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Prepared for Lederer Group

Supplementary Report;
Consolidated list of ESD commitments
GOSFORD ALIVE

To be built at
136 Donnison Street, Gosford 2250

Issue	File Ref.	Description	Author	Date
A	20-0067	Ecologically Sustainable Development Summary	TC	04-03-20



This is a supplementary report to the Ecologically Sustainable Development (ESD) Report (issue B) prepared by Efficient Living, dated August 2019. The Department of Planning requested a consolidated list of ESD commitments that will be implemented into the future GOSFORD ALIVE development.

The following list of best practice initiatives shall be implemented into the Gosford Alive project as a minimum commitment to achieve the sustainability objectives.

THERMAL COMFORT	<ul style="list-style-type: none"> • Performance glazing throughout (Retail Display glazing excluded) • Low-emissivity glass as required to control solar heat gains • External shading structures optimised for orientation and sun angles • Natural ventilation encouraged through selection of appropriate window sash types • Minimum R2.0 added wall insulation to all external walls • Green roof to podium • Vertical green gardens or fixed planters to soften facades • High thermal mass construction • Internal window furnishings to control heat gains
ENERGY RESIDENTIAL	<ul style="list-style-type: none"> • LED lighting throughout • Minimum 4 star performance rating for dishwashers • All bathroom, laundry and kitchen exhausts externally ducted • Air-conditioning to have high Energy Efficiency Ratings (EER)
ENERGY BASE BUILDING	<ul style="list-style-type: none"> • LED lighting throughout all common areas and carparks • Use of solar lights where appropriate outdoors • Common area lighting controls: daylight sensors, time clocks, motion sensors, dimmers and zoned switching • Carpark ventilation to be connected to CO2 monitors and VSD fans • Destination control lifts where practical • Lifts fitted with regenerative drive technology • Lifts and travelators connected to timers and designed to deactivate when not in use • Minimum R1.0 piping insulation to all hot water ring mains • Building Management and Control System (BMCS) installed to control base building energy consumption • On-going regular commissioning carried out to optimise buildings energy efficiency into the operational phase • Building Users Guide
CIRCULATION SPACES & COMMON AREAS	<ul style="list-style-type: none"> • Open air and naturally ventilated spaces where practical • External grade fans, planting and water features encouraged • Air-conditioned spaces minimised
WATER	<ul style="list-style-type: none"> • All rainwater from the tower roof tops to be collected into a rainwater tank with a minimum of 20,000L capacity • Rainwater tank to be connected to the common area gardens for irrigating vegetation, and to car wash bays



	<ul style="list-style-type: none"> • Irrigation systems to include automatic timers with soil moisture controls • Selected plants to be native to the local area or drought resistant species • All showers to have a flow rate under 7 litres per minute • Minimum 5 star performance rating to tapware (bath excluded) • Minimum 4 star performance rating to toilets • Metering and monitoring of major water uses
STORMWATER	<ul style="list-style-type: none"> • Where possible, storm-water runoff to be directed to lawn and garden beds for irrigation • On-site stormwater detention (OSD) tank strategy appropriately designed for future trends • Appropriate devices and filtration systems • Water Sensitive Urban Design (WSUD) employed
POOLS AND SPAS	<ul style="list-style-type: none"> • All pools and spas to have covers • Pool and spa pumps to be controlled by timers • Pools to have energy efficient heating; Electric heat pump, Solar or Geothermal
GREEN ROOF & VERTICAL GARDENS	<ul style="list-style-type: none"> • The podium will incorporate grassed areas and planters, there is also elevated common areas and terraces with planting in line with the landscape plan.
BUILDING MATERIALS	<ul style="list-style-type: none"> • Use of non-toxic substances including low VOC paints, glues and sealants • Concrete used on site to contain recycled concrete aggregate (RCA) in areas that won't affect the strength properties of the concrete • Sustainably sourced building materials considered
TRANSPORT	<ul style="list-style-type: none"> • Excellent location to public transport, walkable neighbourhoods and natural settings for exercise and relaxation • Active transport plan promoted • Provision of dedicated small car and share car parking spaces • Provision of bike racks suitable for residents, retail and commercial employees and customers • Bike share / rental facilities • Showering facilities to promote active transport options
RENEWABLE ENERGY	<ul style="list-style-type: none"> • A minimum of 200m² of solar Photovoltaics (PV) on top of the residential towers used to reduce the base building energy consumption • Pool heating to come from a solar / renewable energy source
FUTURE PROOFING	<ul style="list-style-type: none"> • Minimum 25 electric vehicle charging stations • Consideration to be given to the size of cable and electrical wire with regards to changing technology and occupant needs over the buildings life.