



ESD REPORT

**PROPOSED RESIDENTIAL DEVELOPMENT
159-167 DARLEY STREET WEST
MONA VALE**

**PREPARED FOR
THE TRUSTEE FOR DREP1 MONA VALE SUB TRUST**

DATE: 18TH NOVEMBER 2025

OUR REFERENCE: 240869-B

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REVISION	DATE	DESCRIPTION
A	13 th November 2025	Issued for SSDA
B	18 th November 2025	Issued for SSDA
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1. INTRODUCTION

1.1 GENERAL

This Ecologically Sustainable Design (ESD) report, prepared by Greenview Consulting, is submitted to the Department of Planning, Housing and Infrastructure (DPHI) on behalf of The Trustee of DREP1 Mona Vale Sub Trust (the applicant), in support of a State Significant Development Application (SSDA), identified as SSD-91496958, for in-fill affordable housing at 159-167 Darley Street West, Mona Vale.

The objective of this report is to summarise the ESD principles incorporated within the proposed design and ongoing operations of the proposed residential development, to form part of the Environmental Impact Statement (EIS) for the SSDA.

1.2 PROJECT DESCRIPTION

This SSDA seeks consent for the design and construction of a new residential development comprising:

- Site preparation works including demolition, excavation and tree removal;
- Construction of three (3) x 6 storey residential flat buildings, comprising:
 - 82 apartments, including:
 - 72 market apartments
 - 10 affordable apartments (10.5% GFA)
 - Separate residential lobbies
 - Communal open spaces
- Construction of 1-3 storeys of basement parking, comprising:
 - 164 car parking spaces, including:
 - 156 residential spaces
 - Eight (8) accessible residential spaces
 - 27 bicycle parking spaces
 - Two (2) motorcycle parking spaces
 - Waste and storage facilities
- Associated landscaping, including transplanting of two (2) trees and planning of new trees and vegetation.

Full details of the proposed development are set out in the accompanying Architectural Drawings and Landscape Drawings prepared by PBD Architects and Arcada, respectively.

1.3 BUILDING CLASSIFICATION

Class 2 and 7a

1.4 CLIMATE ZONE

Zone 5 (ABCB Climate map)

1.5 SITE DESCRIPTION

The site is located at 159-167 Darley Street West, Mona Vale within the Northern Beaches Council Local Government Area (LGA). It is legally described as Lots 1-5 of DP 11108 and owned by Darleydev Pty Ltd.

The Site has an area of approximately 6,112m², with a 76m frontage to Darley Street West to the northeast.



Figure 1 Site aerial

Source: Nearmap, edits by Colliers Urban Planning

Figure 1: 159-167 Darley Street West, Mona Vale– Site Aerial

2.0 RESPONSE TO SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SEARS):

On 22nd August 2025, DPHI issued Secretary's Environmental Assessment Requirements (SEARs) to the application for the preparation of an Environmental Impact Statement (EIS) for the proposed development.

This report has been prepared to respond to the relevant SEARs summarised in the table below:

15. Ecologically Sustainable Development (ESD)	
Requirement	Response
Identify how ESD principles (as defined in section 193 of the EP&A regulation) are incorporated in the design and ongoing operation of the development.	The proposed design aims to minimize environmental impact typically associated with construction and ongoing operations by integrating ESD principles throughout the project. These ESD principles address: • The precautionary principle • Inter-generational equity • Conservation of biological diversity and ecological integrity • Improved valuation, pricing, and incentive mechanisms Refer Section 3.0 in the report
Where relevant, provide an assessment of the development against standards for non-residential development set out in Chapter 3 of State Environmental Planning policy (Sustainable Buildings) 2022.	This residential development does not contain any non-residential components and therefore is not subject to Chapter 3 of State Environmental Planning policy (Sustainable Buildings) 2022.

3.0 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

The following section outlines how the core principles of ESD, as defined in section 193 of the EP&A regulation are incorporated in the design. These implementation of these principles include:

- **The Precautionary Principle:** Ensure necessary measures are taken to prevent serious or irreversible damage to the environment, and assessment for risk-weighted consequences of various options are considered to ensure appropriate measures are taken.

Implementation: The proposed development responds to climate change risks by incorporating passive solar design, thermal insulation, and ventilation strategies to reduce reliance on mechanical heating/cooling systems. This includes the installation of energy-efficient and water-efficient fixtures to meet or exceed the water, energy and thermal comfort targets set out by BASIX.

- **Intergenerational Equity:** Preservation of health, diversity and productivity is maintained for the benefit of future generations.

Implementation: The project proposes to reduce its environmental impact over the building's lifespan through long-term energy and water savings, the use of durable materials and future-ready infrastructure (such as EV charging capacity). These measures ensure sustainability for future occupants.

- **Conservation of Biological Diversity and Ecological Integrity:** A fundamental consideration is to conserve biological diversity and ecological integrity.

Implementation: Proposed landscaping shall incorporate native/drought-tolerant species that enhance biodiversity. Measures to retain significant vegetation and integrated water-sensitive urban design shall support ecological integrity.

- **Improved Valuation, Pricing & Incensitive Mechanisms:** Environmental factors are to be included in the valuation of assets and services.

Implementation: The proposed design shall reduce operational costs for residents through improved building performance and reduced utility consumption. Life cycle efficiency and cost-effective strategies have been considered in material selection and system design.

Sustainability measures implemented in design to support the above principles are:

3.1 INDOOR ENVIRONMENTAL COMFORT

- Daylight & ventilation: The architectural design allows for cross-ventilation and solar access to all apartments, promoting daylight utilisation.
- Thermal comfort: High-thermal mass materials have been considered for the construction of external envelope which shall support indoor thermal comfort. This additionally helps reduce reliance on mechanical heating/cooling and therefore reduces annual energy consumption.

3.2 ENERGY EFFICIENCY

A strong focus has been put in minimising energy consumption and improving overall energy efficiency:

The site is expected to at a minimum meet or exceed energy targets set out by BASIX and meet future-ready energy requirements.

- Thermal insulation: High-performing glazing and insulation in walls, ceilings and floors shall ensure minimal heat transfer. A NatHERS star rating of min. 6-star rating per dwelling and an

average rating of 7-stars will aid in reducing annual energy consumption from mechanical heating/cooling.

- Energy performance rating: Energy-efficient appliances, air conditioning, and efficiency measures for common area light & ventilation fixtures have been included.
- Lighting and glazing: Energy-efficient LED lighting and maximised daylighting in dwellings and common areas will improve overall energy efficiency.
- Future-ready: The basement carpark shall allow for EV charging provisions to meet future needs.
- Energy metering and monitoring: The building shall include energy meters configured to record time-of-use consumption of gas and electricity.

3.3 WATER EFFICIENCY

Water efficiency has been considered throughout the design development process.

The site is expected to at a minimum meet or exceed water targets set out by BASIX.

- Rainwater Re-use: Diversion of run-off from the roof to a rainwater tank has been included for on-site re-use, at a minimum for common area landscape irrigation.
- Water-efficient fixtures: A minimum of 4-star WELS rated water efficiency fixtures have been specified for the development.
- Water management: Comprehensive stormwater treatment and water quality management strategies have been developed to reduce potential environmental impacts, as part of an integrated water management plan.

3.4 MATERIALS AND WASTE

- Sustainable materials: Low-VOC and non-toxic materials shall be prioritised within the development to support improved indoor air quality and align with environmentally sustainable design objectives.
- Recycle & Waste reduction: Waste streams, waste generation estimates and waste handling and collection requirements have been assessed for the operational stage of the development.
- Site-specific ground and water conditions will be assessed and managed through appropriate design measures for low impact to residents and surroundings.

3.5 SUSTAINABLE PLANNING/RESOURCE CONSERVATION

- Permeable landscape areas have been incorporated within the development to support on-site stormwater infiltration and reduce surface runoff.
- Native planting: Min 50% of site area has been proposed for landscaping, including extensive native vegetation planting.
- Carbon emissions: Energy efficiency measures integrated within the design shall contribute to a reduction in overall annual greenhouse gas emissions and support long-term environmental performance.

4.0 CONCLUSION

This SSD incorporates the principles of Ecologically Sustainable Development through thoughtful design and long-term operational strategies. The project complies with the Building Sustainability Index (BASIX), State Environmental Planning Policy 2022 (Sustainable Buildings), and embeds sustainability in the areas of energy and water efficiency, material selection, biodiversity, and climate resilience. While SEPP SB Chapter 3 is not applicable, the development demonstrates strong alignment with broader state sustainability objectives and will deliver enduring environmental benefits.