EMERGEN

SUSTAINABILITY DESIGN REPORT

DUNES BEACH RESORT

2 QUINNS ROAD MINDARIE WA 6030

PREPARED BY

NYONIKA OBERAI

Project: 129540

Published date.

22/02/2024

EMERGEN

DOCUMENT HISTORY AND REVISION DETAILS

DATE	DOCUMENT	COMPLETED BY	APPROVED BY	REVISION NO.
22/02/2024	Architectural Plans	Nyonika Oberai	Glenn Underwood	1
22/02/2024	Architectural Plans	Nyonika Oberai	Glenn Underwood	2

DISTRIBUTION OF COPIES

COPY NO	SOURCE	ISSUED TO
1	Electronic	Hospitality Total Services

SOURCES OF INFORMATION

DRAWING NO.	DRAWING TITLE	REVISION NO.
SK-1.01	Architectural Drawings	Design Approval
DA-1.01- DA-2.03	Architectural Drawings	Design Approval

CONFIDENTIALITY STATEMENT

This report contains confidential information and is intended solely for the recipient. The purpose of this report is to present the sustainability commitments for the project. All information and documentation included in this report shall remain the exclusive property of EMERGEN/CADDS Group and may not be reproduced in any form without prior written consent from EMERGEN/CADDS Group.

DISCLAIMER

The contents of this report are based on the documentation and plans provided by the Client to EMERGEN/CADDS Group. The outcomes presented are representative of schematic systems, schedules, and project design. These results should not be considered as actual energy usage.

EMERGEN

CONTENTS

1 STATE PLANNING POLICY SUMMARY

EMERGEN (a division of CADDS GROUP), in collaboration with the design team Hospitality Total Services, has developed a sustainable design strategy for the Proposed Dunes Beach Resort, aligning with *State Planning Policy 7.0*, which focuses on the Design of the Built Environment - specifically, Principle 5: Sustainability.

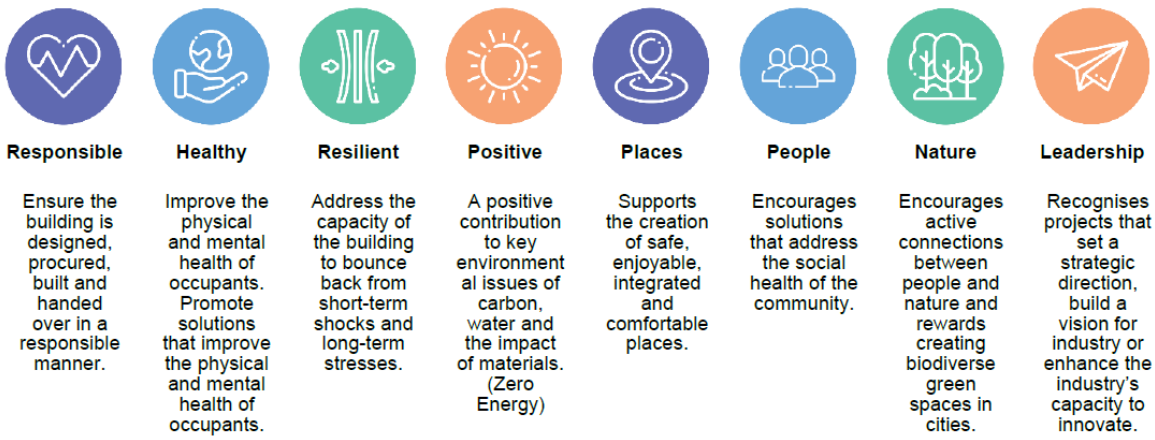
This report serves the vital purpose of bolstering the development application by articulating the sustainability principles and commitments for the project site. We acknowledge the significance of State Planning Policy 7.0 in promoting sustainability within the built environment. Good design, as outlined in the policy, is not only about aesthetics but also optimises the sustainability of our built surroundings, yielding positive outcomes on environmental, social, and economic fronts.

Our approach to sustainable landscape and urban design adheres closely to the established water-sensitive urban design principles, ensuring minimal adverse impacts on existing natural features and ecological processes while promoting green infrastructure at all scales of the project. Furthermore, our strategy for sustainable built environments embraces passive environmental design measures tailored to local climate and site conditions. This includes careful consideration of optimal orientation, shading, building envelope, and natural ventilation, ultimately reducing reliance on energy-intensive heating and cooling technologies. This, in turn, results in reduced energy consumption, decreased resource usage, and lowered operating costs throughout the project's lifecycle.

1.1 DESIGN AND CONSTRUCT TO AUSTRALIAN BEST PRACTICE

EMERGEN will Utilise the Green Star Buildings framework to create structured approach to a sustainable outcome for the design and construction of the development.

Figure 1 Green Star Buildings Framework



1.2 DESIGN AND CONSTRUCT TO AUSTRALIAN BEST PRACTICE

The design team will utilise a structured approach to a sustainable outcome for the design and construction of the development including the following Sustainable Targets.

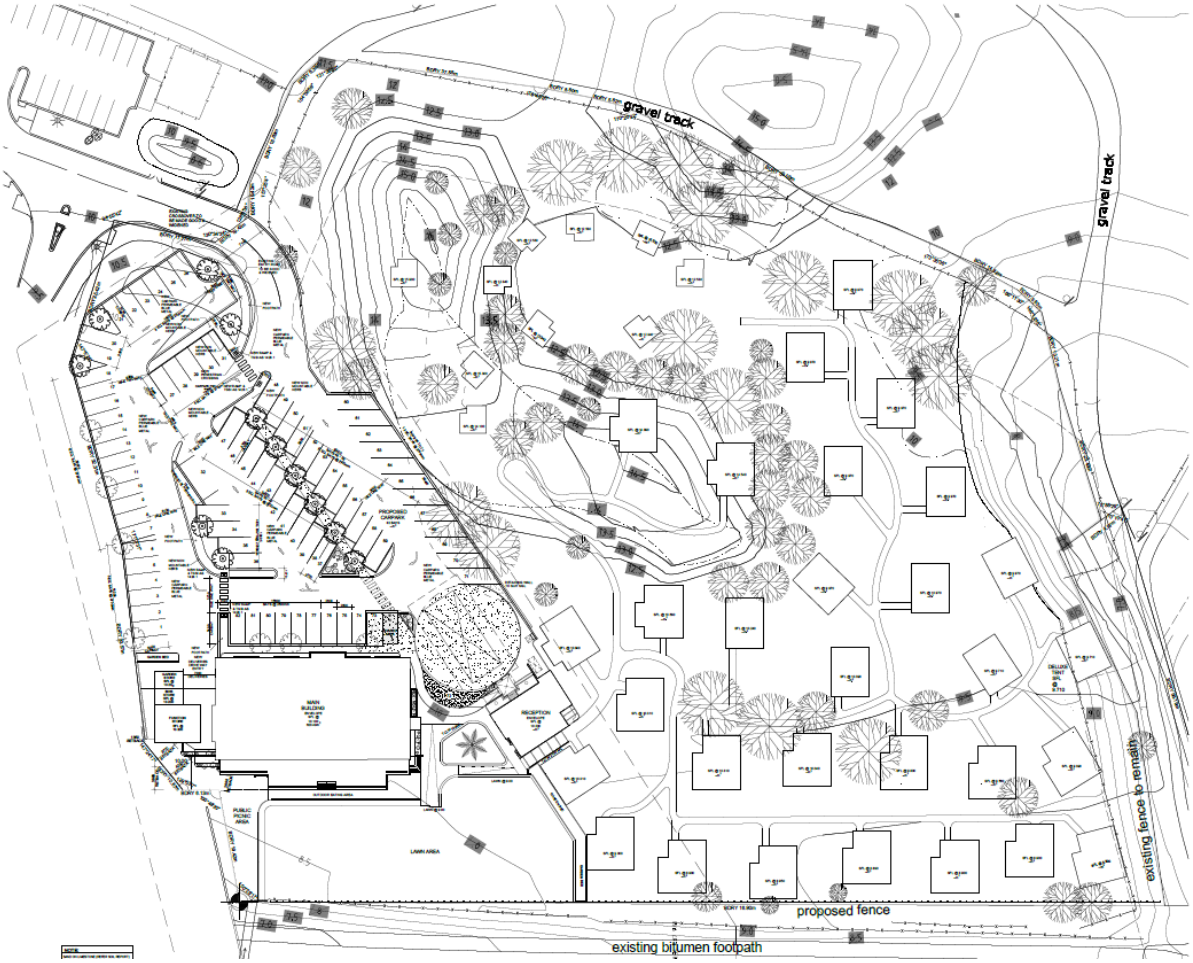
Table 1: Sustainability Targets

DESCRIPTION	GOAL	SUSTAINABILITY COMMITMENTS
CLEAR AIR	Improve indoor environment quality and health and wellbeing of occupants.	Outdoor air provided to primary areas at a rate at least **50%** greater than minimum in AS 1668.2:2012. *(TBC based on mechanical consultant).*
LIGHT QUALITY		Above **40%** of the regularly occupied areas have high level of daylight (above 160 Lux).
EXPOSURE TO TOXINS		The building's paints adhesives, sealants, and carpets are low in TVOC or non-toxic. The building's engineered wood products are low in TVOC or non-toxic. Occupants are not exposed to banned or highly toxic materials in the building.
HEAT RESILIENCE	Reduce impacts of long-term performance.	Light Roof Colour (SRI below 0.50)
ENERGY USE	Reduce emissions and water use.	A minimum of **30%** offset in operational energy usage
WATER USE		High WELS Ratings (these equal to above **30%** reduction in potable water).
LIGHTING USE		**20%** reduction in lighting power when compared to NCC DTS.
MOVEMENT AND PLACE	Low carbon options.	Provision for 2 x EV Charging Bays
DESIGN FOR INCLUSION	Social health.	Disability Access and inclusive design
BIODIVERSITY ENHANCEMENT	Improved Nature outcomes.	Plant additional local native trees on the site to further shade the outdoor areas and structures. Climate Resilience, drought tolerant planting.

2 PROJECT INFORMATION

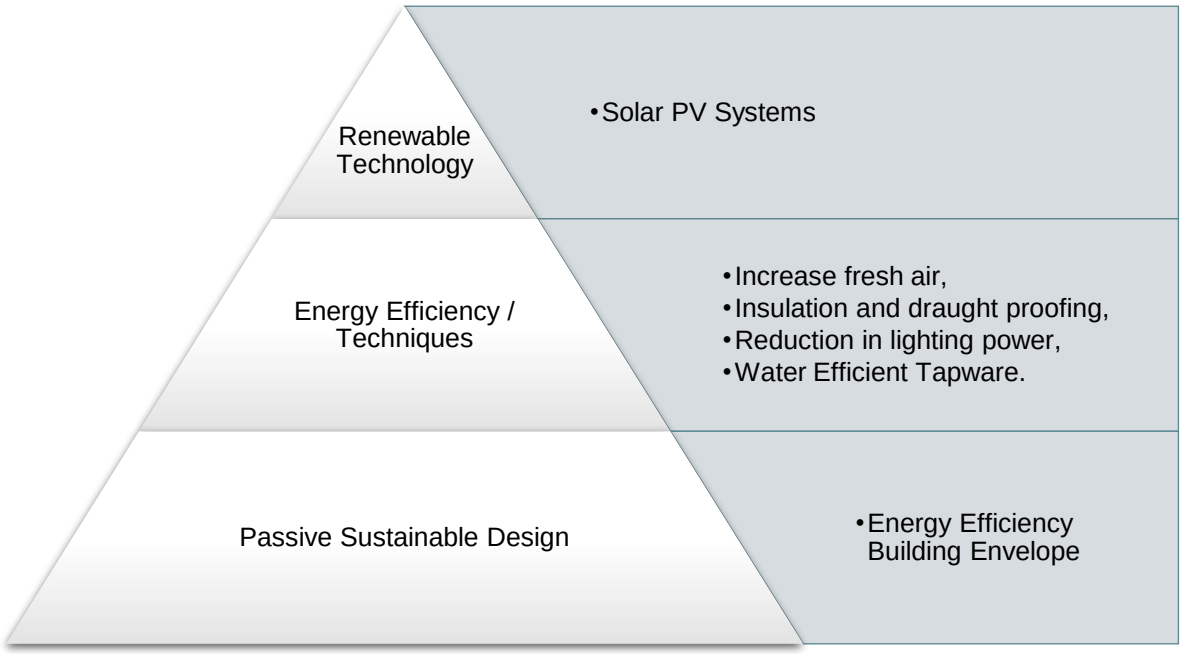
The proposed project is located on previously developed land. The site is now being redeveloped for community use.

Figure 1: Existing Site Images



3 ENERGY REDUCTION STRATEGY

Figure 2: Energy Reduction Strategy



4 COMPLIANCE SPECIFICATION

The assessment process adheres to the JV protocol outlined in the NCC 2022 Requirements. The project has incorporated the following specifications:

Table 2: Construction Specification

CONSTRUCTION		DESCRIPTION	MINIMUM REQUIREMENT
EXTERNAL WALLS	**External Steel Framed Wall**	FC Cladding on 90mm Steel Stud Frame with Plasterboard internally lined. External Finishes as per elevations.	**R2.5HD Insulation Batts + R0.2 Thermal Break**
	External Blockwork	100mm Concrete Structural Wall. External Finishes as per elevations.	**No Insulation Required.**
INTERNAL WALLS	**Steel Framed Wall**	Steel Framed Wall with Plasterboard Lining.	**No Insulation Required.**
	Coolroom Panel	100mm Coolroom Panel.	**No Additional Insulation Required.**
FLOORS	**Slab on Ground**	Concrete slab with ground contact. Floor coverings as per plans.	**No Insulation Required.**
ROOFS	**Roof Type 1**	Metal deck roof sheeting. **(SA=0.45).**	**65mm (R1.3HD) Anticon** with 300mm cavity and **50mm (R1.0) Insulation Blanket** to dropped plasterboard ceilings.

Table 3: Glazing Specification

WINDOW SPECIFICATION		MAX. U-VALUE	SHGC
TYPE 1	Single Clear glazing in aluminium frame. (i.e., 6.38mm **Viridian Laminated Clear**, or equal)	**6.22**	**0.73**

4.1 RESULTS

The figures shown below demonstrate the difference in performance between the Proposed Building and the Reference Building, allowing for a quantifiable comparison on the performance of each building.

Table 4: Estimated Energy Use Without solar PV

Without solar PV							
MODEL	HEATING	COOLING	FANS	LIGHTS	EQUIP	PV	TOTAL
Reference (kWh/m^2)	5.0	33.9	23.6	35.4	14.7	-	**112.6**
Proposed (kWh/m^2)	5.1	42.7	26.0	35.4	14.7	-	**124.0**
Energy Reduction							**-10.10%**

It's important to note that **20kW** solar photovoltaic (PV) system has been integrated into the proposed building's design to assist in offsetting the overall energy consumption.

Table 5: Estimated Energy Use With solar PV

With solar PV							
MODEL	HEATING	COOLING	FANS	LIGHTS	EQUIP	PV	TOTAL
Reference (kWh/m^2)	5.0	33.9	23.6	35.4	14.7	-	**112.6**
Proposed (kWh/m^2)	5.2	43.2	26.3	35.4	14.7	-29.15	**74.8**
Energy Reduction							**33.54%**

Table 6: Predicted Mean Vote (PMV) Summary

PREDICTED MEAN VOTE - % HOURS IN RANGE FOR	<= -1.00	>-1.00 TO <=1.00	>1.00
Class 6	0.13	99.87	0.01

5 HEALTH AND WELLBEING

5.1 PROVISIONS FOR INCREASED OUTDOOR AIR

Pollutants entering the building are minimised, and a high level of fresh air is provided to ensure levels of indoor pollutants are maintained at acceptable levels. It is proposed that outdoor air provided to primary areas will be at a rate at least 50% greater than minimum in AS 1668.2:2012, this will need to be confirmed by the mechanical engineer.

6 LIGHTING COMFORT

Lighting within the building must meet the following criteria:

- All lighting must be flicker-free.
- Light sources must have a minimum Colour Rendering Index (CRI) average R1 to R8 of 85 or higher and have a CRI R9 of 50 or higher.
- Light sources must meet best practice illuminance levels for each task within each space type with a maintained illuminance that meets the levels recommended in AS/NZS 1680.1:2006 series applicable to the project type and including maintenance.
- The maintained Illuminance values must achieve a uniformity of no less than that specified in Table 3.2 of AS/NZS 1680.1:2006, with a maintenance factor method as defined in AS/NZS 1680.4.; and
- All light sources must have a minimum of 3 MacAdam Ellipses.
- The walls within the field of view of occupants in regularly occupied spaces must have an average surface reflectance value of 0.70 and an average surface illuminance of at least 50% of the horizontal illuminance levels required for task.
- Vertical illuminance in workspaces: ensure that 50% of the horizontal task illuminance reaches the average eye height for 90% of primary spaces using vertical illuminance calculation grid.
- The illuminance values must be calculated in accordance with AS/NZS 1680 series for the relevant task.

6.1 EFFICIENT LIGHTING AND CONTROL

The installed aggregate illumination power has been designed to be **20%** below the maximum illumination power based on maximum allowable lighting power densities defined in Table J6.2a of the NCC 2019. Motion Detectors and daylight sensors are provided to reduce demand.

Table 7: Lighting Characteristics

PARAMETER	PROPOSED BUILDING	REFERENCE BUILDING
LIGHTING TYPE	LED light fittings	LED light fittings
DESIGN ILLUMINANCE (LUX)	Various lux	Various lux

NOMINAL LIGHTING POWER DENSITY (W/M^2)	**20%** less compared to NCC max requirements.	As per NCC max requirements.
OCCUPANT SENSOR CONTROLS	Motion sensors	N/A
DAYLIGHT CONTROLS	Yes	N/A
OTHER LIGHTING CONTROLS	Timer switches	N/A
ADJUSTMENT FACTOR APPLIED	0.9 – Motion sensor 1 0.7 – Motion sensor 2 0.55 – Motion sensor 3	Room Aspect Ratio

6.2 DAYLIGHTING

Emergen have completed preliminary daylight modelling. The analysis has been undertaken using IES software at finished floor level based on CIE standard overcast sky. The study boundary includes Primary Spaces only.

Table 8: Calculations Conditions - Daylight

CALCULATION CONDITIONS	
TEST FACTOR	Daylight Factor
SKY FACTOR	CIE Overcast Sky
DATE	March 21st 12:00pm

Table 9: Daylighting

BUILDING	PROPOSE USAGE	NOMINATED AREA (M²)	COMPLIANT AREA (M²)	COMPLIANT AREA (%)
TYPICAL FLOOR	Primary	458.291	355.551	77.6%

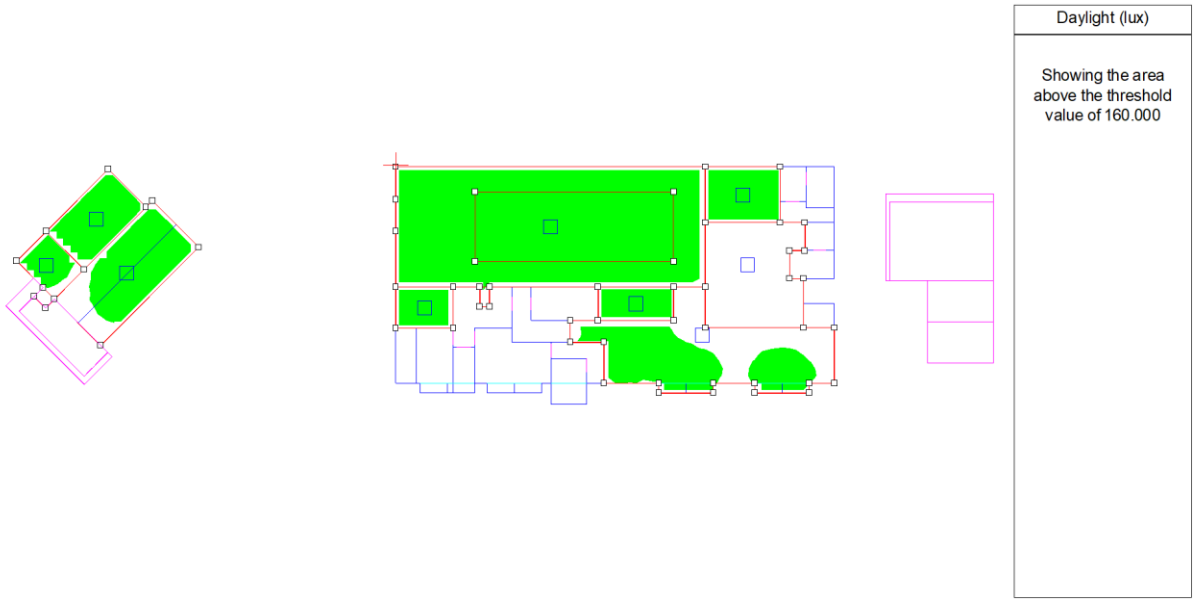


Figure 3: Daylighting for Primary areas

6.3 SOLAR ANALYSIS

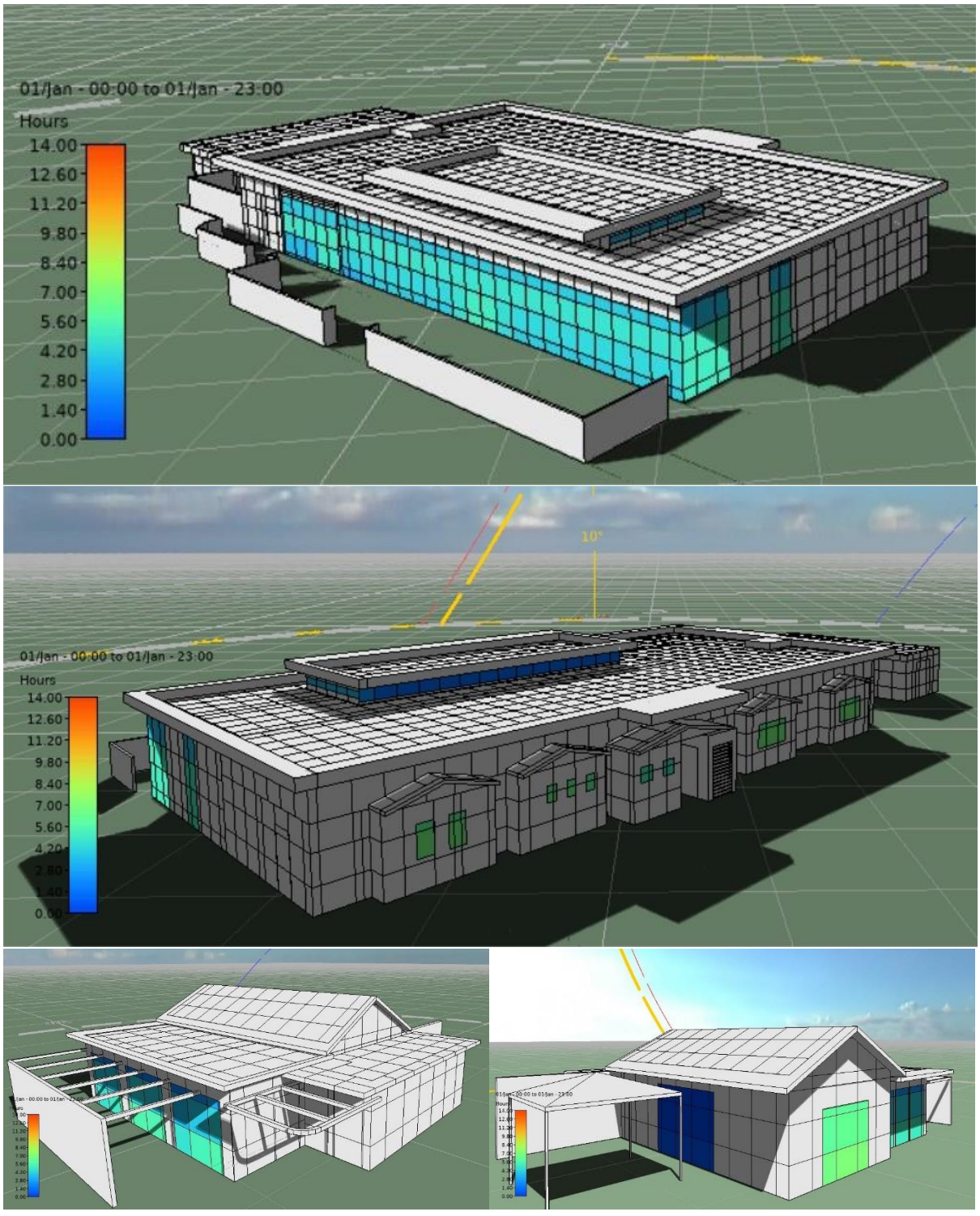


Figure 4: solar analysis.

The shading elements have been strategically designed to minimize extended solar exposure. Each window, as a result, receives approximately 1 to 5 hours of daylight over the course of the day, striking a balance between harnessing natural light and mitigating excessive sunlight exposure.

7 WATER EFFICIENCY

7.1 SUSTAINABLE WATER INITIATIVES

All new water fixtures are to ensure that high WELS rating fixtures and fitting are to be specified in line with minimum benchmarks below.

Table 10: WELS Ratings

FIXTURE / EQUIPMENT TYPE	WELS RATING
TAPS	6 Star
TOILETS	5 Star
URINALS	6 Star

Table 11: Estimated Water Use

FITTINGS	PROPOSED BUILDING WATER DEMAND (KL/YEAR)	STANDARD PRACTICE BUILDING WATER DEMAND (KL/YEAR)
TOILETS	34.0	68.0
URINALS	26.1	26.1
INDOOR TAPS	22.1	36.8
REDUCTION	**62.7%**	

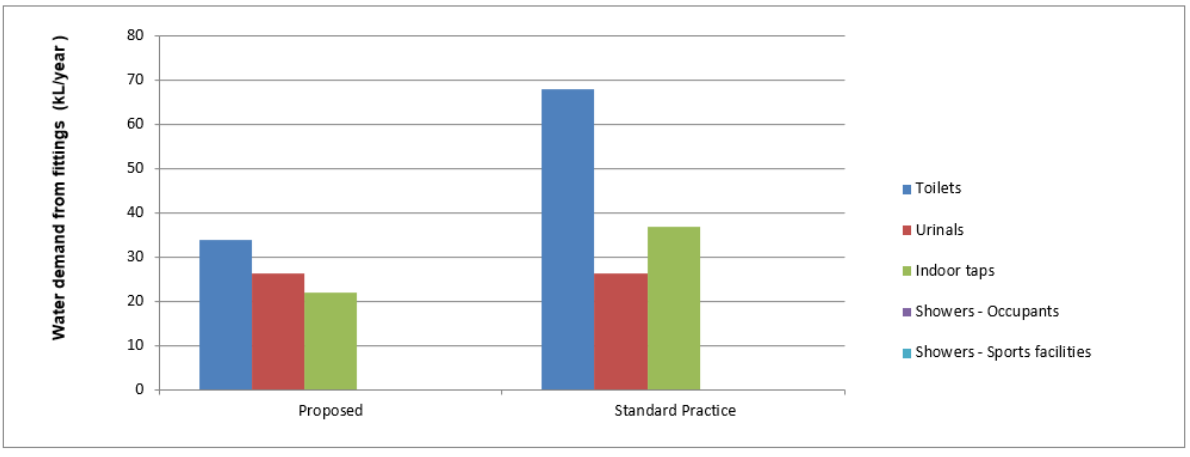


Figure 5: Graph for Estimated Water Use

8 MOVEMENT AND PLACE

8.1 BIKE FACILITY AND SUSTAINABLE TRANSPORT FACILITIES

It is the intention of this category to reduce occupant's dependency on carbon intensive vehicles. The development will install infrastructure to allow for future installation of EV charging stations and bike racks.

The resort can offer bicycles for rental or complimentary use, allowing guests to explore the coastline at their leisure. Providing access to bikes may incentivize guests to explore nearby attractions and discover local areas during their stay.

8.2 ENCOURAGING WALKABILITY

The building's design and location should encourage walking to and from a number of amenities. This means designing roads within the building boundary to prioritise pedestrians, and either providing within, or being located close to, a number of amenities.

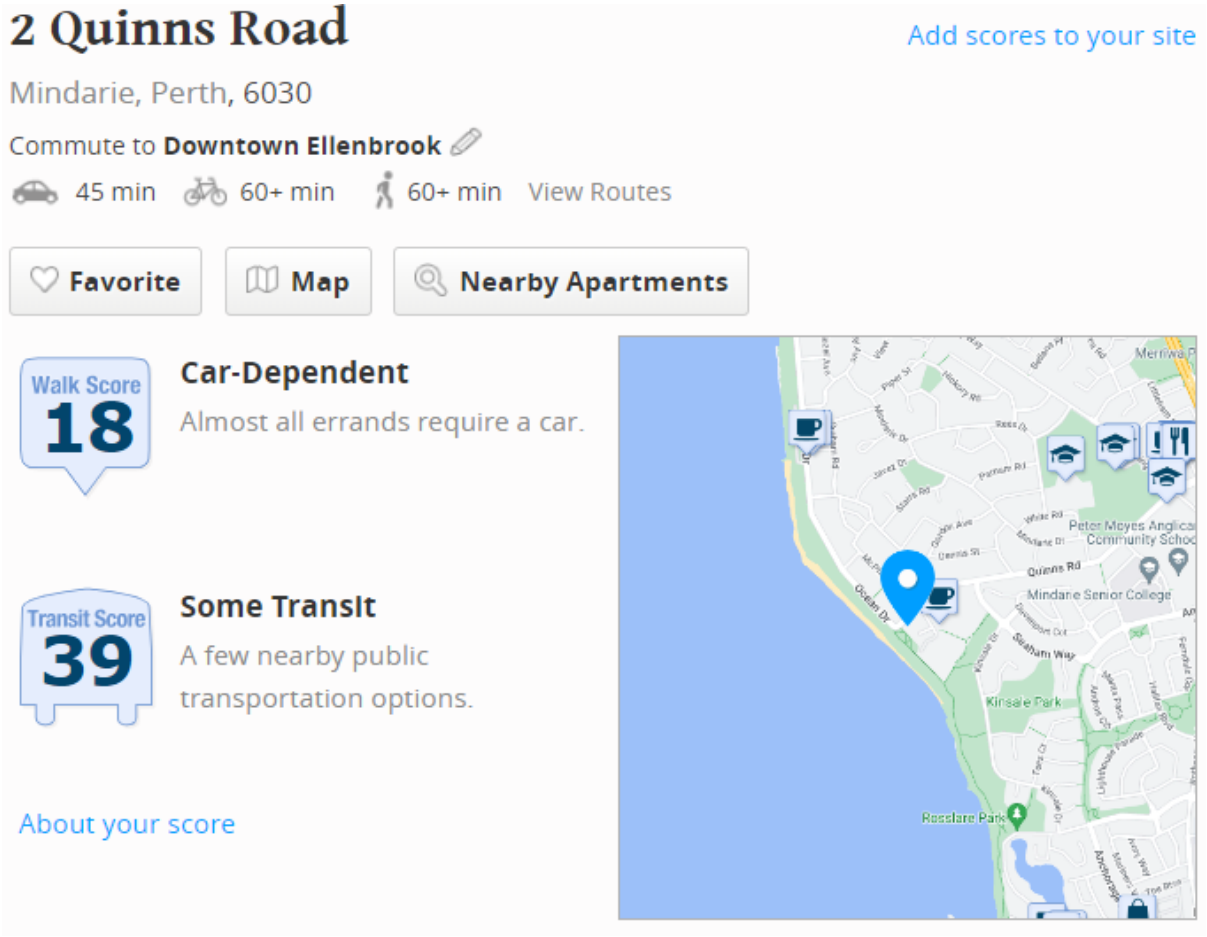


Figure 6: Walkability score of the site

9 LAND USE AND ECOLOGY

9.1 HEAT ISLAND EFFECT

The project will dedicate more than **50%** of the entire site area to include one or a combination of the following:

- Vegetation.
- Roofing materials, including shading structures, having the following:
  - For roof pitched <15°– a three-year SRI of minimum 64; or
  - For roof pitched >15°– a three-year SRI of minimum 34.
- Only where the three-year Solar Reflectance Index (SRI) for products is not available, use the following:
  - For roof pitched <15° – an initial SRI of minimum 82; or
  - For roof pitched >15° – an initial SRI of minimum 39.
- Unshaded hard-scaping elements with a three-year SRI of minimum 34 or an initial SRI of minimum 39.
- Hardscaping elements shaded by overhanging vegetation or roof structures, including solar hot water panels and photovoltaic panels.

9.2 BIODIVERSITY ENHANCEMENT

Landscaping should consist of native vegetation with crop coefficient of 0.5 or below. All landscaping irrigation to include drip irrigation and include moisture sensor override or alternatively the use of Xeriscape Garden. Where Xeriscape Garden is implemented, there will be a provision for the removal of irrigation within three months of landscaping installation reducing the need for watering after. Water for landscaping will be from non-portable sources (where available).

9.3 WASTE EFFICIENCY

A waste planning expert will produce a Waste Management Plan (OWMP) that addresses best practice in waste management, including:

- Identifying the objectives of the plan, by setting diversion from landfill targets and / or target for reducing total materials generation (general waste materials + recyclable / reusable materials);
- Clearly identify waste streams including general waste, paper and cardboard, glass and plastic;
- Clearly identify applicable bins for various waste streams, that allow for separation of recyclable streams – or use of comingled systems where appropriate.
- Clearly identify at least one other waste stream that can be recycled, and for which recycling facilities are provided.
- Clearly identify storage areas for all waste streams identified in the OWMP.
  - Area to be sized sufficiently for all streams nominated above, based on waste generated by the project and the collection frequency for each stream; and
  - Calculations shall be based on third-party best practice guidelines.
- Outline best practice access requirements for the collection of all waste streams identified in the OWMP.

- Outline individual roles responsible for delivering and reviewing the OWMP

10 EXPOSURE TO TOXINS

10.1 PAINTS, ADHESIVES, SEALANTS AND CARPETS

To meet the requirements, at least 95% of internally applied paints, adhesives, sealants (by volume), and carpets (by area) must meet TVOC (Total Volatile Organic Compounds) limits. Compliance with these limits can be achieved through one of the following methods:

1. Product Certification Scheme: The contractor can use products that are certified under a recognized and current Product Certification Scheme at the time of purchase. These schemes assess and verify the TVOC content of the materials, ensuring they meet the specified limits.
2. Laboratory Product Testing: If there are no certified products available, the contractor can conduct laboratory testing on the paints, adhesives, sealants, and carpets to determine their TVOC content. The testing should be carried out using the whole paint, including water and tinters, to obtain accurate results.
3. Absence of Non-compliant Materials: Alternatively, if none of the materials mentioned (paints, adhesives, sealants, and carpets) are present at the time of practical completion (PC), and thus no TVOC emissions are expected, compliance can be achieved.

All paints used for internal application on the job are to have a low TVOC content as outlined below. TVOC content must be based on whole paint (water and tinters included):

Table 12: Paint VOC limits

PRODUCT TYPE / SUBCATEGORY	MAX TVOC CONTENT (G/L OF READY TO USE PRODUCT)
Walls and ceilings – Any gloss level	16
Trim, varnishes and wood stains	75
Primers, sealers and prep coats	65

Maximum TVOC Content Limits for Paints, Varnishes and Protective Coatings
*EU Directive
The TVOC content of the 'ready-to-use' paint shall be theoretically calculated as the sum total of the VOCs of each of the raw material component comprising the paint.

Where the TVOC content of individual components is not known, it must be determined experimentally by one of the following testing methods as appropriate:

- ISO Method 17895 (2005), for a material with a presumed VOC content <1%;
- ISO Method 11890‑2 (2006), for a material with a presumed VOC <15%;
- ISO Method 11890‑1 (2007), for a material with a presumed VOC content >15%;
- ASTM D3960, which is comprised of four individual testing procedures that measures TVOC (D2369) as well as density (D1475) and water content (D4017). Exempt compounds (D4457) must not be subtracted in the calculation of VOC content.

The contractor must obtain written approval from the design team before using any sealant, adhesive, paint, flooring or fit out items. This approval will be contingent on the provision of proof that the product has a VOC content below that noted above.

At the end of construction, the contractor is required to undertake a final audit to ensure that the correct products have been used.

All sealants used in an internal application on the job are to have a low TVOC content as outlined below.

Table 13: Adhesives/Sealants VOC limits

PRODUCT	MAXIMUM TVOC CONTENT (G/LITRE)
General purpose adhesives and sealants	50
Acoustic sealants, architectural sealant, waterproofing membranes and sealant, fire retardant sealants and adhesives	250
Structural glazing adhesive, wood flooring and laminate adhesives and sealants	100
Primers, sealers and prep coats	65
One and two pack performance coatings for floors	140

Maximum TVOC limits for Adhesives & Sealants
*Sealants used to enhance the fire- and water-proofing properties are included.

The testing method applicable to adhesive and sealants is only ASTM D3960 as detailed above for paints. For more information on ASTM D3960 refer to South Coast Air Quality Management District Rule 1168.

The contractor must obtain written approval from the design team before using any sealant, adhesive, paint, flooring or fitout items. This approval will be contingent on the provision of proof that the product has a VOC content below that noted above.

At the end of construction, the contractor is required to undertake a final audit to ensure that the correct products have been used.

All carpets and/or other flooring used on the project are to have low TVOC emission rates as outlined below.

Table 14: Carpet VOC limits

ALL CARPET/FLOORING PRODUCTS MUST COMPLY WITH TVOC EMISSION LEVELS	
Total VOC limit	0.5 mg/m^2 per hour
4-pc (4-Phenolcycohexene) limit	0.05 mg/m^2 per hour

Compliance Testing: Refer to Carpet and Rug Institute Green Label (US) OR American Society for Testing and Materials (ASTM) D5116 Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Material/Products OR

For carpets and laminate floor coverings, an option for demonstrating compliance with TVOC levels is as follows: ISO 10580 (also known as ISO/TC 219) – Document N238 – Resilient,

Textile and Laminate Floor Coverings Evaluation of Volatile Organic Compounds Emissions, with a limit of 500µg/m^2/hr at 24 hours. OR

For floor coverings (other than carpet), an option for demonstrating compliance with TVOC levels is as follows:

ISO16000 parts 9, 10 and 11 (also known as the EN 13419), with a TVOC limit at three days of 5mg/m²/h and 0.5mg/m²/h at 28 days.

Carpet or other flooring installed as part of the base building works prior to fit out works, can be deemed re-used for the purpose of this credit.

The contractor must obtain written approval from the design team before using any sealant, adhesive, paint, flooring or fit out items. This approval will be contingent on the provision of proof that the product has a VOC content below that noted above.

At the end of construction, the contractor is required to undertake a final audit to ensure that the correct products have been used.

There are two options for demonstrating compliance for carpets, as follows:

Option A - Product Certification:

Carpets certified under a relevant Product Certification Scheme standard recognised by the GBCA under the GBCA assessment Framework for Product Certification Schemes are deemed to satisfy the requirements of this criterion. Relevant GBCA recognized standards are listed on the GBCA web site. The certificate must be current at the time of project registration or submission and list the relevant product name and model.

A UL GREENGUARD Children & Schools® certification current at the time of project registration or submission is another acceptable evidence for demonstrating compliant TVOC levels for carpets.

Option B - Experimental Testing

All carpets comply with the Total VOC (TVOC) limits within Table below. The emission levels detailed in this table must be established by a NATA or another ISO/IEC17025 accreditation laboratory.

Table 15: Flooring VOC limits

ALL CARPET/FLOORING PRODUCTS MUST COMPLY WITH TVOC EMISSION LEVELS – TO ASTM D5116 TEST PROTOCOL	
Carpets using ASTM D5116 Test Protocol:	
Total VOC limit	0.5 mg/m^2 per hour
4-pc (4-Phenolcycohexene) limit	0.05 mg/m^2 per hour
Carpet using ISO 16000 test protocol (also known as EN 13419)	
TVOC at three days-	0.5 mg/sqm per hour
Flooring using ISO 10580 (also known as ISO/TC 219) – Document	

TVOC at 24 hours - 0	0.5mg/sqm per hour

10.2 FORMALDEHYDE MINIMISATION

All engineered wood products used internally, including exposed and concealed applications, must have low formaldehyde emissions as defined in the table below, or contain no formaldehyde. Engineered wood products are defined as particleboard, plywood, veneer, MDF, Laminated Veneer Lumber (LVL), High-Pressure Laminate (HPL), Compact Laminate and decorative overlaid wood panels and include both finished and unfinished products.

These requirements are not applicable to exterior applications, formwork, internal car park applications, reused engineered wood products or raw timber.

The contractor must obtain approval from the design team before substituting any product.

The limits listed here are defined according to the test method. The levels listed are equivalent results for different test procedures.

Table 16: Formaldehyde emission limits

TEST PROTOCOL	EMISSION LIMIT/ UNIT OF MEASUREMENTS
AS/NZS 2269:2004, testing procedure AS/NZS 2098.11:2005 method 10 for Plywood	< 1.0 mg/L
AS/NZS 1859.1:2004 - Particle Board, with use of testing procedure AS/NZS 4266.16:2004 method 16	< 1.5 mg/L
AS/NZS 1859.2:2004 - MDF, with use of testing procedure AS/NZS 4266.16:2004 method 16	< 1.0 mg/L
JIS A 5908:2003- Particle Board and Plywood, with use of testing procedure JIS A 1460	< 1.0 mg/L
JIS A 5905:2003 - MDF, with use of testing procedure JIS A 1460	< 1.0 mg/L
JIS A1901 (not applicable to Plywood)	< 1.0 mg/L
ASTM D5116	<0.1 (+/- 0.0005) mg/m²hr (may also be represented as mg/m²/hr)
ISO 16000 part 9, 10 and 11 (also known as EN 13419)	<0.1 (+/- 0.0005) mg/m²hr (may also be represented as mg/m²/hr)
ASTM D6007	0.12mg/m³*
ASTM E1333	0.12mg/m³**
EN 717-1 (also known as DIN EN 717-1)	0.12 mg/m³
EN 717-2 (also known as DIN EN 717-2)	3.5 mg/m²hr (may also be represented as mg/m²/hr).
*The test report must confirm that the conditions of Table 1 comply for the particular wood product type, the final results must be presented in EN 717-1 equivalent (as presented in the table) using the correlation ratio of 0.98.	

11 CONCLUSION

In conclusion, the presented report provides a comprehensive overview of sustainability commitments that harmonize seamlessly with the core principles of the sustainability philosophy. These initiatives centre around the critical areas of energy conservation, water conservation, and waste reduction, showcasing a concerted effort to create a more environmentally responsible and resource-efficient approach. By prioritising these fundamental aspects, the report underscores a commitment to fostering a greener and more sustainable future.

Table 17: Sustainability Commitments

DESCRIPTION	GOAL	SUSTAINABILITY COMMITMENTS
CLEAR AIR	Improve indoor environment quality and health and wellbeing of occupants.	Outdoor air provided to primary areas at a rate at least **50%** greater than minimum in AS 1668.2:2012. *(TBC based on mechanical consultant).*
LIGHT QUALITY		Above **40%** of the regularly occupied areas have high level of daylight (above 160 Lux).
EXPOSURE TO TOXINS		The building's paints adhesives, sealants, and carpets are low in TVOC or non-toxic. The building's engineered wood products are low in TVOC or non-toxic. Occupants are not exposed to banned or highly toxic materials in the building.
HEAT RESILIENCE	Reduce impacts of long-term performance.	Light Roof Colour (SRI below 0.50)
ENERGY USE	Reduce emissions and water use.	A minimum of **30%** offset in operational energy usage
WATER USE		High WELS Ratings (these equal to above **30%** reduction in potable water).
LIGHTING USE		**20%** reduction in lighting power when compared to NCC DTS.
MOVEMENT AND PLACE	Low carbon options.	Provision for 2x EV Charging Bays
DESIGN FOR INCLUSION	Social health.	Disability Access and inclusive design
BIODIVERSITY ENHANCEMENT	Improved Nature outcomes.	Plant additional local native trees on the site to further shade the outdoor areas and structures. Climate Resilience, drought tolerant planting.