

BALFOUR GROUP PTY LTD

ENVIRONMENTALLY SUSTAINABLE DESIGN REPORT

19-25 Balfour St, Lindfield



Project number: 250819







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JENSEN HUGHES

Quality management

Revision	Date	Revision description				
1.1	30 May 2025	Environmentally Sustainable Design (ESD) Report				
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Executive summary

This ESD Report has been prepared by Jensen Hughes on behalf of Balfour Group Pty Ltd to accompany a State Significant Development Application (SSDA) for a proposed residential flat building (including in-fill affordable housing) at 19 – 25 Balfour Street, Lindfield, within the Ku-ring-gai Local Government Area (LGA).

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-82709458) on 22 April 2025. Additionally, the report outlines how the project responds to the sustainability requirements of the following planning policies:

- + SEPP (Sustainable Buildings) 2022
- + SEPP (Housing) 2021
- + NSW BASIX (Building Sustainability Index)
- + Ku-ring-gai Development Control Plan (DCP) 2024

This report concludes that the proposed residential flat building is suitable and warrants approval subject to the implementation of the following mitigation measures.

- + A fully all-electric design with no gas infrastructure
- + On-site solar PV system and provision for future battery storage
- + High efficiency building services and passive design elements
- + Integration of Water Sensitive Urban Design (WSUD) measures
- + Embodied carbon reporting and material efficiency
- + Design provisions to enable future net zero emissions operation

Following the implementation of the above mitigation measures, the remaining impacts are considered appropriate.

1.0 Introduction

1.1 Project Description

The SSDA seeks development consent for a proposed residential flat building, including in-fill affordable housing at 19 – 25 Balfour Street, Lindfield. The proposed works include demolition of existing structures, site preparation works, excavation and construction of the building and associated landscaping works.

Specifically, the SSDA seeks development consent for:

- + demolition of existing buildings and structures on site
- + construction of a ten-storey residential flat building featuring:
- + basement level car parking
- + approximately 71 market residential units
- + approximately 27 affordable housing units
- + associated landscaping works, including a communal open space.
- + associated infrastructure and services

The proposal incorporates 17% affordable housing pursuant to Chapter 2, Section 15C and Chapter 5, Section 156 of the Housing SEPP. The proposal seeks to utilise the incentive controls under Chapter 2, Part 2, Division 1, Section 16 of the State Environmental Planning Policy (Housing) 2021 (Housing SEPP) to achieve 30% additional building height and floor space ratio (FSR).

This report has been prepared in response to the requirements contained within the Secretary’s Environmental Assessment Requirements (SEARs) dated 22 April 2025 (SSD-82709458). Specifically, this report has been prepared to respond to the SEARs requirement issued below.

Item	Description of requirement	Section reference (this report)
15. Ecologically Sustainable Development	<ul style="list-style-type: none"> • <i>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.</i> • <i>Where relevant, provide assessment of the development against the standards for non-residential development set out in Chapter 3 of State Environmental Planning Policy (Sustainable Buildings) 2022</i> 	Section 5

1.2 Subject Site

The site is located at 19-25 Balfour Street, Lindfield, within the Ku-Ring-Gai Local Government Area (LGA). It is legally described as:

- + Lot 12 DP654363
- + Lot 1 DP121527
- + Lot 13 DP657173
- + Lot 13 DP663524

The site has an area of approximately 4,771 m² and is generally rectangular in shape.

The site is currently occupied by four detached dwellings, swimming pools, landscaping and ancillary structures. It is zoned R2 Low Density Residential pursuant to the Ku-Ring Gai Local Environmental Plan 2024 (KLEP 2024).

The subject site is located within the Lindfield Transport Oriented Development (TOD) area, pursuant to Chapter 5 of the Housing SEPP (Figure 3).

The site itself is not identified as a heritage item; however, it is located within Balfour Street/Highfield Road Conservation area (Area C29). Schedule 5 of the KLEP 2024 states the heritage area is valued for its aesthetic and historical significance with the Federation Queen Anne style housing. Within the heritage area there is one heritage item located approximately 30 m from the site (I39).

High biodiversity value land is present at the site across the north part of the site, pursuant to the Biodiversity Conservation Act 2016.

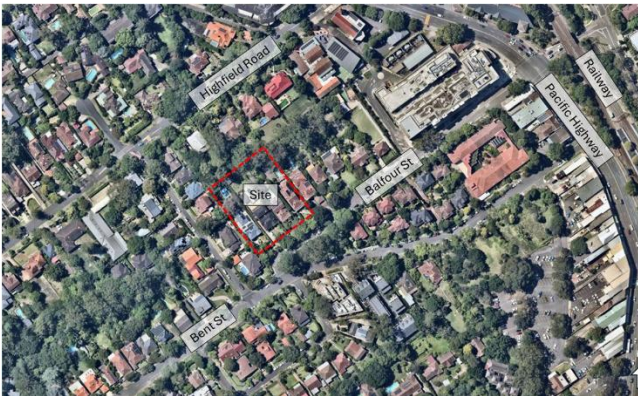


Figure 1: Site location (Base source: Nearmap)



Figure 2: TOD Map (Source: Espatial Viewer)

1.3 Surrounding Context

To the north of the site is the broader Balfour Street Highfield Road Heritage Conservation Area, of which the subject site occupies the south-western portion of the area. Further north is an area of low density residential, consisting generally of one to two storey dwellings.

Pacific Highway and Lindfield Station are located approximately 330m east of the site, with a strip of commercial and retail uses along the highway. To both the south and west is a large area of low-density residential homes and beyond this, is a golf course and local park both within a kilometre west of the site.

In addition to Lindfield Station, the site is also serviced by several bus services, with the nearest stop approximately 400m away (6 min walk), offering services to Chatswood and Macquarie University. The site is located approximately 2.75km north-west of Chatswood, 4.4km east of Macquarie University, and 10.5km north-west of the Sydney CBD.

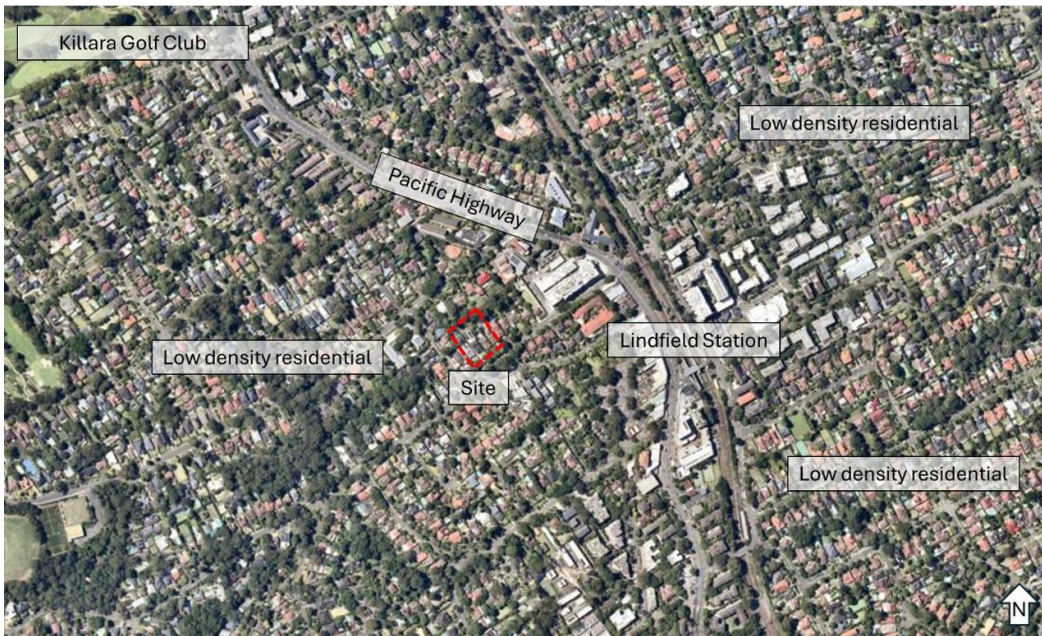


Figure 3: Site Context (Source: Nearmap)

1.4 Planning and Policy Context

This report outlines how the proposed development intends to respond to the relevant sustainability requirements and objectives outlined in the below mandatory statutory planning instruments, technical standards and benchmarks:

1.4.1 State Environmental Planning Policies (SEPPs)

- + **SEPP (Sustainable Buildings) 2022:** Mandates improved environmental performance for residential developments, including compliance with updated BASIX targets (thermal comfort, energy, and water), water conservation, electrification readiness, and minimisation of greenhouse gas emissions across the lifecycle.
- + **SEPP (Housing) 2021:** Provides provisions and incentives for affordable housing. This development includes dwellings to be managed by a CHP and retained as affordable housing under the SEPP, ensuring compliance with relevant delivery, management, and design standards.

1.4.2 Local Development Controls

- + **Kur-ring-gai Development Control Plan (DCP) 2024:** Specifies local performance-based controls for residential developments including solar access, cross-ventilation, deep soil planting, water efficiency, sustainable design, and climate resilience.

1.4.3 Project-Specific SSSA Requirements

- + **Secretary's Environmental Assessment Requirements (SEARs) – Item 9:** Requires a demonstration of how the project incorporates ESD principles in design, construction and operation.

1.4.4 State Residential Requirements

- + **BASIX:** Mandatory compliance for residential dwellings, including enhanced energy and water performance targets. Project targets exceed minimum compliance with a 7-star NatHERS average.

The project will aim to embed best-practice sustainable design strategies throughout the design and operation of the facility, with key focus areas including:

- + Energy efficiency and carbon performance
- + Water conservation and management
- + Water Sensitive Urban Design (WSUD) strategies
- + Sustainable material selection and waste minimisation
- + Indoor environmental quality and occupant wellbeing
- + Biodiversity protection and urban heat mitigation

1.5 Design Documentation

This report has been prepared based on the following Design Plans and Specifications:

- + 19-25 Balfour St, Lindfield TOD – SSDA_250516_For Coordination

1.6 Report Scope

The purpose of this report is to assess the proposed design against the relevant environmentally sustainable design strategies to ensure the design is environmentally, culturally, socially, and economically sustainable, with resilience built in to anticipate future challenges. This report addresses:

- + Sustainability drivers stipulated from relevant regulatory and project requirements.
- + Project's design responses corresponding to the sustainability drivers.
- + Further frameworks and guidelines to demonstrate design excellence

1.7 Limitations

This report aims to provide high-level ESD design guidance to the project in accordance with State and Local requirements. It is intended that the options nominated in this report are subject to be discussed, assessed and workshopped into the detailed design of the development. Section J compliance must refer to separate, designated assessment reports. Sections B, C, D, E, F, G, H and I of the NCC.

2.0 ESD Framework Requirements

2.1 EP&A Requirements

Under the Environmental Planning and Assessment Act 1979 (EP&A Act), State Significant Developments (SSDs) are required to demonstrate how the project addresses the principles of Environmentally Sustainable Design (ESD). These principles are outlined below:

- + **The precautionary principle:** Anticipating and avoiding environmental harm where there is scientific uncertainty.
- + **Inter-generational equity:** Ensuring the health, diversity, and productivity of the environment for future generations.
- + **Conservation of biological diversity and ecological integrity:** Minimising impacts on biodiversity, water bodies, soil, and ecosystems.
- + **Improved valuation of environmental resources:** Considering environmental costs and benefits in project decision-making.

2.2 Secretary's Environmental Assessment (SEARS) Requirements

The Secretary's Environmental Assessment Requirements (SEARs), issued for this project, reinforce obligations under Item 9 – Ecologically Sustainable Development. The SEARs require the Environmental Impact Statement (EIS) and supporting documents (including this ESD report) to:

- + Explain how sustainability principles are embedded in the design, construction and operation of the development.
- + Demonstrate a commitment to minimising greenhouse gas emissions, water use, and resource consumption.
- + Consider climate change adaptation and long-term environmental resilience.
- + Outline measures to monitor and achieve environmental performance outcomes.

These provisions set the foundation for integrating sustainability initiatives into the project lifecycle, ensuring the development meets both statutory obligations and broader environmental objectives. Detail on how the project intends to respond to these principles is set out in 3.0 Sustainable Design Strategies.

2.3 SEPP (Sustainable Buildings) 2022 Requirements

The Sustainable Buildings SEPP 2022 establishes mandatory sustainability outcomes for residential and non-residential developments. The following requirements apply to the proposed development:

- + **Operational Greenhouse Gas Emissions:** Development must meet improved BASIX standards including reduce energy-related greenhouse gas emissions, comply with updated NatHERS energy modelling and minimization of GHG emissions through passive design and efficient systems.
- + **Renewable Energy and Electrification:** Incorporate on-site renewable energy (e.g. rooftop PV) and futureproofing for battery storage and EV charging. Avoid the use of fossil fuels by prioritizing electrification of building systems.
- + **Water Efficiency:** Water-efficient fittings (minimum WELS 4-star) are specified, alongside rainwater harvesting for non-potable uses (toilets, irrigation). A BASIX water score of ≥ 40 has been targeted.

- + **Construction Waste and Circular Economy:** Develop a Construction Waste Management Plan, use materials with recycled content and provide for on-site waste separation and recycling.

To achieve compliance with the NSW Sustainable Buildings SEPP, the following documentation should be included in the DA application to satisfy ESD requirements:

- + General Sustainability Statement (covered in this report).
- + Section J Compliance Pathway.
- + BASIX Certificate and thermal modelling outputs

2.4 SEPP (Housing) 2021 Requirements

As the development includes dwellings managed by a registered Community Housing Provider (CHP), it is eligible to access affordable housing incentives under the SEPP (Housing) 2021. Relevant sustainability-related requirements include:

- + **Design Quality:** Affordable units must be externally indistinguishable from private units and constructed to equivalent environmental and amenity standards.
- + **Retention Period and Management:** A minimum of 10% of dwellings will be retained as affordable housing for at least 10 years under a VPA or consent condition and managed by a registered CHP.
- + **Environmental Performance:** Affordable housing components must comply with the same BASIX, NCC, and DCP standards as private dwellings to ensure equity in sustainability outcomes.

2.5 Ku-ring-gai Development Control Plan (DCP) 2024 Requirements

The DCP outlines performance-based controls that apply to residential flat buildings. The proposed development addresses the following sustainability-related provisions:

- + **Section A7 – Residential Flat Buildings:**
 - *Solar Access:* At least 70% of units achieve a minimum of 2 hours direct sunlight to living areas mid-winter.
 - *Natural Ventilation:* 60% of dwellings are naturally cross-ventilated.
 - *Deep Soil Zones:* Minimum 25% of the site area is allocated for deep soil planting, supporting canopy trees and habitat creation.
- + **Section C23 – General Building Design and Sustainability:**
 - *Energy Efficiency:* Building design incorporates orientation, shading, insulation and glazing controls to reduce energy consumption.
 - *Water Conservation:* Inclusion of rainwater reuse and efficient irrigation.
 - *Waste Management:* Centralised waste storage with source separation for recycling.
 - *Sustainable Materials:* Encouragement of environmentally preferable materials with low embodied carbon and high durability.
- + **Urban Heat Mitigation and Biodiversity:**
 - Green infrastructure, reflective surfaces, and tree canopy cover are integrated to reduce urban heat island effects and enhance local ecological value.

The proposed development demonstrates compliance with the above SEPP and DCP requirements through:

- + High-performance passive and active design
- + Integration of WSUD and water reuse
- + Native landscaping and urban cooling
- + Sustainable construction, material selection and waste minimisation

Further detail on each strategy is provided in Section 5: Sustainable Design Strategy.

2.6 Sustainability Standards for Residential Developments (BASIX)

The Building Sustainability Index (BASIX) aims to deliver equitable, effective water and greenhouse gas reductions across the state of New South Wales. BASIX is implemented under the Environmental Planning and Assessment Act. BASIX applies to all residential dwelling types and is part of the development application process in New South Wales.

BASIX reduces water and energy consumption in residential dwellings. These environmental outcomes also provide long-term financial savings for the homeowner – and a valuable contribution to the sustainable future of our communities.

The development is targeting the BASIX Water and Energy scores below through the sustainability commitments listed in the BASIX and Thermal Assessment Report.

Table 1 BASIX Targets

BASIX	Target Score	Project Score
Water	40%	40%
Energy	60%	64%
Thermal Comfort (NatHERS)	7 Star Average 6 Star Minimum	Pass

3.0 Sustainable Design Strategies

To satisfy the sustainability requirements outlined in the previous sections and minimise the project's environmental impact, the following preliminary ESD strategies will guide the design, construction, and operational phases of the development.

3.1 Passive Design Strategies

Passive building design has a direct influence on the thermal comfort and visual quality of the indoor environment. Effective passive design strategy can minimise the energy demands for internal heating, ventilating, air-conditioning, and artificial lighting throughout the year, thus providing savings in operational energy and reductions in greenhouse gas emissions.

Feature	Design Strategy	Objective / Impact
Daylighting and Visual Comfort	<ul style="list-style-type: none"> + High levels of daylight are to be provided for the occupied areas with viewing facades and skylights, whilst managing the glare reduction for the nominated area through a combination of blinds, screens, fixed devices, or other means + The nominated areas are to have a clear line of sight to an external view + Maximise daylight harvesting with optimisation of the building orientation and avoid overshadowing of adjoining properties 	Delivery of well-lit spaces that provide high levels of visual comfort to building occupants and reduce lighting energy consumption by maximising the use of natural daylight
Passive Solar Design	<ul style="list-style-type: none"> + Use of shading to maximise the sun received during winter months, whilst minimising the penetration of the summer sun 	Avoid and reduce the need for additional heating and cooling
Glazing and Shading	<ul style="list-style-type: none"> + Glazing U-value and SHGC to comply with or exceed BASIX requirements based on the thermal performance modelling protocol. 	Reduce energy required for heating, cooling and lighting needs
Roof, Wall and Floor	<ul style="list-style-type: none"> + Insulation added to these elements to be at or greater than the level required to be compliant via the NatHERS thermal modelling provisions. 	Reduce energy required for heating and cooling
Natural ventilation and Indoor Air Quality	<ul style="list-style-type: none"> + Use of operable windows and sliding doors to allow natural and cross ventilation + The entry of outdoor pollutants is to be mitigated through building ventilation systems designed according to ASHRAE Standard 62.1 + Mechanical ventilation system is to be designed for ease of maintenance and cleaning 	Provide high indoor air quality to occupants

3.2 Services System Efficiency (Active Design)

Services systems account for the main operational energy consumption during the lifetime of the building. Using highly efficient mechanical, lighting, electrical and hydraulic service systems can significantly minimise energy consumption and reduce the local grid supply pressure.

Feature	Design Strategy	Objective/ Impact
Lighting System	<ul style="list-style-type: none"> + Provision of high output LED light fitting to all lighting systems, with design target to meet or improve on DTS maximum power density provision. + Provision of efficient lighting controls to relevant areas: <ul style="list-style-type: none"> - Motion sensor with manual off/ auto-off - Lighting control zone no larger than 100 m², with stage down the lighting load via dimming levels - Daylight sensor controls to perimeter zone - Motion sensor and timer for back of house lighting 	Avoid energy wastage when spaces are unoccupied and reduce energy required during operation
HVAC Systems	<p>The HVAC system will be installed for all conditioned areas. Consideration of HVAC system selection should be given to high cooling COP and heat recovery system to improve performance, other considerations may include:</p> <ul style="list-style-type: none"> + Use indirect evaporative dewpoint cooler on the outside air supply to reduce cooling load + Addition of shut-off dampers to adjust outside air supply in the period of low/ non-occupancy + Motor must be high efficiency defined as per AS1359 + Capable to be fully integrated with the BMS where available + Zone grouping and control for areas with similar demands and cooling loads 	Reduce operational energy required for heating, cooling and ventilation needs
Insulation Needs	<p>Provision of insulation to the service pipes including:</p> <ul style="list-style-type: none"> + Air-conditioning ductwork and pipework + Heated hot water pipework 	Reduce unwanted heat loss and avoid reheat energy demand
Appliances	<ul style="list-style-type: none"> + Provision of electrical appliances at the highest practical efficiency under the federal government's energy rating scheme at the time of the development 	Reduce operational energy usage
Hot Water	<ul style="list-style-type: none"> + Provision of solar water heating for hot water. Should this be not feasible for the project, heat pump or condensing boiler type to be used instead 	Reduce operational energy usage
Renewable Energy	<ul style="list-style-type: none"> + Future provision of solar photovoltaic panels to offset grid power to be assessed 	Reduce operational energy usage
Building Monitoring	<p>Provision of a central monitoring system with designated sub-metering to record, analyse and review energy and water consumption for each specified service, which can be used to optimise ongoing operations and identify leaks:</p> <ul style="list-style-type: none"> + HVAC 	Provide fault detection and optimisation opportunities to avoid waste energy and reduce operational demand.

Feature	Design Strategy	Objective/ Impact
	<ul style="list-style-type: none"> + Lighting + Equipment and appliances + Hot water + Ancillary plants 	

3.3 Sustainable Construction

Sustainable construction aims to address the consumption of resources within a building construction context, by encouraging the selection of lower-impact materials. This section will also aim to achieve absolute reductions in the amount of waste generated or the recycling of as much of the waste generated as possible, which will help lower the embodied carbon of the building.

Feature	Design Strategy	Objective/ Impact
Responsible Construction Practices	<ul style="list-style-type: none"> + Environmental impacts are managed during construction by implementing a best practice EMP that covers environmental impacts arising from construction works, as outlined within the NSW Environmental System Guidelines 	Ensure responsible construction practices that manages and minimises the environmental impacts, enhance staff health and well-being and improve sustainability knowledge on site
Construction and Demolition Waste	<ul style="list-style-type: none"> + Waste contractors and waste processing facilities servicing the project demonstrated compliance with a recognised Construction and Demolition Waste Reporting Criteria, and the total amount of waste sent to landfill is less when compared against a typical building 	Reduce construction waste going to landfill by reusing or recycling building materials
Indoor Pollutants	<ul style="list-style-type: none"> + Internally applied paints, adhesives, sealants and carpets to meet stipulated 'Total VOC Limits' as per Green Star Design Buildings v1 requirements. + Engineered wood products to meet stipulated formaldehyde limits as per Green Star Buildings v1 requirements or where possible not used in the building 	Safeguard occupant health through the reduction in internal air pollutant levels
Responsible Building Materials	<ul style="list-style-type: none"> + Structural and Reinforcing Steel is supplied by a steel fabricator accredited to the Environmental Sustainability Charter of the Australian Steel Institute (ASI) where possible + Timber used is certified by a forest certification scheme where possible + Reducing the use of Portland cement content with supplementary cementitious materials (SCMs) where possible + Ensure as much water as possible used within the concrete mix is captured or reclaimed 	Include building materials that are responsibly sourced or have a sustainable supply chain to reduce carbon footprint of the project

Feature	Design Strategy	Objective/ Impact
	+ Using alternative aggregates such as crushed slag aggregate, or incorporating manufactured sand or other alternative materials	

3.4 Water Efficiency

The development should adopt the principles of integrated water cycle management, including minimising total water usage and minimising wastewater requiring treatment. The reduction of potable water on-site can be achieved through the following below strategies.

Feature	Design Strategy	Objective/ Impact
Fittings and Fixtures	+ Highest practical efficiency WELS rating fittings and fixtures where practical as defined by BASIX requirements	Reduce potable water consumption
Appliances and Equipment	Highest practical efficiency appliances & equipment, WELS 4 star or higher where practical + Laundry – washer and dryer + Kitchen – dishwasher	Reduce potable water consumption
Rainwater Harvesting Tank	Rainwater harvesting system can be used to collect rainwater from the roofs of the building and reduce potable water demand for the following uses (where practical): + Garden taps and landscape irrigation systems + Fire sprinkler test system (closed loop)	Offset potable water consumption with the use of rainwater
Stormwater Management	+ A separate Stormwater Management Report is to be issued for the development and incorporate all feasible measures relating to stormwater management, flood risk, water conservation water quality and groundwater protection.	Minimise impacts on the natural water cycle and the environment, and Council's existing drainage network.

3.5 Urban Heat Mitigation and Biodiversity

The development should incorporate strategies to reduce localised urban heat island (UHI) effects and enhance biodiversity outcomes through appropriate landscaping, materials selection, and ecological integration. These measures support occupant thermal comfort, reduce energy demand, and promote ecological resilience on-site.

Feature	Design Strategy	Objective / Impact
Tree Canopy Coverage	+ Provision of deep soil zones and tree planting along site boundaries, common areas, and roof terraces using native species.	Reduce localised urban heat and improve shade and comfort for residents and pedestrians.
Green Roof and Terrace Planting	+ Integration of native and adaptive vegetation into rooftop communal areas and terraces using irrigated planter beds and green infrastructure.	Improve insulation, increase evapotranspiration, and enhance biodiversity.

Feature	Design Strategy	Objective / Impact
Cool Roof and Paving Materials	+ Use of high Solar Reflectance Index (SRI) materials for roof membranes, podium paving, and footpaths.	Reduce heat absorption and improve microclimatic conditions.
Biodiversity-Friendly Landscaping	+ Landscape design prioritises native, drought-tolerant plant species and habitat features (e.g., logs, insect hotels, bird-attracting flora).	Support urban habitat connectivity and enhance site biodiversity value.
Stormwater-Integrated Planting Zones	+ Vegetated bio-retention zones or rain gardens integrated into WSUD strategy to support flora, filter stormwater and reduce heat load.	Multifunctional cooling, stormwater treatment, and biodiversity enhancement.
Landscape Maintenance Plan	+ A landscape management strategy will be prepared to ensure the long-term viability of planting and green infrastructure.	Support ecosystem health and thermal comfort across the lifecycle of the building.

3.6 Climate Change Resilience

Climate change resilience is an important objective to address in the design of the project. The project team can consider a Climate Change Adaptation and Resilience Plan (CCAP) to assess the future climate hazards and risks to the site and local community.

3.6.1 Future Climate Projections (NARCLiM Data – Sydney Region)

The following climate change projections have been identified from the NARCLiM projected data for the region of Sydney:

Increased Temperatures & Urban Heat:

- + Mean annual temperature increase of 0.7°C by 2030 and up to 2.1°C by 2070.
- + Days above 35°C are projected to increase by 4 days/year by 2030 and 11 days/year by 2070.

Increased Rainfall & Humidity:

- + Minor change in total annual rainfall by 2030 (+4%), increasing to +6.5% by 2070.
- + Rainfall patterns become more erratic with higher intensity events, particularly in summer and autumn.

3.6.2 Recommended Climate Adaptation Strategies

To address these risks, the following design and operational strategies will be considered:

- + **Risk Identification and Planning:** Undertake a climate risk assessment based on IPCC scenario modelling (e.g., SSP2.6 and SSP4.5). Evaluate acute climate shocks (e.g. heatwaves, blackouts) and chronic stresses (e.g. temperature rise, water scarcity).
- + **Operational Resilience:** Ensure the building is capable of maintaining basic survivability and critical functions during a power outage. Use future climate files for HVAC system sizing to accommodate higher ambient temperatures and humidity.
- + **Passive and Adaptive Design:** Maximise passive design features to reduce energy demand and support indoor comfort in extreme weather.

- + **Water-Sensitive Design:** Apply WSUD principles to manage increased rainfall and runoff through the strategies outlined previously.
- + **Urban Heat Island Mitigation:** Ensure that at least 75% of the site incorporates green cover (trees, landscaping) and high solar reflectance materials (light coloured roofs/ shading).
- + **Energy Resilience:** On-site solar generation and battery storage to reduce reliance on energy grid. Consider demand response strategies to reduce grid stress during peak periods.

These strategies will ensure that the project is responsive to future climate conditions and aligned with best-practice resilience planning principles.

4.0 Conclusion

This report outlines how the proposed development at 19-25, Balfour Street, Lindfield can meet or exceed the relevant sustainability requirements under state and local planning instruments.

The project will be designed to align with the principles of Environmentally Sustainable Design through the strategies described. This includes the integration of both passive and active sustainability measures, including high efficiency building services, all-electric systems, on-site solar PV infrastructure, and water efficient systems. Climate adaptation and resilience strategies should also be considered throughout the design to mitigate future climate related shocks and stressors.

The development is intended to serve as a resilient, low-impact residential development that intends to contribute positively to the community and NSW's sustainability goals.