road zoned SP2 – Infrastructure (Local Road). It provides mandatory considerations which are responded to in Table 11.

Table 11. BLEP 2015 - Clause 7.9 Assessment

Item	Response
<p><i>(3) Development consent must not be granted to development on land to which this clause applies unless the consent authority has considered the following—</i></p>	
<p>(a) where practicable, whether vehicular access to the land is provided by a road other than the road referred to in subclause (2),</p>	<p>The proposal will utilise approved vehicular access points to Station Road approved by council under DA-21-01058. Alternate vehicular access via McCoy Street was considered as a part of the local DA but was ultimately considered unviable.</p>
<p>(b) whether the safety, efficiency and ongoing operation of the road will be adversely affected by the development as a result of—</p> <p>(i) the design of the vehicular access to the land, or</p> <p>(ii) the emission of smoke or dust from the development, or</p> <p>(iii) the nature, volume or frequency of vehicles using the road to gain access to the land,</p>	<p>The traffic implications of the development have been considered in Section 6.6 and have been deemed to be acceptable. Further, the development is located some 100m back from Station Road and not expected to emit any smoke or dust which would affect its operations.</p>

Table 11. BLEP 2015 - Clause 7.9 Assessment

Item	Response
<p>(c) whether the development is of a type that is sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the road.</p>	<p>The development is a light industrial usage which is not sensitive to traffic noise or vehicle emissions.</p>

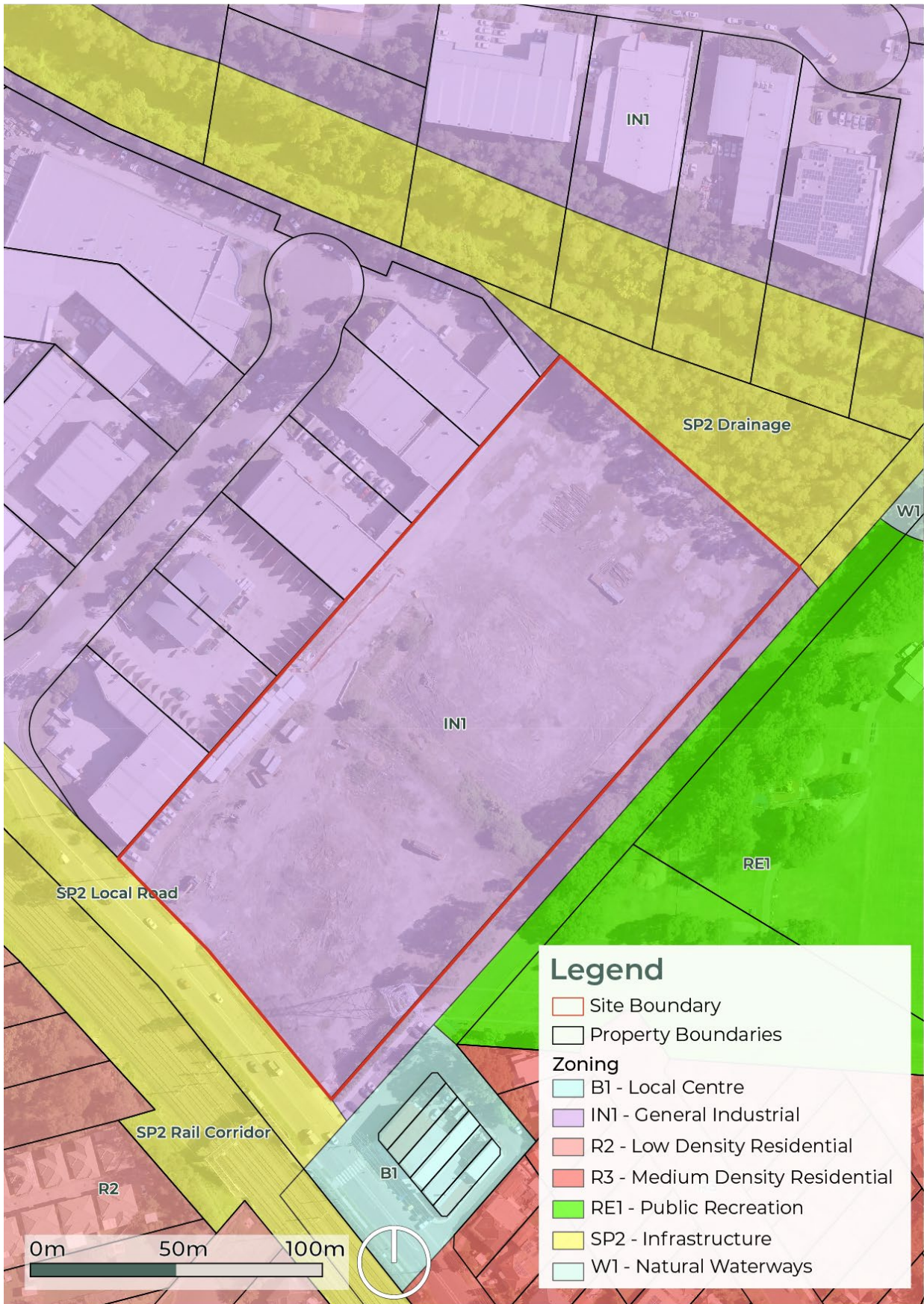


Figure 23: Zoning map of subject site
 Source: Patch using data from BLEP 2015



Figure 24: Height map of subject site
 Source: Patch using BLEP 2015 data



Figure 25: FSR map of subject site
 Source: Patch using BLEP 2015 data

4.5 Blacktown Development Control Plan 2015

Whilst clause 2.10 of SEPP (PS) 2021 expressly states that DCPs do not apply to SSD, the BDCP 2015 has nevertheless been considered in relation to the proposal. An assessment of the application against key provisions of the BDCP 2015 is provided in Appendix 3 and demonstrates the proposal to be generally consistent with its provisions as they relate to general development, and development on industrial land.

Of note is the proposed departure to Council's car parking rates, as outlined in BDCP 2015 Part A. Strict compliance with these controls would necessitate the provision of 122 car parking spaces on site.

The BDCP 2015 states that car parking requirements for development types that are not specified in its car parking rates or other Planning Instruments will be assessed on merit and may require the submission of a traffic study. It is noted that data centres are not a specified development type in the BDCP 2015 and as such, a parking study has been undertaken to determine the proposed development's parking need.

The outcomes of this study, which recommend the need for a total of 31 car parking spaces on site, is discussed in Section 6.6.3 of this EIS.

5 Community and Stakeholder Engagement

This chapter provides a summary of the engagement undertaken prior to the lodgement of this SSDA. A more detailed overview is provided in the accompanying Engagement Report prepared by the Astrolabe Group (refer Appendix 24).

To inform the development of the proposed scheme accompanying this EIS, and in accordance with the SEARs, community and stakeholder engagement was undertaken prior to lodgement. This included:

- Surrounding landowners, occupants, and businesses;
- Blacktown City Council;
- The City of Parramatta Council;
- NSW Environment Protection Authority (EPA);
- NSW Department of Natural Resources Access Regulator (NRAR);
- NSW Department of Planning and Environment;
- Endeavour Energy; and
- Sydney Water.

5.1 Community Views

A postcard providing information about the proposal and an Online Community Information Session was distributed to 1,500 dwellings and businesses in the vicinity of the site. A webpage was also created to support the Information Session, provide details regarding the proposal, and allow for registration.

Two members of the public registered for the session, which was held on Tuesday 15 February 2022. However, ultimately no community members attended the session.

At this stage, the views of the community relating to the project are unknown. As a further opportunity for community consultation will be provided through the SSDA phase, community views are expected to become known at that point.

5.2 Government Agency Views

State and local government agencies were contacted throughout January – February 2022 as the proposal was being prepared. Details of the engagement, and advice from agencies, is provided in Table 12.

Table 12. Government Agency Consultation Outcomes

Agency	Engagement	Details
Blacktown City Council	Meeting held on 7 February 2022, attended by Patch, LCI, DEM, and ACOR.	Written advice was received from Council following the meeting, outlining a number of policies and planning controls that any future development should consider. The full set of minutes is provided in Appendix 31, with the response to key issues provided in Section 5.3 below.
City of Parramatta Council	Patch emailed Council on 22 January with details of the proposal.	The City of Parramatta Council responded that the Development and Traffic Services Unit had no comment at this time. The proponent has also begun more recent engagement with the City of Parramatta Council regarding the potential use of nearby public car parking for use during the construction phase.
EPA	Patch emailed EPA on 31 January 2022 and a follow-up phone call on 11 February 2022.	EPA stated that it had no comments at this time.
NRAR	Patch emailed on 31 January 2022.	No response received.
DPE	Patch, LCI, DEM and ACOR met with DPE on 17 February 2022 to present the proposed scheme.	General requirements for the development and EIS were provided, which have been incorporated.
Sydney Water	LCI have contacted Sydney Water in relation to the servicing of the site.	Refer to Section 6.8.
Endeavour Energy	LCI have contacted Endeavour Energy in relation to the servicing of the site.	Refer to Section 6.8.

5.3 Blacktown City Council Feedback

Table 13 provides a summary of the key issues raised in the pre-application meeting held with Blacktown City Council on 7 February 2022. A full set of the Council-issued minutes is held at Appendix 31.

Table 13. Response to Blacktown City Council feedback

Item	Requirement	Response
Key issues and submission requirements		
Draft Environmental Planning Instruments /Explanation of Intended Effects	<p>The Department of Planning, Industry and Environment has placed on exhibition the following draft Environmental Planning Instruments or Explanation of Intended Effects:</p> <ul style="list-style-type: none"> • Design and Place SEPP; • Employment zones reform • Proposed Housing SEPP • Review of Standard Instrument LEP in relation to Clause 4.6; • Proposed Environmental Planning and Assessment Regulation 2021 • Repeal of Concurrence and Referral process. 	<p>Of the draft environmental planning instruments or Explanation of Intended Effects listed by Council, it is noted:</p> <ul style="list-style-type: none"> • The Design and Place SEPP will no longer be proceeding to finalisation. Therefore, it has not been considered in the EIS; • The employment zones reform is expected to result in the land use zoning for the site change from IN1 – General Industrial to E4 – General Industrial. <p>No consequence upon the SSDA is expected from this change given data centres will remain a permissible use in the E4 Zone;</p> <ul style="list-style-type: none"> • The Housing SEPP has commenced but has no implications for the project; • Changes to Clause 4.6 have no implications to the project, as no variation to a development standard is sought; • The amendment to the Regulations have commenced; and

Table 13. Response to Blacktown City Council feedback

Item	Requirement	Response
		<ul style="list-style-type: none"> The repeal of concurrence and referral processes has occurred.
Car parking	<p>Parking provision onsite is to be provided in accordance with the parking rates set out in Blacktown's DCP 2015.</p> <p>1 space per 75sqm GFA for the data building plus 1 Space per 40sqm GFA for the office component.</p> <ul style="list-style-type: none"> The applicant is address how the development will accommodate parking for staff including those who are to work in the data centre and in the office. E.g. how many people will be on site at any one time. The applicant will also need to provide an operational plan that indicates how parking is to be accessed by staff, and other uses. <p>As the proposed development is to share the site with another approved development the plans submitted with the SSD are to include a site plan that shows the other approved development as well as the proposed new development and is to show any areas of intended shared use such as vehicular movement paths, any carparking etc.</p>	<p>A detailed Traffic Impact Assessment prepared by TTPP supports the EIS and is held at Appendix 10.</p> <p>The TIA demonstrates that strict compliance with Council's parking controls (which do not consider data centres specifically), would lead to an oversupply in parking at the site. As such, the TIA instead undertakes a first principles parking demand analysis which has determined the site (as a whole) demands the provision of 31 car parking spaces, which has been provided in the proposal. It is noted that sixteen of these spaces will be provided under DA-21-01058, with an extra 15 to be provided under the subject SSDA.</p> <p>This matter is discussed in detail at Section 6.6.3 of this EIS, while details regarding the operational relationship between the approved and proposed data centres are provided at Section 3.2.8.</p>

Table 13. Response to Blacktown City Council feedback

Item	Requirement	Response
	<p>Where there is to be any shared use or interaction of the DA approved under DA-21-01058 and this proposed development then the EIS is to explain this and how the uses will operate in harmony together. If there is any shared use of carparking then this is to be explained in the traffic report, however there needs to be sufficient carparking provided to serve the needs of traffic generated by both the existing approved development at the front of the site and this proposed new data centre at the rear and to meet Council's onsite parking requirements. The traffic report needs to provide figures for both developments in terms of cars and trucks generated and staff numbers.</p>	
<p>Key matters raised by other sections of Council</p>		
<p>Engineering (Drainage)</p>	<p>The following comments have been provided by Council's Drainage Engineer:</p> <ul style="list-style-type: none"> • Water Conservation is required as per part J of the DCP and is to be connected to the landscape and toilet areas. Submit the related MUSIC model. • Water Quality is through a s7.11 contribution which should have been addressed as part of the parent approved DA. • A Gross Pollutant Trap due to the s7.11 contribution has been catered for in the parent DA. • OSD has been approved under the parent D <p><u>Access arrangement to the rear riparian/landscape area.</u></p>	<p>The proposed stormwater drainage solution for the site has largely been provided for under the parent DA (DA-21-01058). Otherwise, compliance with Council's requirements has been achieved.</p> <p>Refer to Section 6.8 for more detailed discussion.</p> <p>If deemed required by DPE, a Vegetation Management Plan could be provided prior to construction certificate stage.</p>

Table 13. Response to Blacktown City Council feedback

Item	Requirement	Response
	<ul style="list-style-type: none"> • A step-down area is to be created to the rear for person access and maintenance of the riparian area. Site restricted access is to be managed and should not remove the need for a maintenance access to this area. This is to be managed internally on lot. Note that a vehicle access or maintenance track is not required. • A Vegetation Management Plan (VMP) is required for the restoration of the flood storage/landscape setback (formerly creating a riparian zone) area including removal of weeds and replanting. The VMP is to also address the swale and creek discharge. 	
Environmental Health	<ul style="list-style-type: none"> • SEPP 33 assessment is required to be undertaken, encompassing the entire site including the Council approved DA-21-01058. • Acoustic assessment is required by a suitably qualified acoustic consultant in accordance with the Noise Policy for Industry 2017, which also takes into the account DA-21-01058 	<p>This SSDA has satisfied these requirements of Council as follows:</p> <ul style="list-style-type: none"> • An assessment against what is now SEPP (Resilience and Hazards) 2021, formerly SEPP 33, has been undertaken at Section 4.4.3; • An acoustic assessment has been undertaken and is summarised at Section 6.3; • The previous contamination analysis was for the entire site and remains satisfactory. This is summarised at Section 6.7;

Table 13. Response to Blacktown City Council feedback

Item	Requirement	Response
	<ul style="list-style-type: none"> • Confirmation statement is required verifying that the Contamination assessment submitted as part of DA-21-01058 was for the entire site and that it is satisfactory and no further assessment and/or remediation is required. If that is not the case then a new site contamination report is required that addresses the part of the site where this development is proposed. • An air quality assessment is to be submitted. • The plans demonstrate that the storage and handling of liquids associated with activities on the premises is to be carried out in accordance with the requirements of; <ul style="list-style-type: none"> ○ NSW Workcover; ○ Australian Standard 1940:2004 The Storage and Handling of Flammable and Combustible Liquids; and ○ Environment Protection Authority Guidelines - Technical BU Bunding and Spill Management. 	<ul style="list-style-type: none"> • An air quality assessment has been provided and is discussed at Section 6.5; and • The EIS demonstrates that the storage of materials is in accordance with relevant guidelines and standards.
Building	Compliance with the National Construction Code (NCC) is required.	The SSDA architectural plans have been considered against the Building Code of Australia (BCA) as outlined in Section 6.18 and 6.19.

Table 13. Response to Blacktown City Council feedback

Item	Requirement	Response
Biodiversity	The proposal is not to release stormwater into the creek line at the rear of the property as there is a Biodiversity Mapped Area Within 100 meters of the site, if this cannot be avoided a BDAR (Biodiversity development assessment report) taking this into account (Section 8.2 of BAM 2020) would need to be submitted to the consent authority (and a copy submitted to Council) for approval.	A BDAR waiver report has been prepared by Biosis and is discussed at Section 6.13 of this EIS. Given the improved site discharge velocities and peak flow rates, the development is considered unlikely to result in any indirect hydrological impacts on Blacktown Creek.

5.4 Engagement to be Carried Out

Following lodgement of the application, we expect DPE will seek comments from relevant agencies and the local community throughout the exhibition phase. Detailed consideration of any issues raised at that point will be undertaken by the broader project team.

In terms of engagement following any approval, it is noted that Astrolabe Groups' Social Impact Assessment (Appendix 25) recommends frequent and clear communication to take place with the community regarding demolition, construction, and operational activities. The incorporation of these mitigations will assist in the management of impacts, particularly those associated with noise, vibration, and air quality.

6 Assessment of Impacts

6.1 Built Form and Urban Design

The design intent and principles which have guided the built form of the proposal are described in detail within DEM's Design Report at Appendix 7.

Data centres are a specific building typology with bespoke design and configuration requirements. For the data hall to function, a large building massing is required to house substantial mechanical and electrical plant components and large-scale areas dedicated for data storage halls. Data hall building components are also required to have solid blank walls without windows.

The proposal has been designed to provide for a high-quality architectural outcome whilst also meeting the bespoke design requirements data centres have. It is considered that the design of the facility is compatible with the height, scale, siting and character of existing residential buildings in the vicinity. The data centre is located centrally within the site away from the street, comprises façades which include a combination of vertically modulated panels, are neutral in colour with some highlighted coloured panels to provide visual interest. Facade panels will have a finish to withstand undesirable weather conditions and reduce maintenance.

The data centre building bulk, massing and height is visually reduced through modulated facade materials that defines the two levels of the building. This facade modulation assists in presenting a more human scale along the site boundary to McCoy Park.

The building height has been driven by the functional requirements of areas dedicated for plant and equipment which require a floor to floor of 7m for the ground floor and a floor to floor of 4.47m for the first floor.

External plant equipment is proposed to be located externally at-grade adjacent to the western and northern facades of the data halls where the building massing will screen this equipment from surrounding residential areas, public streets and recreation areas including McCoy Park and Station Road. These sides adjoin industrial sites as opposed to residential or open space land, hence will be screened from view from sensitive areas from the data hall itself. A neutral, dark colour scheme will be applied to plant areas including walls, screens and service elements to reduce visibility. External equipment that is required along the eastern facade (addressing McCoy Park) will be fully screened using a decorative perforated metal screen.



Figure 26: Illustrative figure depicting proposed data centre
Source: DEM



Figure 27: Illustrative figure depicting proposed data centre
Source: DEM

6.1.1 Overshadowing

The proposal will result in only minimal overshadowing of McCoy Park, and no overshadowing to nearby residential properties, in midwinter.

As shown in Figure 28 to Figure 30, overshadowing associated with the proposal is contained entirely on site at 9am in midwinter, generally affecting carparking and circulation areas as well as the approved data centre at the front of the site. Midday shadows slightly affect the adjoining McCoy Street road reserve, but do not impact upon any usable component of parkland. By 3pm, midwinter shadows encroach on McCoy Park, however are largely affecting a heavily vegetated area which is not used for sporting or passive recreation.



Figure 28: 9am overshadowing associated with proposal
Source: DEM

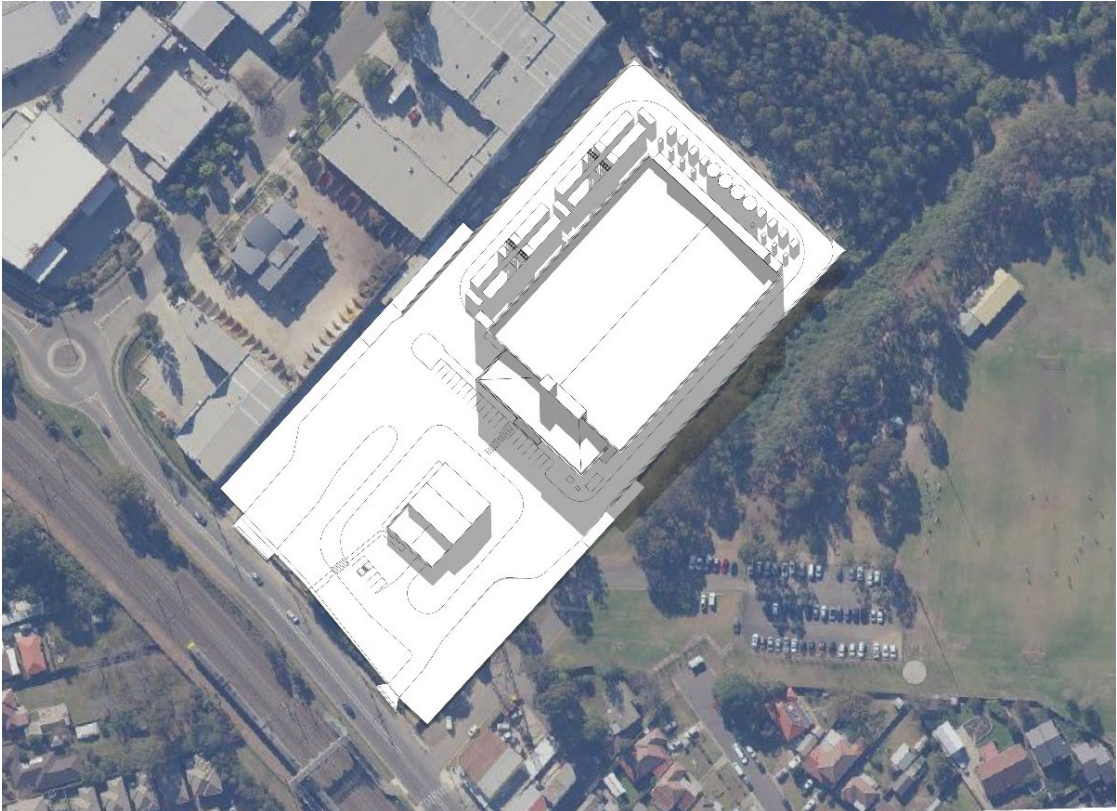


Figure 29: 12pm overshadowing associated with proposal
Source: DEM

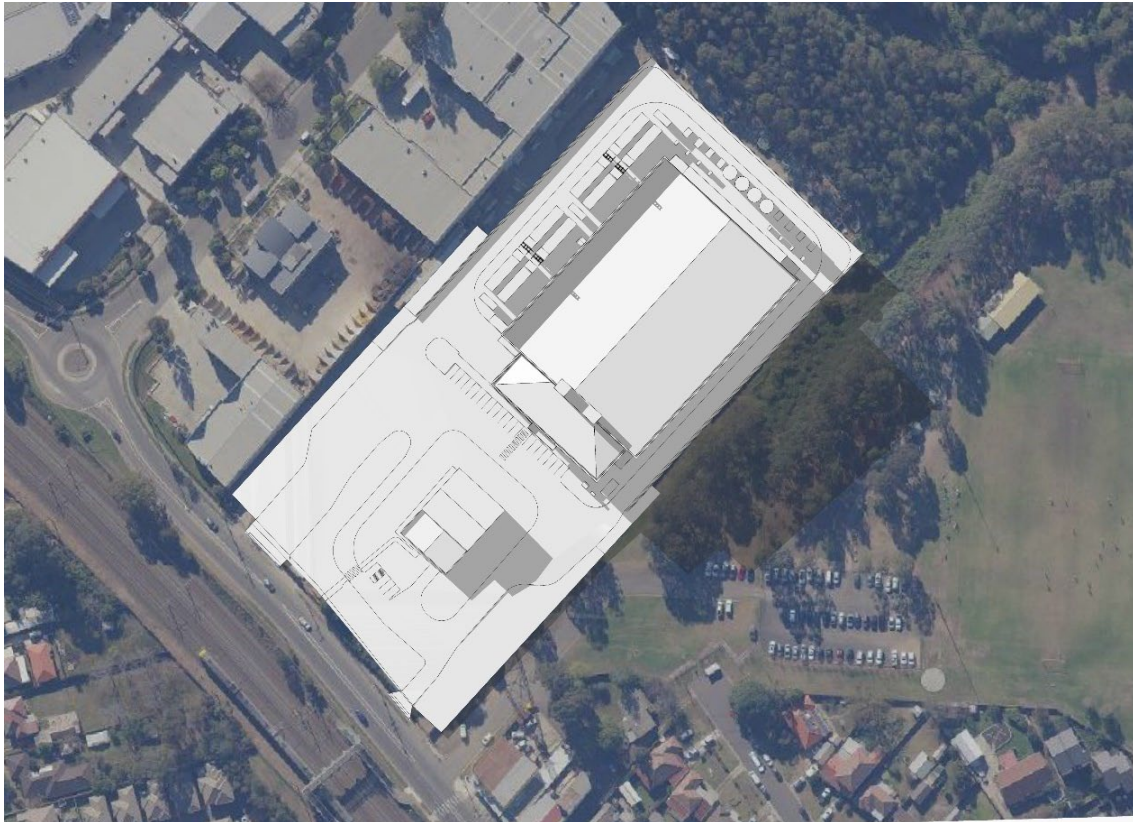


Figure 30: 3pm overshadowing associated with proposal
Source: DEM

6.1.2 Landscaping

Whilst the operation of the data centre requires the provision of visual access and clear sight lines, it is recognised that the proposal also needs to incorporate a unified landscape treatment not only to respond to Council guidelines, but also to contribute towards biodiversity and enhance visual amenity.

The existing site is currently largely cleared, and of low quality with respect to landscaping and vegetation. This will be improved through the proposed landscape treatment, which responds to the functional needs of the data centre but also considers how to complement architectural features, soften hardstand areas, and provide a landscape buffer.

The key landscape design principles include:

- Incorporating indigenous and native plant species, with low water requirements,
- A mix of plant species mainly selected from the BDCP 2015;
- Separation of landscape areas from vehicular areas by kerb;
- Landscape buffers which include a combination of tall canopy trees, shrubs and groundcovers within set back areas;
- Riparian planting adjacent to the northern boundary; and
- Utilisation of water collected on-site for irrigation.

6.2 Visual Impacts

A Visual Impact Assessment (VIA) has been prepared by Moir Landscape Architects in support of the SSDA (refer Appendix 14), which aims to identify and determine the value, significance, and sensitivity of the landscape, and assess the subsequent visual impact of the proposal.

Moir's assessment was undertaken in two stages. The first stage involves the steps outlined below.

- An objective assessment of the relative aesthetic value of the landscape, defined as visual quality and expressed as high, medium or low.
- Determination of the landscape sensitivity and its ability to absorb different types of development on the basis of physical and environmental character.
- An assessment of viewer sensitivity to change, including how different groups of people view the landscape, and how many people are viewing and from how far.
- The undertaking of a viewpoint analysis to identify areas likely to be affected by development of the site, and a photographic survey.
- An assessment of visual impacts and the preparation of recommendations for impact mitigation.

The second stage involves a quantification of the visual impacts defined by methods including the preparation of photomontages to depict the proposal, and providing mitigation strategies.

Moir's method assessed the potential visual impact of the project based on the concepts of visual sensitivity and visual magnitude:

- Visual sensitivity is a measure of how critically a change to the existing landscape is viewed by people from different areas, with sensitivity ratings defined as high, moderate or low (see Figure 31);
- Visual magnitude refers to the extent of change that will be experienced by receptors, and considers the proportion of view affected, the extent of the area over which the change occurs, the size, scale, rate and duration of the change, and the level of contrast and compatibility;
- Visual impact is the change in appearance of the landscape as a result of the development, being the combined effect of visual sensitivity and visual magnitude, and measured as high, moderate, or low (see Figure 32).

VISUAL SENSITIVITY RATING					
LANDUSE	DISTANCE FROM SITE				
	0-1 km	1-2 km	2 - 4.5 km	4.5 -7 km	> 7 km
Townships	HIGH	HIGH	HIGH	MODERATE	LOW
Recreational Reserve	HIGH	HIGH	HIGH	MODERATE	LOW
Homestead	HIGH	HIGH	HIGH	MODERATE	LOW
Rural Township	HIGH	HIGH	MODERATE	LOW	NIL - LOW
Main Highway	MODERATE	MODERATE	LOW	LOW	NIL - LOW
Local Roads	MODERATE	MODERATE	LOW	LOW	NIL - LOW
Farm Road	LOW	LOW	NIL - LOW	NIL - LOW	NIL
Agricultural Land	LOW	LOW	NIL - LOW	NIL - LOW	NIL

Figure 31: Visual Sensitivity Rating Guide
Source: Moir

VISUAL IMPACT RATING					
		VISUAL MAGNITUDE			
		HIGH	MODERATE	LOW	NEGLIGIBLE
VISUAL SENSITIVITY	HIGH	HIGH	HIGH-MODERATE	MODERATE	NEGLIGIBLE
	MODERATE	HIGH-MODERATE	MODERATE	MODERATE-LOW	NEGLIGIBLE
	LOW	MODERATE	MODERATE-LOW	LOW	NEGLIGIBLE
	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE

Figure 32: Visual Impact Rating Guide
Source: Moir

To undertake the assessment, 18 viewpoints were selected, representative of views within the study area. Once selected, panoramic photographs were taken at eye level from the viewpoints towards the site, with the visual impact of the viewpoint then assessed.

The 18 viewpoint locations are shown in Figure 33, with the visual impact assessment results shown in Table 14.

Of the 18 viewpoints assessed, the proposal would be visible from 12. Of these 12:

- Six (6) have been assessed as having nil visual impact;
- Three (3) have been assessed as having a negligible visual impact;
- Three (3) have been assessed as having a moderate-low visual impact;
- Five (5) have been identified as having a moderate visual impact; and
- One (1) has been identified as having a high-moderate visual impact. This viewpoint (VP09) is from a stretch of Station Road immediately opposite the subject site.

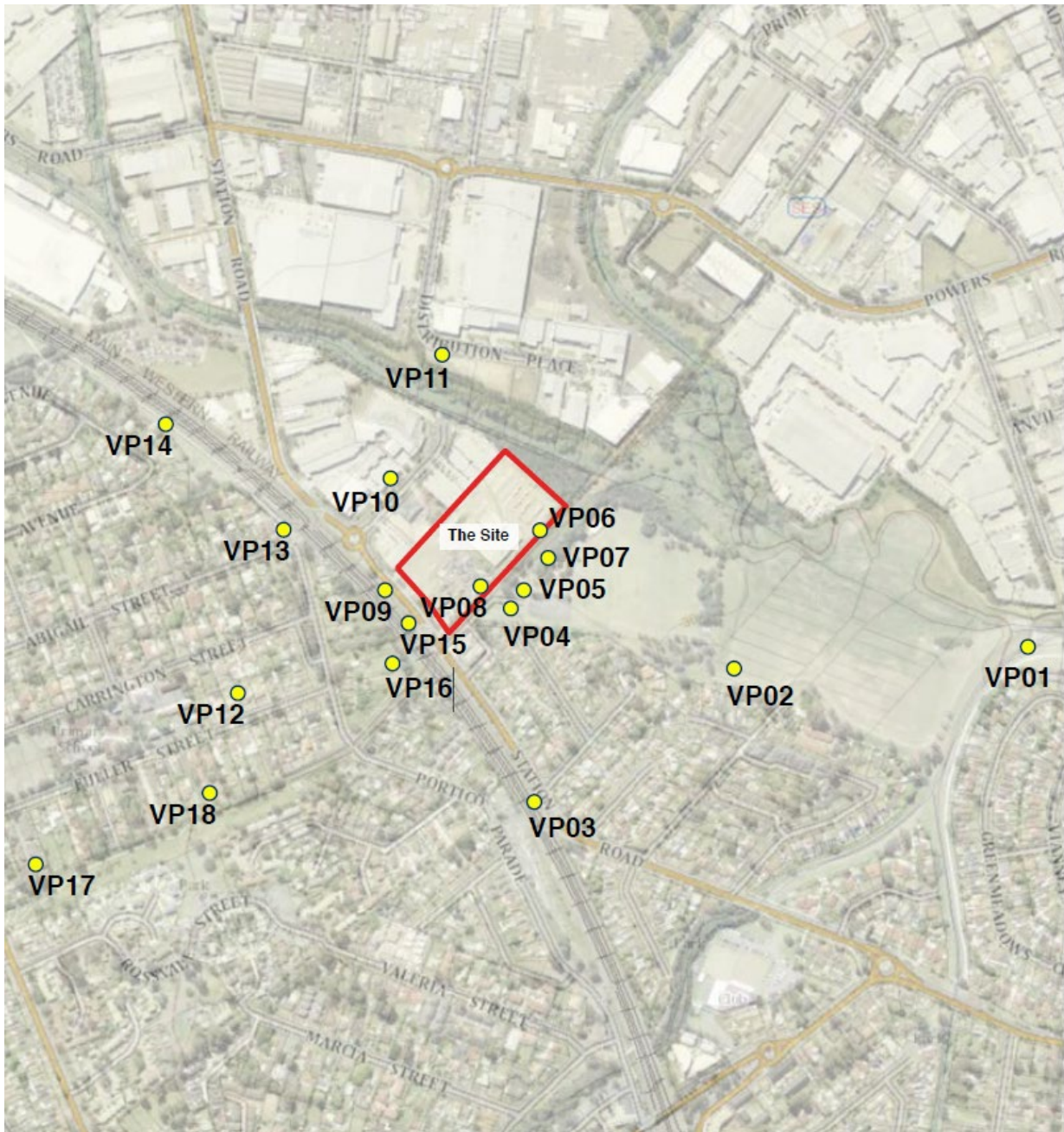


Figure 33: Viewpoint Locations
 Source: Moir

Table 14. Visual Impact Summary

Viewpoint	Visual Sensitivity	Visual Effect	Potential Visual Impact
VP01	High	Nil	Nil
VP02	High	Nil	Nil
VP03	Moderate	Low	Moderate-Low
VP04	High	Low	Moderate
VP05	High	Low	Moderate
VP06	High	Low	Moderate
VP07	High	Low	Moderate
VP08	High	Low	Moderate
VP09	High	Moderate	High-Moderate
VP10	Moderate	Negligible	Negligible
VP11	Moderate	Nil	Nil
VP12	Moderate	Nil	Nil
VP13	Moderate	Negligible	Negligible
VP14	High	Negligible	Negligible
VP15	Moderate	Low	Moderate-Low
VP16	Moderate	Low	Moderate-Low
VP17	High	Nil	Nil
VP18	High	Nil	Nil

Source: Moir

As a part of the visual impact assessment Moir also prepared two photomontages of the proposal. Viewpoints 05 and 16 were selected for the preparation of the montages as these were good indicators of general visibility to the site. The photomontages are shown in Figure 34 and Figure 35.



Figure 34: Photomontage of Viewpoint 05 (McCoy Street Car Park)
Source: Moir



Figure 35: Photomontage of Viewpoint 05 (McCoy Street south)
Source: Moir

6.2.1 Summary of Visual Impacts

As part of their overall assessment of visual impact, Moir have noted the existing landscape character is predominantly industrial and urban residential, with pockets of open space. The depth of the lot, and location of the development to the rear, will limit its overall impact, and the nature of surrounding development suggests that the proposal will integrate with existing built form. Existing vegetation on the northern and eastern boundaries provides a buffer to the recreation areas.

Overall, Moir conclude that when implemented with appropriate environmental management and employment of the recommended mitigation measures, the proposed development could be undertaken whilst maintaining the character of the area with minimal visual impact on the surrounding visual landscape.

6.2.2 Recommended Mitigations

The following mitigations were recommended by Moir, which have been implemented into the development:

- Ensure retention of existing vegetation buffer and most importantly, canopy trees on and around the site.
- Retain and protect existing vegetation where possible during construction.
- Consideration of construction materials to minimise visual contrast for surrounding residents.

6.3 Noise and Vibration

An Acoustic Assessment Report has been prepared by PWNA and is provided in Appendix 12 of the EIS. The report considers the following:

- The existing acoustic environment;
- Operational noise emission criteria;
- Potential operational noise impacts;
- Road traffic noise impacts; and
- Construction noise impacts.

The report identifies 19 potentially impacted noise receivers in the vicinity of the subject site, which includes nine (9) residential receivers, one (1) commercial receiver, eight (8) industrial receivers, and one (1) active recreation receiver. The considered receivers are outlined in Table 15 and shown in Figure 36.

Table 15. Nearest Potentially Affected Receivers		
ID	Address	Type of Receiver
R1	13 Edna Avenue, Toongabbie	Residential
R2	20A Edna Avenue, Toongabbie	Residential
R3	43 Station Road, Toongabbie	Residential
R4	51 Station Road, Toongabbie	Residential
R5	1 McCoy Street, Toongabbie	Residential
R6	15 Carter Street, Seven Hills	Residential
R7	13 Carter Street, Seven Hills	Residential

Table 15. Nearest Potentially Affected Receivers

ID	Address	Type of Receiver
R8	11 Carter Street, Seven Hills	Residential
R9	9 Carter Street, Seven Hills	Residential
R10	43 Station Road, Toongabbie	Commercial
R11	2 Tollis Place, Seven Hills	Industrial
R12	4-6 Tollis Place, Seven Hills	Industrial
R13	8 Tollis Place, Seven Hills	Industrial
R14	10 Tollis Place, Seven Hills	Industrial
R15	12 Tollis Place, Seven Hills	Industrial
R16	16 Distribution Place, Seven Hills	Industrial
R17	18 Distribution Place, Seven Hills	Industrial
R18	20 Distribution Place, Seven Hills	Industrial
R19	26 Mimosa Avenue, Toongabbie	Active Recreation



Figure 36: Location of considered receivers surrounding the project site
Source: PWNA

Long term unattended noise monitoring was undertaken at 18 Edna Avenue, Toongabbie, which was chosen due to its proximity to the proposal. The monitoring was undertaken between 21 October 2020 and 27 October 2020. The results are shown in Figure 37 and are considered by PWNA to be representative of the levels to be expected at the nearest and most affected residences to the proposal.

Measurement Location	Daytime ¹ 7:00 am to 6:00 pm		Evening ¹ 6:00 pm to 10:00 pm		Night-time ¹ 10:00 pm to 7:00 am	
	RBL ²	LAeq ³	RBL ²	LAeq ³	RBL ²	LAeq ³
18 Edna Avenue, Toongabbie	41 dBA	55 dBA	39 dBA	50 dBA	31 dBA	46 dBA

Note 1: For Monday to Saturday, Daytime 7:00 am – 6:00 pm; Evening 6:00 pm – 10:00 pm; Night-time 10:00 pm – 7:00 am. On Sundays and Public Holidays, Daytime 8:00 am – 6:00 pm; Evening 6:00 pm – 10:00 pm; Night-time 10:00 pm – 8:00 am

Note 2: The RBL noise level is representative of the "average minimum background sound level" (in the absence of the source under consideration), or simply the background level.

Note 3: The LAeq is the energy average sound level. It is defined as the steady sound level that contains the same amount of acoustical energy as a given time-varying sound.

Figure 37: Measured ambient noise level at 18 Edna Avenue, Toongabbie
Source: PWNA

6.3.1 Construction Noise and Vibration

Noise generating scenarios at the construction phase are associated with bulk earthworks, concreting works, and structure works. Major plant equipment that will be used in construction is likely to include excavators, dozers, trucks, hand tools, and a franna crane (a type of mobile articulated crane).

Modelling by PWNA suggests that construction activities during each of the construction stages are predicted to exceed the standard hours criteria of 51 dBA at several residential receivers. Suitable management controls and community notifications are therefore required, as outlined further below in 6.3.4.

6.3.2 Potential Operational Noise Impacts

For the purposes of assessing operational noise impacts, the noise model considers major mechanical equipment including air handling units and generators. Air handling units are modelled in two different ways; namely, with a bushfire filtration module considered, and with a standard filtration module. Modelling considers both daytime and evening/night-time scenarios.

Under the standard mode of operation, compliance with all noise criteria as set out within the BDCP 2015 and the NSW Noise Policy for Industry during all operational scenarios, providing the modelling assumptions are implemented (described in Section 6.3.4 of this EIS). Under the bushfire mode operation scenarios, which assume up to one generator operating, compliance with the noise criteria is also achieved.

6.3.3 Road Traffic Noise Assessment

PWNA note that as a part of the development, additional vehicle movements are to be expected on Station Road, which is the road selected for the assessment given it will carry the highest proportion of additional traffic to/from the site.

Under section 3.4.1 of the Road Noise Policy, any increase in total traffic noise should be limited to 2 dB above that of a corresponding 'no build' option. This would equate to approximately a 60% increase in road traffic along Station Road, whilst the proportional increase in traffic associated with the development is predicted to be far smaller than this amount (refer Section 6.6 of this EIS).

Accordingly, road traffic noise levels are not anticipated to increase by 2 dB or more and no noise mitigation measures have been recommended.

6.3.4 Recommended Mitigations

Given the predicted noise levels at the construction phase, a number of noise control measures and noise management practices have been recommended for the project. These are summarised in Table 16 with further description provided in PWNA's full report.

Table 16. Summary of mitigation measures for construction noise

Procedure	Description
General Management Measures	Introduce best-practice general mitigation measures in the workplace which are aimed at reducing the acoustic impact onto the nearest affected receivers.
Project Notification	Issue project updates to stakeholders, discussing overviews of current and upcoming works. Advanced warning of potential disruptions can be included.
Verification Monitoring	Monitoring to comprise attended or unattended acoustic surveys to confirm measured levels are consistent with predicted levels, and verify that the mitigation procedures are appropriate for affected receivers. If measured levels are higher than those predicted, mitigations will need to be reviewed.
Complaints Management System	Implement a management system which includes procedures for receiving and addressing complaints from affected stakeholders.
Specific Notification	Individual letters or phone calls to notify stakeholders that noise levels are likely to exceed noise objectives.
Respite Offer	Offer provided to stakeholders subjected to ongoing impact.
Alternative Construction Methodology	Contractor to consider alternative construction options that achieve compliance with relevant criteria. This should be determined by considering the assessment of on-site measurements.

PWNA's recommended mitigations also include site-specific measures to implement throughout works and operation which include maximising the offset distance between plant items and nearby sensitive receivers, preventing noisy plant working simultaneously and adjacent to sensitive receivers, minimising consecutive works in the same site area, orienting equipment away from noise sensitive areas, and carrying out loading and unloading away from noise sensitive areas.

The predicted noise level modelling with up to one generator operating indicate that compliance with the relevant noise criteria set out in the BDCP 2015 and the NSW Noise Policy for Industry is predicted. It is noted that this is based off several modelling assumptions being implemented, and accordingly the following conceptual noise controls are recommended for the project.

- The generators are to be tested one at a time during the day scenario only.
- The generators are to be packaged units which feature attenuators on the air intakes and mufflers or attenuators on the exhaust ducts. The enclosed generators are to comply with a sound pressure level of 85 dB(A) at 1m. The recommendations are to be assessed at the detail design stage.

- The sound power levels of the air handling units are to be at or below the levels listed in Figure 38 of this EIS (Table 16 of PWNA's Report) for the day, evening and night periods. The suitability of the selected air handling units is to be assessed at the detailed design stage.
- The air handling units are to incorporate intake acoustic louvres, with specific details of the required insertion losses provided by the louvres outlined in PWNA's report.
- Once the final concept, mechanical equipment selection and equipment layout are finalised in later stages of the project, recommended noise control measures can be finalised. That is, the above conceptual noise measures are subject to final equipment selections and layouts.

AHU Type	Fans	Octave Band Centre Frequencies (Hz)								Overall
		63	125	250	500	1000	2000	4000	8000	
AHU with Bushfire filtration	100% Load	82	88	88	84	86	87	86	80	93 dBA
	Partial Load	79	85	85	81	83	84	83	77	90 dBA
Standard AHU	100% Load	70	82	90	81	77	76	73	64	85 dBA

Figure 38: Minimum Insertion Losses – Intake Louvres for Air Handling Units
Source: PWNA

6.4 Hazards and Risks

6.4.1 Hazard Screening Assessment

ACOR consultants have undertaken a screening review of the proposed dangerous goods storage systems to be located within the proposal (refer Appendix 20) to establish whether a Preliminary Hazard Analysis is required.

The total quantities and types of hazardous materials to be stored at the development are outlined in Table 17.

Table 17. List of Hazardous Materials

Location	Proper Shipping Name	Total Qty.	DG Class / Division	Sub-risk	Packing Group
Data Centre Expansion (Subject SSDA)					
Generator enclosures	Combustible liquid, Diesel	289,000L	C1	N/A	III
Located within battery storage room	Lithium-Ion Batteries	56,500kg	9	N/A	II
Approved Data Centre (DA-21-01058)					
Generator enclosures	Combustible liquid, Diesel	38,000L	C1	N/A	III
Located within battery storage room	Lithium-Ion Batteries	3646.5kg	9	N/A	II
Total Site Hazardous Materials					
Generator enclosures	Combustible liquid, Diesel	327,000L	C1	N/A	III
Located within battery storage room	Lithium-Ion Batteries	60,146.5kg	9	N/A	II
<i>Source: ACOR</i>					

The screening review undertaken indicates there are no dangerous goods on the site that are included in the threshold values contained within the Resilience and Hazards SEPP, and the proposed development is therefore not a potentially hazardous industry. As such, no Preliminary Hazard Analysis is required to be conducted.

6.4.2 Compliance with Standards

The SEARs require this EIS to demonstrate compliance with several standards related to batteries and diesel storage, being:

- AS/NZ S4681 Storage and handling of Class 9 (miscellaneous) dangerous goods and articles;
- AS IEC 62619 – Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for secondary lithium cells and batteries, for use in industrial applications;
- FM Global Property Loss Prevention Data Sheet 05-32 – Data Centres and Related Facilities; and
- AS 1940 – Storage and handling of flammable and combustible liquids.

Advice has been received from LCI which confirms compliance with these standards (refer Appendix 21). A summary of the planning and design considerations that have been implemented into the Proposal is provided below, with greater detail provided in LCI's advice.

Diesel Fuel

- The location of diesel generators with integral bulk fuel storage have been developed with the requirements of AS1940 dictating the distance from on-site protected places. The proposed locations, approximately 4.75m from the building and minimum 600mm from other fuel tanks, comply with Tables 5.3 and 5.4 of AS1940 for the 37500L integral fuel tanks.
- Sound suppression material is of a non-combustible type in accordance with FM Global Datasheet 05-32.
- Generator fuel tanks are designed with double walls in accordance with AS1940. The void between these two walls are provided with interstitial leak detection interfaced to the sites building management system to alert personnel of a leak.
- Generator enclosures are provided with an integral fill point with visual indicators alerting of the fill level of the diesel tanks. Fill points are also provided with a minimum 15L overflow containment as per AS1940, as well as spill kits local to the fill point.
- As part of the generator procurement, the design team will mandate compliance with AS1692 which specifies requirements for the design and construction of steel tanks for the storage of flammable and combustible liquids.
- Generator enclosures are provided with several emergency stop buttons in accordance with FM global requirements, external to the enclosures as well as hazard indicator strobes which activate in an alarm condition.
- Diesel generators are provided with battery powered controls and starting system, as well as water jacket heaters to maintain ideal operating temperatures for starting as per FM global requirements.
- A standardised maintenance plan is proposed by the client, aligned to their global standard. This includes for testing as well as inspection of all systems.

Battery Storage

- Battery rooms are provided with battery exhaust fans supplied via the life safety services low voltage supply, including fire rated wiring system in accordance with AS3013. The battery exhaust system also serves to exhaust smoke in the event of a fire.
- Vendor selection is undertaken via a process of due diligence, ensuring the products are compliant to relevant standards including IEC 62619 and UL9540A. Test reports via an independent and accredited lab are reviewed and verified.

6.5 Air Quality

Benbow Environmental have prepared an Air Quality Impact Report to determine the proposal's ability to comply with relevant emissions regulations and guidelines associated with the eight (8) 3000kW and one (1) 500kW (see Appendix 13). These include:

- Protection of the Environment Operations Act 1997;
- Protection of the Environment Operations (Clean Air) Regulation 2021;

- NSW Environment Protection Authority Guidelines; and
- National Environment Protection (Ambient Air Quality) Measure.

Twenty-one (21) nearby receptors were considered by Benbow in their assessment, shown in Figure 39 below. The assessment considers local meteorology, climate, and air quality to determine the impact of both construction activities and emissions associated with generator testing and emergency operations.



Figure 39: Receptors considered in air quality assessment
 Source: Benbow Environmental

6.5.1 Construction Phase Impacts

A Construction Impact Assessment has been undertaken by Benbow, which includes three steps:

1. Screening assessment.
2. Dust risk assessment.
3. Management strategies.

As there are human receptors within 350m of the site, the screening assessment indicates that further detailed assessment is warranted. The dust risk assessment has considered the potential magnitude of dust emissions at the construction phase, and the sensitivity of the receptors to these emissions. Due to the distance of the receptors from the site, Benbow's assessment indicates that the risk from construction works is low.

For management strategies, a Construction Environmental Management Plan (CEMP) has been recommended to be prepared which should include an Air Quality Control Procedure setting out procedures for managing and monitoring air emissions during construction. The below is a summary of the control measures recommended to be included in the CEMP in relation to air quality:

- 24 hour air monitoring is to be implemented on site using on-site monitoring units;
- Monitor local weather conditions and cease dust generating operations when conditions result in visible dust emissions, and implement mitigation measures or until weather conditions improve;
- Erection of wind breaks such as fences or vegetative buffers at the site boundary;
- Locate stockpiled materials away from drainage paths, easement, kerb, or road surface, and near existing wind breaks such as trees and fences;
- Dust suppression/wind breaks on stockpiles;
- Limit stockpile height to 5 m (maximum) and size;
- Vehicles leaving the site to be cleaned of dirt and other materials to avoid tracking onto public roads;
- Enforce appropriate speed limits for vehicle on site. Recommended speed limit is <15 km/hr;
- Cover all loads entering and leaving the site; and
- Inspect the site daily using a Site Dust Control Checklist to aid with the implementation of air quality control measures.

6.5.2 Operational Emissions

Benbow's operational emissions analysis considers the eight (8) 3000kW and one (1) 500kW diesel generators which would be used to provide emergency power during a blackout (the 'worst case scenario'), and are to be tested on a quarterly basis.

The primary pollutants of concern from the exhaust emissions are nitrogen oxides (NO₂), carbon monoxide (CO), and dust (PM_{2.5}). The 3000kW generators have been assessed at a 20m stack height, and the 500kw generator has been assessed at a 6m stack height.

The selected generator types have been specified as a CAT C175-20 (50 Hz) and CAT C18 (50 Hz) diesel generator, with the specifications provided within Benbow's report.

An air dispersion model was used for the prediction of off-site impacts associated with the generators. Three scenarios were modelled:

- Scenario 1 – Testing: 1 Generator operating at 75% for 35 minutes
 - Nitrogen dioxide (1hr)

This scenario reflects the 70% load quarterly test plan. 70% load emissions data is not available, so the 75% mass emissions rate was based on operations for 35 minutes within 1 hour.

- Scenario 2 – Peak testing: 1 generator operating at 100% for 65 minutes
 - Nitrogen dioxide (1hr)
 - PM_{2.5} (24 hours)
 - PM_{2.5} (annual)
 - CO (24 hour)
 - CO (8 hours).
- Scenario 3: Emergency operations (worst case scenario)
 - Nitrogen dioxide (1 hour)
 - PM_{2.5} (24 hours)
 - CO (24 hour)
 - CO (8 hours).

Generator stacks, assumed at 20m and 6m in height, are modelled as sources that are wake-affected. Nearby buildings are included in the model to predict for their interferences with the trajectory of emissions. Meteorological and terrain effects are also included. All generators were assessed individually for impacts on receptors for both Scenario 1 and Scenario 2. Scenario 3 assesses all generators operating simultaneously.

Results

Nitrogen Dioxide

All three scenarios assessing NO₂ impacts have been presented utilising the following three methods:

- Method 1 assumes all incremental NO_x is NO₂ and add this value to the background NO₂;
- Method 2 utilises background ozone levels for conversion of NO_x to NO₂; and
- Method 3 utilises an empirical relationship to determine the conversion, which is a function of wind speed, temperature, background ozone, tabulated seasonal scaling factors and distance from source to receptor.

The 100th percentile hourly averaging period assessment of NO₂ impacts under Scenario 1 shows compliance for all receptors under Method 1 and Method 2, and compliance at all receptors for Method 3 except one (R8). Scenario 1 is a maintenance scenario which will only occur once for 35 minutes every quarter for each generator, hence the 100th percentile operating during all daytime hours is highly conservative.

The 100th percentile hourly averaging period assessment of NO₂ impacts under Scenario 2 shows compliance for all receptors under Method 2, nine of twenty (9/20) receptors under Method 1 and fourteen of twenty (14/20) under Method 3. Scenario 2 is the peak testing maintenance scenario which occurs for 65 minutes each year for each generator, therefore a 100th percentile operating during all daytime hours is highly conservative.

The 100th percentile hourly averaging period assessment of NO₂ impacts under Scenario 3 shows exceedance at all receptors under Method 1 and Method 3, and compliance for eight of twenty (8/20) receptors under Method 2. It is important to note that Scenario 3 assumes all generators are operating 100% of the time, which is highly conservative. Based on the system average interruption duration index (SAIDI) and the system average interruption frequency index (SAIFI), a supply loss of ~350 minutes represents 0.069% of the year. Based on this, despite predicted exceedances of the NO₂ impact assessment criteria being likely during operation of all standby generators concurrently, it is not likely that this worst-case scenario would occur in a typical year.

Carbon Monoxide

Assessment of carbon monoxide under Scenario 2 and Scenario 3 shows compliance at all sensitive receptors for the assessed averaging periods.

Particulate Matter

Assessment of particulate matter under Scenario 2 shows exceedances due to elevated background levels of PM_{2.5}. The maximum predicted impacts at sensitive receptors were 0.27 µg/m³ for the 24-hour averaging periods and 0.04 µg/m³. These are considered minimal impacts.

The maximum predicted impacts under Scenario 3 at sensitive receptors were 4.8µg/m³ for the 24 hour averaging periods. However, it is not likely that this worst-case scenario would occur in a typical year.

6.5.3 Recommended Mitigations

Benbow have provided mitigation measures related to maintenance and emergency operations.

Maintenance:

- Maintenance is to be undertaken as per the schedule presented in Table 7-1 of the Acoustic Assessment (replicated in Table 6 of this EIS). Operation of standby generators during testing and maintenance should be minimised as far as practicable.

Emergency Operation:

- It is recommended that a power outage NO₂ monitoring procedure be included in the site's Emergency Response Plan. This procedure is to:
 - Provide all practical measures to reduce the duration of the outage;
 - Direct a suitably qualified consultant or suitably qualified/trained onsite personnel to monitor NO₂ levels utilising a gas detector at nearest sensitive receptors downwind of the site in the event of all power outages;
 - Include measures such as informing emergency services, issuing a local air quality warning and instructing affected residence/sensitive premises to undertake measures proportional to the impacts to avoid harm such as closing windows or evacuation.

6.6 Traffic and Transport

TTPP were engaged to prepare a comprehensive traffic and transport assessment of the proposal, which includes a Traffic Impact Assessment (Appendix 10) and Construction Traffic Management Plan (CTMP) (Appendix 11). The findings of these reports are discussed below. Note that SIDRA modelling files have also been provided separately as a part of the EIS package for the Department and Council's review.

6.6.1 Construction Phase Traffic Impacts

The CTMP assesses the traffic, public transport, local access, pedestrian and parking implications associated with the various stages of construction. The principles of the plan include to:

- Manage access to and from adjacent properties;
- Manage and control construction vehicle activity in the vicinity of the site;
- Provide an appropriate and convenient environment for pedestrians and cyclists;
- Minimise impact on pedestrian movements;
- Provide alternative detour routes;
- Maintain appropriate public transport access; and
- Maintain bus service reliability and minimise bus service delay.

Key elements of the CTMP are summarised below.

Construction Access

Access to/from the construction site will occur via the two-way driveway off Station Road. Whilst the approved data centre will be operational during the time of construction, its operations will be entirely separate from the proposed SSDA and construction will not impact upon it.

Construction personnel are proposed to be located on site near the driveway to manage and direct construction vehicles towards the construction works area, and staff towards the approved data centre building.

Transport Routes

Construction materials and equipment would be delivered from other suburbs throughout Sydney, which will access the site from arterial roads such as Prospect Highway and Old Windsor Road.

The largest vehicle to be used for construction is expected to be a 19m semi-trailer. The network map for this vehicle type, incorporating National Heavy Vehicle Regulator regulations, is shown in Figure 40. Oversize or overmass vehicles may also be required to deliver generators and bulky plant to the site. A Ministerial Order is required for such vehicles to travel on the NSW road network and this may require the need for a pilot vehicle and escort vehicle, however this will be confirmed once a construction contractor is appointed and more detail on oversized infrastructure is confirmed.

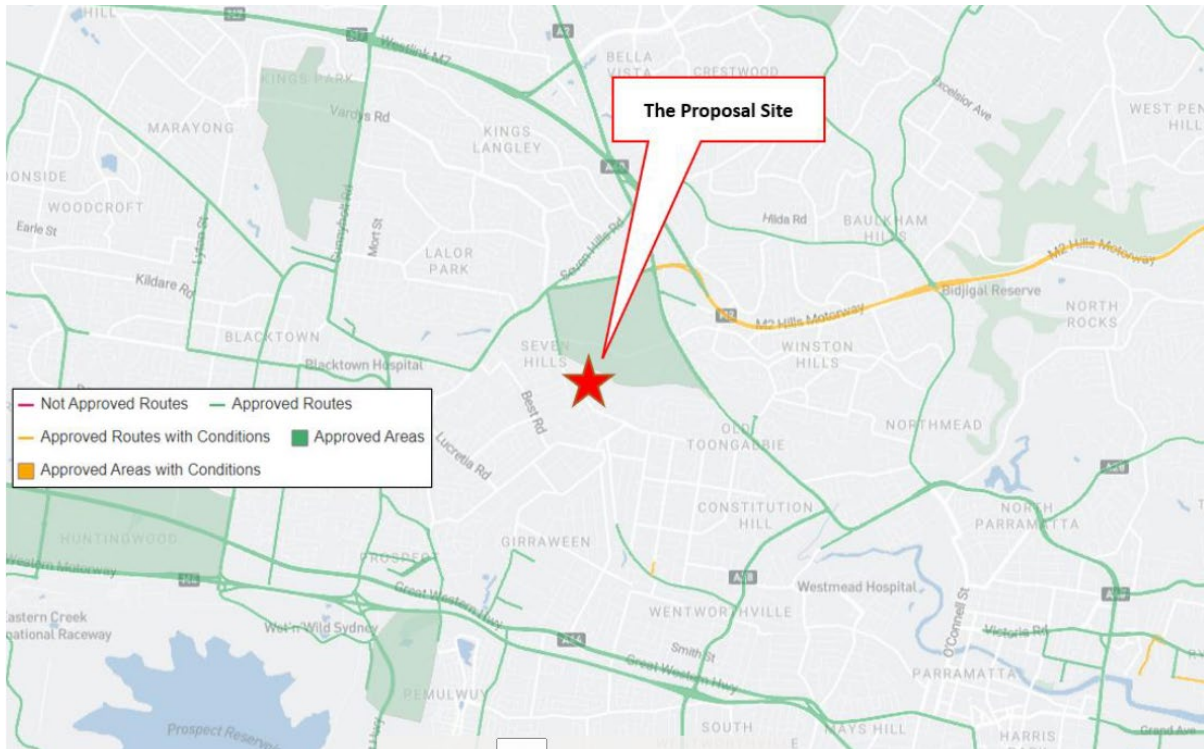


Figure 40: Approved heavy vehicle routes in vicinity of site
 Source: TTPP

Construction workers accessing the site by car would generally use nearby arterial roads such as Old Windsor Road, Prospect Highway, or Abbott Road. Considering the site's proximity to public transport, train and bus (with walking) is also an option. Use of public transport and car-pooling will be highly encouraged amongst construction workers given the limited number of construction car parking spaces available on site.

Construction Worker Parking

The site is able to provide for some car-parking on site which will need to ensure that both construction works and vehicle circulation are uninterrupted. A minimum of 25 spaces will be provided on-site during construction. However, car-pooling and public transport usage will be strongly encouraged and supported by the provision of secure storage areas where workers will be able to keep tools and equipment.

To account for the balance of parking demand that will be generated by construction workers, the proponent intends to establish a shuttle bus service which will operate to the nearest major transport interchanges (Blacktown and Seven Hills) as well as Toongabbie station. At Seven Hills, there is a commuter car park with 1,600 parking spaces, whilst at Blacktown there are a number of car parks totalling over 800 spaces. The proponent is also currently in consultation with the City of Parramatta LGA regarding the use of McCoy Street Park car park for overflow construction car parking, during times of low use.

Construction Traffic Generation and Modelling

Construction is expected to generate approximately 30 heavy vehicles per day during the standard construction period, and up to 80 heavy vehicles per day during the peak of construction. These will occur during the day and, assuming 10% of movements may occur during road network peak periods (7:30AM – 8:30AM and 4:15PM – 5:15PM), could result in around six (6) heavy vehicle trips per hour and 16 heavy vehicle trips per hour during the standard and peak construction periods, respectively.

SIDRA modelling was undertaken to assess the impacts of construction vehicles during the road network peak periods. The modelling indicates that nearby intersections currently operate at a 'very good' level of service (LoS B). Inclusive of construction traffic, the nearby intersections continue to operate at LoS B with very minimal impact to average delay per vehicle. The exception is the Station Road and McCoy Street intersection, which currently has a LoS E in the AM peak period and LoS F in the PM peak period. As outlined within TTPP's CTMP, these modelled results are not considered a true representation of the existing performance of the intersection, and the 'second best' outcome (LoS B) has been assumed. This has also been assumed for the impact on the intersection to the site from Station Road, which is expected to maintain a LoS A during construction.

TTPP have determined that the proposed construction activities are not expected to generate a negative impact on operation and safety of the surrounding road network, nor on pedestrians using the public footpath.

6.6.2 Operational Phase Traffic Impacts

Existing Conditions

To establish the existing context, TTPP undertook traffic turning movement surveys at the following intersections nearby to the site:

- Station Road –Tollis Place (roundabout);
- Station Road –Wentworth Avenue –Fitzwilliam Road (roundabout);
- Station Road –McCoy Street (priority); and
- Station Road –Site Access Driveway.

The road network peak periods at these intersections were identified as 7:30 am – 8:30 am for the AM Peak, and 4:15pm–5:15pm for the PM Peak.

An automatic tube count was also undertaken on Station Road near the site for a period of one week.

The results of the traffic flow assessment are shown in Table 18. TTPP state that, according to the *RTA Guide to Traffic Generating Development*, the road is operating below its capacity of 2,000 cars per hour (two way).

Table 18. Station Road Traffic Flows	
Period	Combined (Two Way)
AM Peak Hour, 7am – 8am	1,756
PM Peak Hour, 4pm – 5pm	1,909
Average Weekday (5 days)	23,034
Average Daily (7 Days)	20,980
<i>Source: TTPP 2022</i>	

Proposed Development

The former site, containing a timber yard known, was estimated by TTPP to have generated 18 trips in the AM Peak Hour and 20 Trips in the PM Peak Hour. By contrast, based on the maximum number of people anticipated on site at any one time and shift information provided by the client, the total peak hourly site trip generation is estimated as 18 total trips comprising:

- 8 staff light vehicles exiting the site (8 trips);
- 3 heavy vehicles entering then exiting the site in the same hour (6 trips); and
- 2 light vehicles entering then exiting the site in the same hour (4 trips).

Level of service (LoS) indications have been used as a performance measure to understand the traffic impacts of the abovementioned trips. Indicators range from A-F, with A – D indicating that an intersection is operating within capacity. Background traffic growth has been assumed to assist with the modelling, with three scenarios modelled using SIDRA Intersection software:

- Scenario 0 – Existing conditions;
- Scenario 1 – Future conditions with background traffic growth only (i.e. no development traffic); and
- Scenario 2 – Future conditions with background traffic growth plus development traffic.

The modelling results indicate most intersections currently operate with a very good LoS, and would continue to do so in the future. TTPP conclude that the modelling results indicate the traffic arising from the development would not cause any noticeable impacts to key nearby intersections.

6.6.3 Car Parking

TTPP have taken a first-principles approach to determining the car parking needs of the site operating as a single campus. Data centres are a nuanced land use, without specific car parking controls provided for in the BDCP 2015, and if the rates of the most similar land uses were applied (light industry, general industry, and warehouse and distribution centres), there would likely be an oversupply of parking for the site.

Applying the parking rates strictly from the BDCP 2015 would require the provision of 122 spaces, with 108 spaces required for the data hall and 14 spaces required for the office component. This is in significant excess of the maximum 36 staff and 4 visitors/contractors expected at any one time on site, as advised by the client.

Utilising Journey to Work Data (Transport for NSW 2016) and assuming a 7.5% modal shift in accordance with the Green Travel Plan (see Section 6.6.4) which would result in a car mode share of 76.5%, TTPP have determined the need for a total of 31 spaces on site. This is broken down in Table 12.

Table 19. Car Parking Demand

Site	User	Max. On Site at One Time	Car Mode Share (including 7.5% mode shift)	Parking Demand
SYD08	Staff x 32 Visitor/ Contractors x 4	36	76.5% x 36	28 spaces
SYD09	Staff	4	76.5% x 4	3 spaces
Total				31 spaces
<i>Source: TTPP 2022</i>				

The car parking provision will continue to comply with conditions of consent associated with DA-21-01058, which required 16 parking spaces to be provided for the site, 11 of which are to be permanent and five (5) of which are to be provisional. The proposal increases the total number of spaces to 31 which meets the projected demand for the campus as a whole, which will operate functionally as a single integrated development.

The provision of car parking is consistent with other recent data centre approvals across Sydney, which have proposed variations from standard DCP rates, with TTPP identifying approvals at Roberts Road, Eastern Creek, and Sirius Road, Lane Cove as two examples where a similar approach has taken place. Further, the provision of parking broadly equates to one space per 300sqm of GFA. This exceeds the proposed rates prepared by the Department of Planning, Industry and Environment in its recently exhibited Explanation of Intended Effects (EIE) for data centres as complying development (2021). Whilst it is acknowledged that Government’s proposal to permit data centres as complying development ultimately did not proceed, the EIE nevertheless suggested a rate of 1 space per 450sqm be applied for data centres.

Two accessible car parking spaces have also been proposed as a part of the 31 spaces, in accordance with the relevant standards.

6.6.4 Green Travel Plan

Travel demand management initiatives have been incorporated in the proposal in an effort to encourage a modal shift from single-occupant private vehicle trips, influence the way people move to and from the site, and deliver better environmental outcomes. A key element of achieving this will be through the preparation and implementation of a Green Travel Plan, which is included within TTPP’s Traffic Impact Assessment.

The drivers for developing and implementing the Green Travel Plan are described below.

- **Car Parking:** Car parking uses valuable land resources, impacts amenity, and has a significant cost. There are strong economic imperatives to reducing car parking demand.
- **Environmental Impacts:** The transport sector is Australia’s third largest source of greenhouse gas emissions and emissions have grown significantly.

- **Health Benefits:** The shift from private cars to sustainable transport can yield immediate health co-benefits.
- **Social Equity:** The provision of sustainable transport modes can provide a more affordable alternative to car use.

A modal shift target of 7.5% has been set for the development. Initiatives to achieve this as outlined in the Green Travel Plan include:

- Preparing a Transport Access Guide (TAG), a concise presentation of how to reach the site using low-energy forms of transport, which will be distributed to staff before their first day at work;
- Dedicating two of the 31 car parking spaces on-site as car-pool / car-share spaces;
- Providing one car parking space as an electric vehicle charging space;
- Providing public transport information within the workplace where they will be visible to staff;
- Encouraging carpooling;
- Implementing initiatives to encourage walking, such as a 10,000 steps per day initiative; and
- Providing secure bike storage facilities and end-of-trip facilities.

6.7 Contamination and Remediation

The site has been subject to several studies related to potential contamination and remediation. Under DA-21-01058, a Phase 2 Contamination Assessment and a Validation Report for the removal of underground petroleum storage systems (UPSS), both prepared by RCA Australia and prepared in early 2021, were submitted. These were accompanied by a summary Review of Contaminated Lands Report prepared by Martens and dated May 2021 (refer Appendix 22).

Martens' letter notes the following key points with respect to the RCA investigations:

- RCA supervised a site remediation program which included the removal of all UPSS infrastructure and the removal of soil material located within the car wreckers yard which was observed to be stained.
- All UPSS removal works were undertaken by a licensed contractor and completed in general accordance with requirements outlined in the UPSS regulations. All waste material (soil, concrete and UPSS infrastructure) was disposed offsite to suitably licenced waste facilities.
- Following UPSS removal, RCA completed a soil validation sampling program which included soil samples from the walls and base of UPSS excavations. Soil samples were analysed for TRH, BTEXN, PAH and heavy metals. All results were found to be less than relevant human health criteria for commercial / industrial land use.
- RCA did not complete any additional groundwater sampling following UPSS removal, however concluded that previously noted hydrocarbon impacts at well adjacent to the USTs would be expected to improve with time following UPSS removal. In this regard, RCA conclude that no groundwater remediation is necessary for the site.

Martens' summary report confirms that RCA's investigations met the relevant NSW EPA guidelines and provided a dataset robust enough to determine the contamination status of the site and suitability to support the proposed development. Their conclusions were that the site was suitable for the proposed commercial / industrial development.

Although no remediation was deemed necessary by either Martens or RCA, conditions were imposed by Council upon DA-21-01058 which require remediation of any potentially contaminated soils with the submission of a validation report prior to construction certificate.

6.8 Stormwater and Wastewater

An Integrated Water Management Report has been prepared by ACOR, providing an assessment of the stormwater management proposal for the development (see Appendix 15).

6.8.1 Approved Development

Under DA-21-01058, 'future proofing' stormwater drainage works were included which would allow for the subject development. This included:

- A 1,400m³ on-site detention (OSD) tank at the rear of the site, sized to cater for the entire development footprint;
- A combined 90kL secondary re-use tank and 10kL roof rainwater tank:
 - The secondary re-use section of the tank collects surface run-off for landscaping irrigation, whilst the roof rainwater tank is used for toilet flushing and general washdown taps;
- An in-ground pit and pipe system catering for the single storey data centre, as well as the trunk drainage network through the fill platform that will be utilised to drain the two-storey data centre development; and
- A gross-pollutant trap (GPT) downstream of the OSD to treat stormwater discharge prior to entering the existing swale drain, which eventually drains into Blacktown Creek.

The approved stormwater management plan for DA-21-01058 is shown in Figure 41.

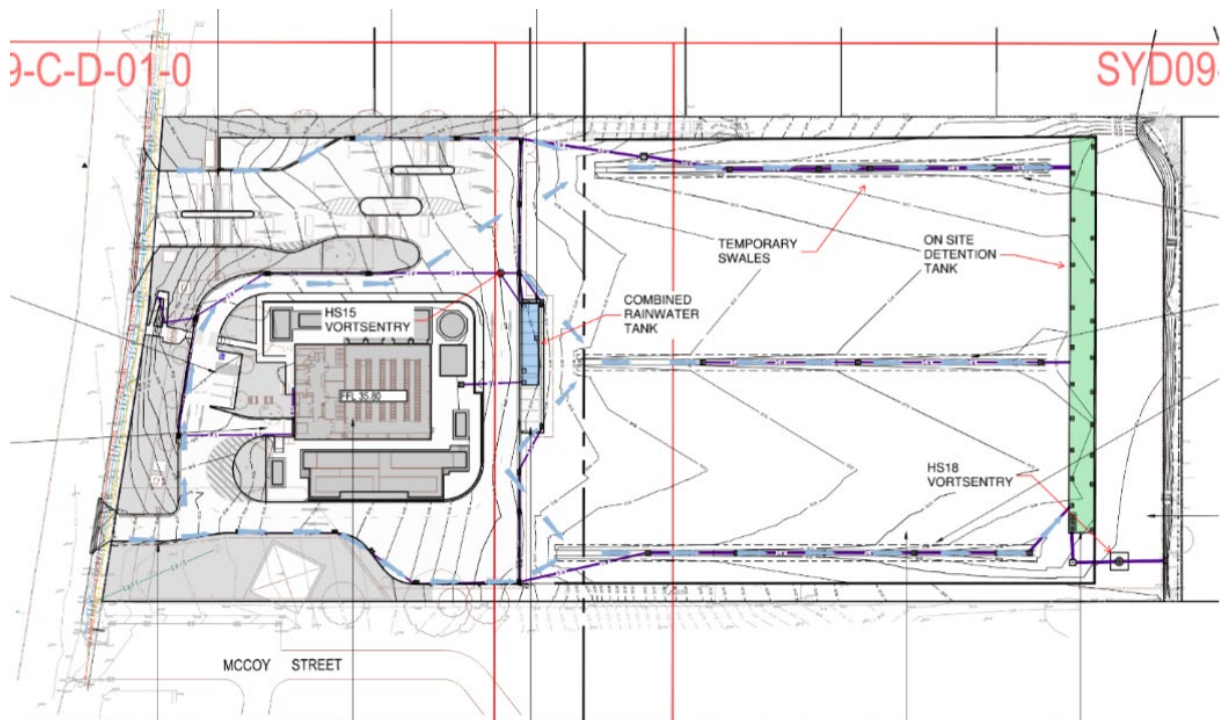


Figure 41: Stormwater Management Plan Approved Under DA-21-01058
Source: ACOR

6.8.2 Proposed Development

For the subject SSDA, stormwater drainage infrastructure has been designed to comply with the following:

- BDCP 2015 – Part E Development in the Industrial Areas;
- BDCP 2015 – Part J Water Sensitive Urban Design and Integrated Water Cycle Management;
- Upper Parramatta River Catchment Trust – On-Site Stormwater Detention Handbook Version 4; and
- S3QM, Council's Deemed to Comply Tool.

For OSD, the system provided under DA-21-01058 was sized to service the entire development and has been deemed to comply under S3QM. A summary of the site storage and permissible site discharge, as per S3QM, is shown in Table 20.

Table 20. Site Storage and Permissible Site Discharge Requirements				
Storm Event	Volume of Storage Required below Overflow Weir (m ³)	Permissible Discharge (L/s)	Site	Orifice Diameter (mm)
50% AEP	925m ³	83 L/s		156mm
1% AEP	1,400m ³	307 L/s		275mm

Using hydrological inputs and parameters sourced from the Bureau of Meteorology and the AR&R data hub, the below hydraulic design parameters have been used in the stormwater drainage design for the site.

- The minor drainage system comprising of the in-ground pit and pipe network is designed to safely collect and convey stormwater flows generated during the minor storm events. Blacktown Council's Engineering Guide for Development Appendix D Section 1.1 requires that the minor system be designed for the 20 Year ARI (5% AEP) Storm Event for industrial sites.
- The in-ground stormwater system has been designed with additional capacity to cater for a 4% AEP (25-year ARI) storm event, which is a client requirement. As the 4% AEP storm event is not a standard Australian event, a 25% increase in rainfall intensity has been added to the 5% AEP storm event to provide a conservative estimate of the 4% AEP storm intensities.
- Safe overland flow paths are designed to convey 1% AEP storm event. The overland flow paths areas are also designed to convey flows in an event of in-ground system failure.
- A blockage factor of 30% is applied to on-grade inlet pits and 50% to sag-inlet pits as per Council's Engineering Guide for Development Appendix D Section 10.2.
- A minimum pipe grade of 0.5% has been adopted for all drainage pipelines greater than 225mm diameter.
- Pit loss coefficients have been considered in the design, in accordance with the relevant Missouri Charts.
- A 10% increase in rainfall intensities has been adopted to design rainfall intensities to account for climate change. This is aligned with the recommendations of the NSW Department of Environment & Climate Change.
- The percentage of the overall site bypassing the proposed OSD shall be less than 15% of the developable site footprint, as per Blacktown City Council requirements.

In terms of stormwater discharge, there is no formal Council stormwater network downstream of the property, however an existing drainage swale is located at the rear (northern) boundary of the property, which drains into Blacktown Creek (which is zoned SP2 – Drainage). Under the existing approval, an existing discharge point, being a headwall outlet discharging into northern drainage swale, will be reconstructed, which will be maintained by the proposal.

Water Sensitive Urban Design

A GPT was approved as a part of the single storey data centre development. Whilst water quality pollutant targets are not applicable for the site, due to the imposing of a Section 7.11 contribution for water quality, site discharge nevertheless requires treatment through a GPT in accordance with Council guidelines.

No additional water quality treatment devices are proposed under the subject SSDA as there are no modifications proposed to the site discharge methodology already approved under DA-21-01058.

Water Conservation

Council's BDCP 2015 – Part J requires that industrial development meet a minimum of 80% non-potable water demand through rainwater reuse. For the development, this includes toilets and urinals, general washdown areas, and landscape irrigation. The demand estimated for these items is shown in Table 21.

Table 21. Water Demand Allowances for Proposed Data Centre

Description	Unit Demand	Total Number of Fixtures or Area	Total Water Demand
Toilets and Urinals	0.1kL / day per toilet	14 toilets	1.40kL / day
Irrigation (excluding turf area)	0.4kL / year / m ²	1,305m ²	522kL / year
General Washdown (1 tap per 50m building perimeter)	0.005kL / day per tap	7 taps	0.035kL / day

To cater for the above, a proposed rainwater storage tank will harvest roof water runoff from the proposed building. A roof area of 5,100m² will drain into two proposed rainwater tanks located within the plant yard to the north of the data centre building. Modelling through a MUSIC model has identified the need for two 40kL rainwater storage tanks to service this runoff and provide for 80% of non-potable demand. The rainwater tanks are located within the plant yard to the north of the data centre building, as shown dashed red in Figure 42.

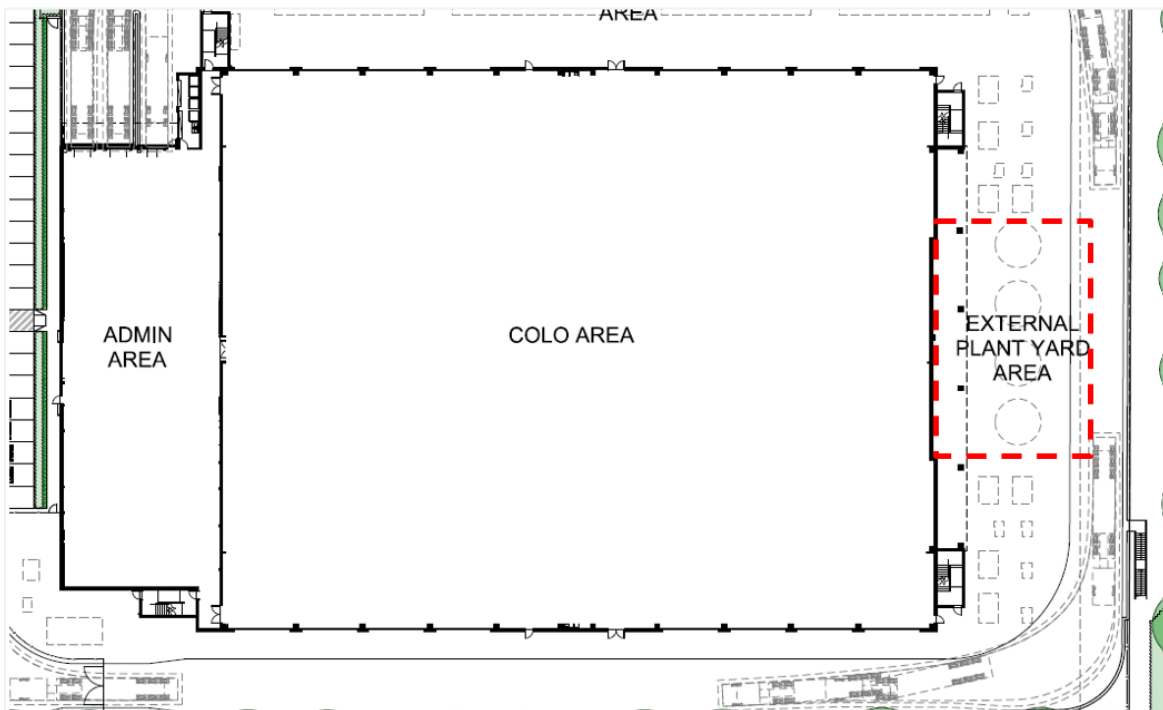


Figure 42: Location of Rainwater Tanks
Source: DEM modified by Patch

6.9 Flooding Risk

As demonstrated in Figure 43, Blacktown City Council's online mapping service identifies a portion of the site as being flood prone, necessitating a flood impact assessment to be undertaken.

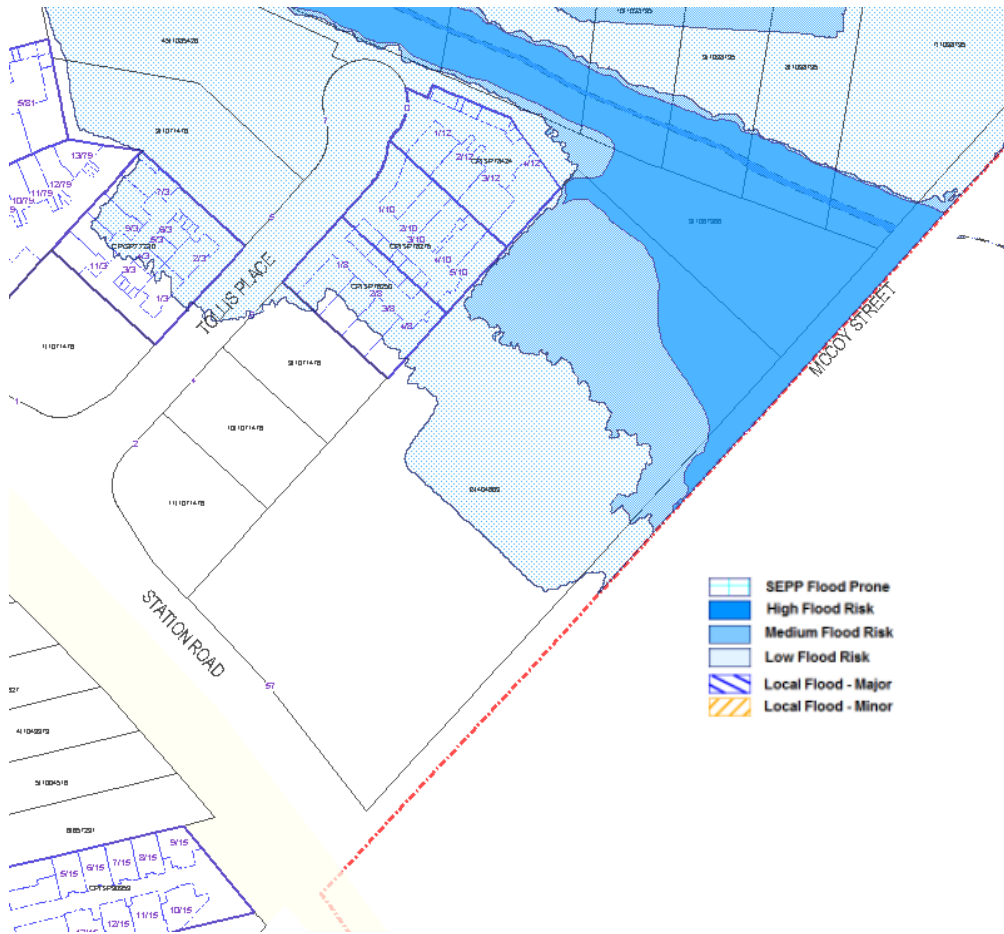


Figure 43: Flood Map of Site
 Source: Blacktown City Council

Notwithstanding, it is noted that significant earthworks and civil works are being undertaken in accordance with the existing approval, with the topography of the site to change substantially as a result. ACOR originally prepared a Flood Impact Assessment Report for DA-21-01058 in 2021, which has been updated to reflect the subject proposal and is included as Appendix 16 to this SSDA. The existing approval provides development approval for the proposed filling and retaining of the rear portion of the site. No proposed works is proposed to the flood storage zone as a part of this SSDA, other than minor landscaping and ground cover works to provide screening of the proposed development.

The purpose of ACOR's assessment is to define the extent of the 1% Annual Exceedance Probability (AEP) design flood / over land flow on the subject property, as well as define the associated hazard from such inundation. Additionally, ACOR have addressed the extent of the Probable Maximum Flood event and 5% AEP design flood event for the site.

Proposed Development Assessment

ACOR have provided an assessment from their modelling with respect to design floor levels, car parking and driveway access, flood effects, and evacuation in relation to the proposed development.

The finished floor level for the proposed development is RL 34.00m AHD, as detailed in architectural drawings (Appendix 6). This is over four metres above the 1% AEP flood level, hence the building will not be adversely affected by this flood event.

The car parking areas are not affected by overland flow or mainstream flooding for events up to and including the 1% AEP. Runoff over the car park is below 0.1m, meaning light cars will not float. In events greater than the 1% AEP, up to and including the PMF flood event, car parking spaces will not be flood affected although runoff may pond.

The flood effects on neighbouring properties will be minimal, generally less than 0.02m.

Finally, the site should not be required to be evacuated for flood events up to and including the PMF. The development contains a habitable room above the flood level, and not moving from a safe location or vertical evacuation to a higher level within the building is consistent with the FloodSafe Guide (NSW Floodplain Development Manual, 2005).

6.10 Infrastructure Requirements

A Building Services Infrastructure Report has been prepared by LCI and accompanies this EIS as Appendix 26. The report considers the potential utility infrastructure requirements associated with the proposed data centre.

6.10.1 Hydraulic and Fire Infrastructure

The subject site is currently undergoing all necessary approvals with Sydney Water to ensure appropriate hydraulic connections and servicing. A Section 73 application to connect to the Sydney Water network was applied for in February 2022 and a response is expected shortly which will provide detailed requirements for connection.

Initial advice from Sydney Water indicates that potable water and fire water connections will be provided via existing 250mm mains located in Station Road.

6.10.2 Electrical

The site sits within the authority of Endeavour Energy, with whom preliminary negotiations have already commenced. A connection application has been submitted to provide for an ultimate load of 28MW, which Endeavour Energy have indicated can be supplied via the local 33kV network via the Seven Hills Zone Substation. A supply authority 'contestable' project will be undertaken to extend two 33kV network feeder cable supplies to service the site.

6.10.3 Information and Communication Technology

The entire development site will have multiple telecommunications carrier connections. Multiple carrier point-of-entries are provided at the site which allows for telecommunications connectivity to the entire campus.

6.11 Ecologically Sustainable Development

An ESD Report has been prepared by LCI in support of the SSDA and in response to the SEARs (see Appendix 23). The report provides an overview of:

- How the development incorporates ESD principles into its design and ongoing operation;
- How the development will meet or exceed relevant industry standards related to building sustainability and environment performance; and
- How the development minimises greenhouse gas emissions and material resources.

6.11.1 ESD Principles

The way in which the project responds to ESD principles, as outlined in Clause 7(4) of Schedule 2 of the Regulations is described further below.

The Precautionary Principle

The proposed development is situated on a previously developed site that was formerly used for industrial purposes. Blacktown Creek is located immediately to the north of the site, and the design has been carefully developed to prevent degradation to this waterway. The stormwater management system prevents peak stormwater discharge into the creek exceeded pre-development levels, thus mitigating environmental impacts.

Further proactive measures to minimise environmental degradation will be included within the design, construction, and operational phases of the development, many of which will be captured by the design and construction measures adopted to achieve a LEED Gold rating. An erosion and sediment control plan will be implemented to prevent construction activities from increasing soil sedimentation flows into surrounding waterways, and adherence to procedures accounting for environmental risk and mitigation measures will be met through operation.

Inter-Generational Equity

The proposal minimises the consumption of energy and water resources, whilst also reducing waste.

The data centre has been designed to achieve the Deemed-To-Satisfy provisions of Section J of the National Construction Code (NCC). Reduction in water use will be achieved through high WELS-rated fixtures and fittings, with rainwater also collected and reused for irrigation and toilet flushing. Low irrigation vegetation will be selected to further minimise water use.

Waste generated both through construction and operation will be diverted from landfill, to be recycled.

Conservation of Biological Diversity and Ecological Integrity

The siting of the development on previously developed land reduces the need to impact undeveloped environments. Further, the site will be cleared under DA-21-01058 hence the potential for further impacts on flora and fauna will be minimised.

The project's reduction of energy, water and waste consumption will have an indirect impact on the conservation of biodiversity and ecological integrity for the surrounding area. By minimising demand for these items, pollution generated from nearby utility infrastructure will be minimised.

Improved Valuation, Pricing and Incentive Mechanisms

Valuation of the project's assets and services considers environmental factors. A system will be created where pollution is managed and controlled, with an incentive created to reduce waste. Environmental goals are pursued in a cost effective way, first by reducing demand before active design measures such as more efficient building systems are considered.

6.11.2 Building Sustainability and Environmental Performance Standards

The proposal has been designed against Leadership in Energy and Environmental Design (LEED) category ratings. LEED is a green building rating system developed by the US Green Building Council, which seeks to maximise the sustainability of building construction and operation through design. LEED is the industry recognised standard for the certification of sustainable data centre design and is more stringent than the National Australian Built Environment Rating System (NABERS) which is commonly used in Australia.

LEED ratings are awarded by achieving the minimum points thresholds required, with the ratings ranking from Certified (Lowest), Silver, Gold, and Platinum (Highest). The project is committed to achieving a LEED Gold Rating.

6.11.3 ESD Initiatives

The project has been designed with a number of ESD initiatives including measures to reduce greenhouse gas emissions, energy and water, and incorporate the use of sustainable materials. These initiatives can be categorised into eight categories, as outlined below.

Table 22. ESD Initiatives	
Category	Initiatives
Passive Cooling and Heating Design	<p><u>Continuous Roof and External Wall Insulation</u></p> <p>The project will maximise the use of continuous insulation that removes a heat bypass, which would enhance the insulative performance of the building envelope.</p> <p><u>Optimised Window to Wall Ratio</u></p> <p>Glazing will be optimised to reduce sunlight penetration, reducing the need for cooling energy.</p> <p><u>High-Performance Glazing Systems</u></p> <p>The project will consider the use of high-performance glazing systems to reduce energy consumption by both reducing heat conduction through windows, and reducing unwanted solar heat gain.</p>
Mechanical Services	<p><u>Provision of High Efficiency Cooling Systems</u></p> <p>The project will consider alternative cooling systems such as direct evaporative cooling, as well as enhancement of the operating temperature of equipment. The cooling strategy will also consider the direct use of outside air to cool data halls which reduces energy consumption.</p> <p><u>Building Management Control System (BMCS)</u></p> <p>A BMCS with automatic intelligent controls will be used which allows cooling equipment to be brought online only as it is needed.</p>

Table 22. ESD Initiatives

Category	Initiatives
Electrical Services	<p><u>Lighting</u> Robust, long-life LED lighting will be used throughout the building which has reduced power demand and a longer life. Dimmable lighting will also be provided for regularly-occupied areas such as offices.</p> <p><u>BMCS</u> The BMCS will control building operation and enable monitoring of equipment and their energy consumption, allowing problem identification and handling to optimise energy consumption.</p> <p><u>Energy-efficient IT Equipment</u> More energy efficient IT equipment will be used compared to industry standard.</p>
Hydraulic Services	<p><u>Highly-efficient Water Fixtures and Appliances</u> The project will adopt high-efficient water fixtures with high WELS ratings.</p> <p><u>Rainwater Capture and Reuse</u> Rainwater harvesting and reuse will be used to reduce potable water consumption, such as for toilet flushing and irrigation.</p> <p><u>Low-Irrigation Demand Plant Selection</u> Plants with low irrigation demand will be considered to reduce water consumption from irrigation.</p> <p><u>Strategic Water Metering</u> Water metering will be provided to monitor and record water consumption by the overall development.</p>
Civil Engineering Services	<p><u>Stormwater Management</u> Design strategies have been implemented to minimise pollution of local waterways after storm events, such as through rainwater collection and stormwater detention.</p>
Transport	<p><u>Low Emission Vehicles</u> Priority parking will be provided for low-emissions vehicles including hybrid and electric vehicles.</p> <p><u>Electric Vehicle Chargers</u> Electric vehicle chargers will be provided to encourage the use of electric vehicles.</p>

Table 22. ESD Initiatives	
Category	Initiatives
Sustainable Materials and Reducing Waste	<p><u>Construction and Demolition Waste Reduction</u></p> <p>This waste stream will be reduced with the setting of a waste target and diversion away from landfill.</p> <p><u>Environmental Product Declarations</u></p> <p>The project will consider procuring products with environmental product declarations for a portion of the products used.</p> <p><u>Life Cycle Assessment</u></p> <p>A life cycle assessment may be conducted in order to estimate reductions in carbon emissions from material selections.</p> <p><u>Recyclable Collection and Storage Facilities</u></p> <p>Sufficient room will be provided to ensure the proper storage and collection of recyclables.</p>
Water Sensitive Urban Design	Water sensitive urban design measures have been implemented into the development, as outlined in Section 6.8 of this EIS.

Energy modelling carried out for the LEED submission indicates that the building is expected to consume approximately 124.65GWh, representing a 72% reduction in energy consumption compared to the industry standard. The associated greenhouse gas emissions expected for the project is around 114.88 kilotonnes CO_{2-e} compared to a baseline emission of 406.78 kilotons CO_{2-e}. This figure constitutes around .02% of the national greenhouse gas emissions inventory (2021 figures) and 0.08% of the NSW greenhouse gas emissions inventory (2019 figures).

Water consumption with selected flow and flush fixtures is anticipated to be 359.6KL per year, a 36% reduction on LEED baseline figures, or 128KL per year (a 77% reduction on LEED baseline figures) when also incorporating reductions from rainwater harvest and reuse.

6.12 Heritage

6.12.1 Aboriginal Cultural Heritage

A draft Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared by Biosis accompanies this EIS as Appendix 17. A completed ACHAR is expected to be finalised in early July 2022 depending on the complexity of community comments, and will be submitted to the Department as a part of the project's Response to Submissions phase.

In accordance with Section 2.3 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW*, the assessment that has been undertaken provides evidence about the material traces of Aboriginal land use to support the conclusions and management recommendations of the ACHAR.

An archaeological survey, conducted on foot, was undertaken with Biosis noting disturbance prevalent throughout the majority of the site, and more extensive in the eastern and central portions in the location of the previous building. These areas would likely have limited potential to contain archaeological deposits.

The desktop study identified the site as located in an area characterised by Ashfield Shales and South Creek and Blacktown soil landscapes, which possess moderate to high archaeological potential. The research demonstrates that the site has been subject to significant land clearance and industrial development since the 1800s, up until the recent (February 2022) demolition of the previous industrial buildings.

Predictive modelling and previous archaeological assessments suggest that Aboriginal people would occupy areas in close proximity to higher order perennial streams, on elevated ridges or slopes with lower likelihood of being flooded, and that the presence of Aboriginal artefacts on flat or gently sloped landforms is not as desirable as ridges or crescents. Biosis note that given the site's landform, and its location adjacent a non-perennial lower order stream, as well as the levels of disturbance across the site, there is a lower likelihood for Aboriginal sites. Biosis' overall assessment classes the entirety of the site as holding low archaeological potential.

Aboriginal community consultation

Consultation with the Aboriginal community has commenced with Registered Aboriginal Parties, with public notice provided on 1 March 2022 inviting Aboriginal people who hold cultural knowledge to register their interest in a process of community consultation. The final stage of consultation, being review of the draft ACHAR, is yet to be finalised.

Recommendations

Several management recommendations have been provided by Biosis within the draft ACHAR, outlined below.

Recommendation 1: Areas identified as having low archaeological potential: No further investigations are required for areas assessed as having low archaeological potential. This recommendation is conditional upon Recommendations 5 and 6.

Recommendation 2: Continued consultation with the registered Aboriginal parties: It is recommended that the proponent provides a copy of the draft ACHA report to the Aboriginal stakeholders and considers all comments received. The proponent should continue to inform these groups about the management of Aboriginal cultural heritage sites within the study area throughout the life of the project.

Recommendation 3: Discovery of unanticipated Aboriginal objects: All Aboriginal objects and Places are protected under the NSW National Parks and Wildlife Act 1974 (NPW Act). It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the Heritage NSW, Department of Premier and Cabinet (Heritage NSW). Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These may include notifying the Heritage NSW and Aboriginal stakeholders.

Recommendation 4: Discovery of human remains: If any suspected human remains are discovered during any activity works, all activity in the vicinity must cease immediately. The remains must be left in place and protected from harm or damage. The following contingency plan describes the immediate actions that must be taken in instances where human remains or suspected human remains are discovered. Any such discovery at the study area must follow these steps:

1. Discovery: If suspected human remains are discovered all activity in the vicinity must stop to ensure minimal damage is caused to the remains; and the remains must be left in place, and protected from harm or damage.
2. Notification: Once suspected human skeletal remains have been found, the Coroner's Office and the NSW Police must be notified immediately. Following this, the find will be reported to the Aboriginal parties and DECCW NSW.

6.12.2 Non-Aboriginal Heritage

As described in Section 4.4.4, the site is not within proximity to any nearby local or State heritage item or heritage conservation area. As such, there is considered to be no likely impacts on non-Aboriginal heritage as a result of the proposal.

6.13 Biodiversity

An assessment of the site's biodiversity qualities, and an accompanying request to waive the requirement for a full Biodiversity Development Assessment Report (BDAR), has been provided by Biosis and is contained at Appendix 19.

The objective of Biosis' assessment is to determine the presence of any threatened flora, fauna, populations or ecological communities (entities) within the study area, listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), *Biodiversity Conservation Act 2016* (BC Act 2016) and/or *Fisheries Management Act 1994* (FM Act), with the analysis comprising a detailed desktop review and field survey.

Biosis' analysis found:

- The field assessment identified vegetation at the site consists of planted native and exotic species, with no threatened ecological communities;
- Background searches identified 22 threatened flora species and 46 threatened fauna species recorded or predicted to occur within 5km of the site, however:
 - No threatened flora species, ecological communities or their habitats were recorded or considered likely to occur at the site;
 - No threatened fauna species or their habitats were recorded or considered likely to occur at the site, with no hollow-bearing trees or native vegetation suitable for roosting or foraging identified;
- The site does not contain any aquatic habitats, with the nearest habitat associated with Blacktown Creek to the north. No impacts to aquatic habitats are likely to occur as a result of the project.

Biosis note that 0.11ha of existing vegetation has been approved for removal under DA-21-01058 (see Figure 42), with no additional vegetation removal proposed under the subject SSDA. The site is considered to have limited features of ecological value, unlikely to support any threatened species, and unlikely to provide roosting habitat for threatened microbats.



Figure 44: Ecological Values of the Site
Source: Biosis

Biosis have also considered the indirect hydrological impacts of the proposed stormwater discharge, due to a downstream area of Blacktown Creek being included within DPE's Biodiversity Value mapping. Biosis note that the project will utilise an approved stormwater discharge point and will provide for reduced peak flow rates, with water treated through a GPT. Given that the development will result in improved site discharge velocities and peak flow rates, the project is considered unlikely to result in any indirect hydrological impacts.

Biosis conclude that the proposal is highly unlikely to result in direct, indirect, or prescribed impacts to threatened flora and fauna species, and a waiver is requested from undertaking a full BDAR. The waiver request is included as an appendix to Biosis' report.

6.13.1 Recommended Mitigations

Biosis have recommended the following to minimise further indirect impacts to biodiversity values:

- Any trees to be retained should be protected in accordance with Australian Standard AS4970 –2009;
- Protection of trees on development sites;
- In the unlikely event that unexpected threatened species are identified during the project, works should cease and an ecologist should be contacted for advice;
- Appropriate erosion and sediment control measures should be installed to avoid impacts to nearby waterways via stormwater collection systems; and
- Minimise disturbance to any urban native and exotic to be retained.

6.14 Social Impacts

Astrolabe Group have prepared a Social Impact Assessment (SIA) in support of the proposal, which accompanies the EIS as Appendix 25, prepared in accordance with the *Social Impact Assessment Guidelines for State Significant Projects*. The SIA provides a social baseline, predicts, analyses, and evaluates social impacts, and provides responses to social impacts.

The SIA has assessed the impacts and benefits of the proposal by:

- Understanding the surrounding community, including residents, businesses, and services;
- Identifying local community values through engagement activities and the strategy and policy landscape;
- Highlighting surrounding land use within both existing and future context; and
- Identifying potential social impacts and how they will be distributed, in consideration of supporting technical studies.

The process for evaluating potential social impacts involves a standardised matrix approach, which considers a “likelihood level” (ranging from almost certain to very unlikely), and a “magnitude level” (ranging from minimal to transformational).

6.14.1 Social Impacts

Astrolabe note that, given the historical use of the site as a timber warehouse, car junkyard, and container storage, the redevelopment for a data centre is likely to have minimal social impacts. Impacts are expected to be greatest at the construction phase, which will be temporary and limited to immediate surroundings.

Specific impacts related to community, culture, health and wellbeing, surroundings, and livelihoods as assessed by Astrolabe utilising the technical specialist reports referred to in this EIS, are provided below.

Table 23. Social Impacts

Category	Description	Impact
<i>Community</i>		
Community Values	Proposal's commitment to achieving LEED gold rating and reducing ecological footprint, aligning with Council's <i>Community Strategic Plan 2036</i> strategic direction to create a clean, healthy and sustainable environment.	Medium , as a positive impact.
<i>Accessibility</i>		
Traffic Impact	Construction phase traffic impacts arising from the increase in workers accessing the site.	Medium , if construction hours are followed.
	Operational phase traffic and parking issues as a result of increased traffic movements.	Low , if the recommended amount of car parking spaces is provided.
<i>Culture</i>		
Aboriginal Cultural Heritage	The impact on Aboriginal cultural heritage arising from construction and operation.	Low , noting the findings of the Aboriginal Survey Report indicating the site's low potential for containing objects of Aboriginal significance.
<i>Health and Wellbeing</i>		
Noise and Vibrations	The impact arising from noise and vibrations arising at the construction and operations phase.	Low
ESD design impacts	The adoption of ESD principles will ensure mitigation against negative environmental externalities that could affect the health and wellbeing of the community.	Low
<i>Surroundings</i>		
Visual Amenity	The visual impact arising from the development, for sensitive receivers surrounding the site.	Low

Table 23. Social Impacts		
Category	Description	Impact
<i>Livelihoods</i>		
Job Creation	The creation of up to 250 construction jobs and 36 new FTE jobs through operation.	Medium , as a positive impact.

Astrolabe consider that the overall negative social impacts of the proposal will be low, based on the assessment against the above individual components. Further, the proposal has positive economic impacts, namely through job creation at the construction and operational phases.

6.14.2 Recommended Mitigations

Astrolabe have recommended that frequent and clear communication with the community regarding demolition, construction, and operational activities be undertaken as a part of the development to mitigate social impacts.

6.15 Waste Management

Encycle consulting were engaged to prepare a Waste Management Plan which accompanies this EIS at Appendix 18. In accordance with the SEARs, the plan considers likely waste streams from construction and operations, measures to manage waste, and servicing arrangements.

It is noted that there is no demolition phase waste to consider, given that demolition is being undertaken as a part of the existing approval.

6.15.1 Construction Waste and Recycling Generation

During construction, appropriate receptacles for waste and recycling will be leased as needed. Encycle have provided an estimate of waste generation expected from the construction phase based upon project cost estimates. These are shown in Table 24.

Table 24. Estimated Volume of Construction Waste

Type	Estimated Volume (m ³)	Estimated Tonnage (t)	Recycling (off-site) (m ³)	Waste Disposal (m ³)
Earthworks (excavation soil/sand) of	34,000	26,000	32,000	2,000
Concrete	1,000	900	1,000	-
Metal reinforcement/fencing	65	100	65	-
Asphalt	60	40	60	-
Sand	100	65	100	-
HDPE Membrane	46	46	46	-
Blockwork / kerbing	10	7	10	-
Sundries, packaging	100	77	30	70
Total	35,367	27,394	15,920	765

Source: Encycle

A number of local facilities have been identified in Encycle’s Waste Management Plan as operators capable of providing waste services as needed. It is noted that the construction contractor may have other local facilities which may be substituted at the time of construction.

During construction, the construction contractor (yet to be appointed) will be responsible for managing construction waste, establishing appropriate storage areas, and making sure waste and recycling is removed from site and taken to an appropriate processor/disposal site.

6.15.2 Operational Waste and Recycling Generation

Based on information from other sites and provided by the client, Encycle have estimated waste and recycling to be generated in accordance with Table 25 on an ongoing basis.

Table 25. Operational Waste and Recycling

Type	Bin Size (L)	Number of Bins	Collection Frequency
General Waste	1,100	2	Weekly
Comingled Recycling	240	1	Weekly
Cardboard	1,100	2	Twice Weekly
Soft Plastic	1,100	1	As Required
E-Waste (Cabling)	240	1	As Required
Timber Palletts	1sqm space for stacking	Intermittent	As Required

Source: Encycle

A bin store area has been located within the data centre, with waste and recyclables to be transferred directly to this area or collected in small bins and transferred by cleaners at the end of the working day. The bin store will be accessible via roller shutters, with a waste collection vehicle able to park adjacent to collect waste.

Private service providers will service the site once operational. The loading area suitable for a 12m Heavy Rigid Vehicle which is adequate for rear-lift waste collection vehicles expected to service the site.

On an ongoing basis, the data centre will have staff with responsibility for overseeing waste management. The relevant staff will work closely with the waste service provider regarding the schedule for collection.

6.16 Crime Prevention

Crime Prevention through Environmental Design (CPTED) is a crime prevention strategy which reduces opportunities for crime by using design and place management principles.

A CPTED analysis was requested by Blacktown City Council to be included as part of this environmental impact assessment. Whilst Council does make a CPTED Report Template available to applicants, it is focused towards residential development and much of it would not apply to industrial development.

As such, Patch has relied on the *Crime prevention and the assessment of development applications: Guidelines under section 79C of the Environmental Planning and Assessment Act 1979*¹ guidelines prepared by the NSW Department of Urban Affairs and Planning (2001). The guidelines can be applied in the assessment of development applications to ensure that approvals are not creating or exacerbating crime risk.

¹ https://www.police.nsw.gov.au/_data/assets/pdf_file/0003/9390/duapguide_s79c.pdf

Four principles are included in the guidelines that need to be used in the assessment of applications to minimise the opportunity for crime:

- Surveillance;
- Access control;
- Territorial reinforcement; and
- Space management.

Surveillance

Good surveillance is provided when people can see what others are doing. The layout of the proposed development ensures sightlines into and out of the site are maintained, with open fencing to Station Road, and carparking areas visible from within the administration building.

Access Control

The site will be security monitored, with access controlled via boom gates, accessible via swipe card. Visitors and delivery drivers will have access provided via security at the gatehouse.

Territorial Reinforcement

Territorial reinforcement relates to community ownership of public spaces, and can be achieved through design that encourages gathering, provides clear transitions and boundaries between public and private spaces, and includes design cues on who is to use spaces and for what purposes.

The principle of territorial reinforcement is not strictly relevant to the proposal given that it is not a public space. Nevertheless, territorial reinforcement will be provided by strong barrier fencing and landscaping which will indicate the land as private property.

Space Management

Space management strategies include site cleanliness, rapid repair of vandalism and graffiti, the replacement of burned out pedestrian and car park lighting and the removal or refurbishment of decayed physical elements. These are ongoing matters which will be implemented into operations.

6.17 Ground and Water Conditions

6.17.1 Geotechnical and Groundwater

Martens' Geotechnical Assessment (Appendix 29) provides an overview of the site's geotechnical, groundwater, and salinity conditions. The report identifies the site as being impacted by some geotechnical constraints including:

- Existing uncontrolled fill which is unsuitable as a foundation material;
- Potential difficulty with excavation of pile into high and potential higher strength shale;
- Excavations may encounter seepage or ephemeral perched groundwater;
- Cutting in the south eastern portion of the site may extend below permanent groundwater level.

The report provides for a number of recommendations for site development which are expected to be incorporated at the construction phase.

6.17.2 Salinity

A Preliminary Salinity Assessment has been undertaken by Martens Consulting Engineers and is provided at Appendix 30 to this EIS.

The assessment indicates that the site is located within an area of moderate salinity as identified on the *Salinity Potential in Western Sydney Map* prepared by DIPNR in 2002. This map is accompanied by a number of broad scale salinity processes which may occur in Western Sydney, and which Martens have assessed the site against as follows:

- **Localised concentration of salinity:** Low potential at the site. There is no evidence of localised salt concentration, waterlogged soil or poor drainage.
- **Shale soil landscapes:** Moderate to High potential at the site. The site is underlain by low permeable clays, overlying shale. There is no evidence of impeded surface soil erosion observed.
- **Deep groundwater salinity:** Low potential at the site. The proposed development does not involve any bulk excavation and is not expected to intercept or raise groundwater levels.
- **Deeply weathered soil landscape:** Low potential at the site. There is no evidence of deeply weathered soils observed. Encountered soils at the site are residual.

Martens have provided a number of saline soil management strategies to be prepared at the construction certificate stage.

6.18 Accessibility

An Access and Adaptability Assessment Report has been prepared by LCI and accompanies the EIS at Appendix 27. The report provides an assessment against the applicable regulatory framework and concludes that the project will meet all access and adaptability requirements in accordance with the Relevant Codes, Premises Standards, and Australian Standards.

6.19 BCA Compliance

LCI have reviewed the architectural and services design documents of the proposal against the relevant Building Code of Australia standards (see Appendix 28). The assessment determines that BCA compliance can be achieved, with a number of items to be resolved prior to construction.

7 Justification of the Project

This EIS has been prepared to support a SSDA for a new data centre development at 57 Station Road, Seven Hills, in accordance with SEARS (SSD-33781208) issued by DPE on 23 December 2021. The EIS provides a comprehensive consideration and assessment of the potential environmental, social, and economic impacts of the development, and is supported by a suite of technical studies and specialist reports.

This chapter provides a holistic assessment, ultimately considering both the negative and positive impacts of the project, and its overall justification for approval. It includes:

- A summary of the key environmental impacts associated with the project, how these have been assessed, and predominant outcomes. This also includes a summary of how the development as a whole has responded to environmental constraints and minimised its impacts on surrounding sensitive areas;
- A summary of the project's social impacts;
- A summary of the projects economic impacts;
- The project's contributions, in terms of local developer contributions and planning agreements;
- Consideration of the suitability of the site for the proposed development; and
- An ultimate justification for the project's approval, based on the above dot points.

7.1 Environmental Impacts

A summary of the predominant environmental impacts, as described in Chapter 6 of this EIS, is provided in Table 26.

Table 26. Summary of Environmental Considerations	
Item	Summary of Impacts and/or Mitigations
Noise and Vibration	<p>An Acoustic Assessment report has been prepared to support this SSDA, providing an overview of the existing acoustic environment, operational noise emission criteria, and potential noise impacts arising from operations, road traffic, and construction.</p> <p>The analysis indicated that operational noise and road traffic noise associated with the development are not likely to have a significant impact on surrounding sensitive receivers. However, modelling does indicate that some receivers are likely to exceed the standard hours criteria of 51dBA at several residential receivers during the construction phase. Suitable management controls and community notifications have therefore been proposed including:</p> <ul style="list-style-type: none"> • Project notification; • Verification monitoring; • A complaints management system; • Specific notifications;

Table 26. Summary of Environmental Considerations

Item	Summary of Impacts and/or Mitigations
	<ul style="list-style-type: none"> • Respite offers; and • Alternate construction methodologies.
Hazards and Risks	<p>A risk screening exercise has been undertaken to ensure that the storage of diesel fuel and lithium-ion batteries is compliant with State guidelines. The assessment finds that the goods are not included within storage threshold values of the relevant guidelines hence no detailed analysis is further required.</p> <p>The storage of batteries and diesel storage has also been shown to be compliant with relevant standards including AS/NZ S4681, AS IEC 62619, FM Global Property Loss Prevention Data Sheet 05-32, and AS 1940.</p>
Air Quality	<p>An Air Quality Impact Report has been prepared to support the environmental assessment and consider relevant emissions regulations and guidelines. Twenty-one nearby sensitive receivers were considered as a part of the modelling, which considered both construction-borne dust and emissions from generators.</p> <p>The report identified the potential for construction activities to generate dust, and a Construction Environmental Management Plan has been recommended to be prepared which will set out procedures for managing and monitoring air emissions during construction.</p> <p>Generator emissions were tested under three scenarios, considering NO₂, CO, and PM_{2.5}. Based on the findings of the analysis, further assessment is not considered warranted.</p>
Traffic and Transport	<p>This EIS has considered the project's impact at the construction and operational stages relating to parking and traffic generation.</p> <p>During the construction phase, construction vehicles will access the site via the Station Road entrance and nearby arterial roads. The site will be able to cater for at least 25 parking spaces which, although not accounting for the entirety of the construction workforce, is expected to be supplemented by a shuttle bus service which will deliver workers to the site from a nearby location.</p> <p>Supporting evidence has concluded that the parking generated from the proposal would not cause any noticeable impacts to key nearby intersections. The operational parking requirements of the data centre are able to be met on site, with 31 spaces provided for the campus as a whole, 15 additional spaces than what has been approved under DA-21-01058.</p> <p>The car parking demand of the site is to be managed through initiatives outlined in the Green Travel Plan which is expected to result in mode shift away from car use. This includes dedication of car share/car pool spots,</p>

Table 26. Summary of Environmental Considerations

Item	Summary of Impacts and/or Mitigations
	encouragement of public transport and active transport, and provision of bike racks and end of trip facilities, as well as the distribution of a Transport Access Guide to staff and visitors to assist reaching the site via alternative travel modes.
Contamination and Remediation	Consideration has been given to the site's potential for contamination, evaluated through several former contamination and remediation studies. These have determined that the site is suitable for industrial/commercial purposes.
Stormwater and Wastewater	<p>Stormwater drainage works were futureproofed under DA-21-01058, which included the provision of OSD, rainwater and re-use tanks, an in-ground pit and pipe system, and a GPT.</p> <p>The development as a whole will comply with Council's stormwater drainage standards and includes water sensitive urban design initiatives, including meeting requirements that 80% of non-potable water demand be met through rainwater reuse. This is achieved through the provision of a rainwater storage tank which will harvest roof runoff.</p>
Flooding	<p>The site is identified as flood prone, affected by high, medium, and low flood risk affectations.</p> <p>The civil works being undertaken in accordance with DA-21-01058 will change the layout of the site, and will see an extent of fill and retaining at the rear of the site which will support the subject proposal. As such, the assessment undertaken for this EIS has demonstrated that the proposed development will not be adversely affected by the 1% AEP flood event, and that there will be only minimal impacts on surrounding properties.</p>
Ecologically Sustainable Development	The design of the data centre responds to ESD principles through its features which minimise energy and water consumption, improve stormwater quality, and manages pollution. Further, the development has been designed to achieve a LEED Gold Rating, a building rating system which seeks to maximise the sustainability of building construction and operation through design.
Heritage	<p>The proposal has given consideration to Aboriginal cultural heritage, with an Archaeological Survey Report being prepared in support of a draft ACHAR (to be finalised as a part of the project's Response to Submissions).</p> <p>The archaeological assessment has included a site survey and desktop study and has concluded that as a result of development already underway, and the site's location, there is a lower likelihood of Aboriginal sites. However, a series of recommendations have been provided with respect to ongoing works and dealing with unexpected findings.</p>

Table 26. Summary of Environmental Considerations

Item	Summary of Impacts and/or Mitigations
Biodiversity	An assessment of the site’s biodiversity qualities has been provided as a part of the SSDA, in accordance with the BC Act 2016. The assessment found no threatened flora or fauna habitats on site, and concluded that the site is unlikely to have any features of ecological value.
Waste Management	A Waste Management Plan accompanying the SSDA considers the source, management, and location of waste that may arise at the site during the construction and operational phases. The plan indicates that the appropriate bin storage areas have been provided as a part of the development, with ongoing servicing to be provided by private service providers.
Ground and Water Conditions	Preliminary assessments into the site’s salinity and groundwater conditions have been undertaken to support the development of this SSDA. A number of management strategies have been recommended in the accompanying reports, which are expected to be adopted at the construction phase.

7.1.1 Summary

As detailed in Table 26, a range of environmental matters have been considered in the preparation of this SSDA proposal.

In general, the supporting documentation indicates that the most significant impacts are expected at the construction phase. This is anticipated to include impacts associated with noise, dust, and additional parking demand in the area. However, these are short term impacts and proposed mitigations to help minimise their effect include, but are not limited to:

- Preparing a CEMP to manage and monitor air emissions during construction;
- Undertaking early notifications and providing the community with warnings of potential disruptions;
- Establishing a complaints management system; and
- Undertaking verification monitoring.

A series of all mitigations associated with the approval, including those described above, is provided in Appendix 4.

Notwithstanding the construction-related impacts, the proposal itself has responded to the unique needs associated with data centres whilst considering the underlying environmental constraints and sensitivities, in an effort to minimise ongoing impacts associated with the operational phase. The building siting is a key response in which the perceived dominance of the building is reduced. The data centre is provided with significant setbacks of 14.1m and 41.2m respectively to the side (McCoy Street/McCoy Park) and rear (Blacktown Creek) boundaries, and is substantially setback from Station Road itself behind the approved smaller data centre. This siting assists in minimising the appearance and bulk and scale of the building when viewing the site from nearby residential and recreation areas to the east, south, and west.

Increased setbacks have had to be balanced against the need to provide sufficient space to for necessary plant and equipment associated with data centres. The placement of plant and equipment on the building's northwestern side, along the side boundary to other industrial areas, minimises the exposure of such equipment to the closest residential receivers and other sensitive uses such as McCoy Park. This also ensures that impacts from noise and emissions associated with plant and equipment can be minimised, as they are located as far as possible away from such receivers.

The landscaping strategy also contributes towards further minimising the perceived visual impact of the proposal, with the existing treescape of McCoy Park, looking west, to be further increased through additional planting of trees with mature heights of up to 20m.

From an operational sustainability perspective, the future development also incorporates strategies related to water sensitive urban design, passive heating and cooling, the use of sustainable materials, and more. These all will result in an improved environmental outcome upon the site, particularly when compared to previous uses.

It is recognised that there is the potential for negative operational impacts associated with the data centre, particularly traffic, noise, and air quality impacts. These have been assessed in detail within the accompanying documentation which, as outlined in Table 26, have demonstrated that these impacts are marginal or acceptable. Mitigations for the operational phase, such as a Green Travel Plan to reduce car dependency amongst future workers, has also been included.

7.2 Social Impacts

As outlined in Chapter 5, prior to the finalisation of this EIS the proposal was subject to community and stakeholder engagement in order to build an understanding of the views of key parties and amend the scheme if and as needed.

No responses were received from members of the community through the pre-lodgement consultation phase, however, the community will be provided with an additional opportunity to make comments on the scheme throughout the statutory exhibition phase associated with the SSDA.

Consideration of the project's overall social impacts have been considered within Astrolabe's Social Impact Assessment (Appendix 25). This has found the overall social impacts of the project to be low, whilst noting that positive impacts are provided for such as additional job creation and improved environmental outcomes, which aligns with the aspirations of the community as expressed within the Council's *Community Strategy Plan 2036*.

7.3 Economic Impacts

The development will result in economic benefits for the local area, the Central City District more broadly, as well as the broader city.

Prior to the subject development, the site was occupied by lower value industrial uses including storage and a timber yard, which provided little economic benefit to the surrounding area.

By contrast, the redevelopment of the site will provide for greater economic outcomes and a better use of the land. This is consistent with State and local government strategic planning as outlined below, contributing towards the overall economic development and evolution of the city as a whole.

- **Greater Sydney Region Plan (Greater Sydney Commission):** The project contributes towards the vision of the plan to provide more jobs in the Central City District.
- **Central City District Plan (Greater Sydney Commission):** The project assists in the realisation of a number of planning priorities relating to attracting innovation into industrial lands, protecting and improving the health of the District's waterways, and increasing tree canopy cover.
- **Blacktown Local Strategic Planning Statement (Blacktown City Council):** The project contributes towards Council's vision for the LGA as a City of excellence, and aligns with Local Planning Priorities related to increased investment in industrial lands, improved environmental outcomes, and increased urban tree canopy cover.

7.4 Contributions and Public Benefit

The development falls within the catchment of Blacktown Contributions Plan No. 19, which levies for:

- Water Cycle Management Facilities;
- Traffic and Transport Management Facilities;
- Open Space and Recreation Facilities; and
- Community Facilities and Aquatic Facilities.

Under DA-21-01058, contributions in the order of \$240,921 were levied on the development, to be provided toward stormwater quality improvements. The levies were calculated on the developable area of the entire development site (2.5710ha). As such, it is understood no further 7.11 contributions are to be levied on the subject proposal.

Otherwise, no Voluntary Planning Agreement applies to the site.

7.5 Suitability of the Site

Following the analysis undertaken as a part of this environmental impact assessment, it is concluded that the site is suitable for the proposed use as a data centre, given:

- The development is permissible in the IN1 – General Industrial Zone and has been shown to be consistent with the objectives of the zone;

- The development achieves compliance with the key development standards and built form controls that apply under Blacktown City Council's planning framework, namely the BLEP 2015 and BDCP 2015, other than a departure from the car parking standard for industrial land which has been justified through detailed, site specific analysis;
- The environmental, social, and economic impacts of the proposal have been assessed and have been shown to be acceptable. Where there is the potential for negative impacts associated with the development, mitigations have been proposed to help minimise those impacts on the local community.
- The development will provide for the economic and orderly use of land intended for industrial purposes, and will see a formerly under-utilised site renewed and providing for new jobs and improved environmental outcomes.

7.6 Justification

As outlined in Sections 7.1 through 7.5 above:

- A series of environmental impacts have been considered associated with the proposal. Although there are expected to be some construction-phase impacts, operational impacts are minimal and acceptable. A series of mitigations have also been proposed which are summarised throughout the EIS, and have been combined in Appendix 4. With some specific items, such as site landscaping or water quality treatment, the net-environmental impacts can be considered positive;
- Overall social impacts are considered low, on the basis of the various recommended mitigations (outlined in this EIS) being implemented;
- There are positive economic outcomes associated with the proposal, which will provide not only for local employment opportunities, but will also contribute towards the growth of the Central City District and Sydney more broadly; and
- The site is considered suitable for the proposed development.

Given the above, the number of long-term positive outcomes associated with the development are considered to outweigh the impacts, which are mostly short-term and associated with the construction phase. As such, the proposal is considered justifiable, and to be in the public interest.

7.7 Conclusion and Recommendation

This EIS has been prepared to support a SSDA for a new data centre development at 57 Station Road, Seven Hills. The EIS has been prepared in accordance with the relevant requirements of the EP&A Act 1979, the Regulations, and the SSD guidelines for preparing environmental impact statements.

The social, environmental, and economic impacts of the proposal have been assessed in detail as a part of this EIS and supporting documentation. It has been shown that the proposal will not result in any unjustified or unmanageable impacts on the surrounding community, or flora and fauna.

Based on the justification provided within this chapter, and the detail outlined within this EIS as a whole, it is concluded that the proposal is in the public interest, and Patch recommends the proposal for approval.



PATCH

PLANNING & DEVELOPMENT

Patch Planners Pty Ltd

M 0401 699 336

E info@patchplanning.com

www.patchplanning.com