

PRELIMINARY GREEN STAR REPORT

for

Proposed Mixed Use Development

at the former

Kirrawee Brick Pit , Kirrawee

FOR ACHIEVING FOUR STAR GREEN STAR RATING

Prepared for:

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INTRODUCTION:

In reply to the NSW Government Planning and Infrastructure letter Ref MP10_0076 we now comment on Attachment 1 Issues to be addressed in the Preferred Project Report item Ecological Sustainable Development as noted below

ATTACHMENT 1**Issues to be addressed in the Preferred Project Report
Ecological Sustainable Development**

The PPR shall indicate the likely Green Star level that each building within the development will achieve, and what ESD principles will be incorporated to achieve the desired Green Star level. The desired Green Star level and those principles used to achieve the level shall be incorporated into the Statement of Commitment

GREENSTAR RATING:

The likely Green star rating for the Commercial and Retail buildings shall be **4 Star** which signifies “Best Practice”

ESD PRICIPLES:

The ESD Principles that will be used to achieve the Green Star Rating are scheduled in the attached Appendices:

Retail	Appendix A
Commercial	Appendix B

CONCLUSION:

On the basis of the Proposed Credit Summary for the Retail and Commercial buildings it is concluded that the proposed Commercial and Retail buildings have the potential of achieving a GREEN STAR RATING OF 4 STAR which is recognised in the industry as “BEST PRACTICE”.

Signed
Colin Field



Director

RETAIL

APPENDIX A

CREDIT TARGETTED FOR 4 STAR GREEN STAR RATING

Category	Credit	Credit Title	Max score	Target Score
Management	Man-1	Green Star Accredited Professional	2	2
	Man-2	Commissioning - Clauses	2	2
	Man-3	Building Tuning	1	1
	Man-4	Independent Commissioning Agent	1	1
	Man-5	Building User Guides	2	1
	Man-6	Environmental Management	2	2
	Man-7	Waste Management	2	2
	Man-8	Waste and Recycling Management	2	1
	Man-9	Building Management Systems	1	1
		<u>SUB TOTAL</u>	15	13
Indoor Environmental Quality	IEQ-1	Ventilation Rates	3	1
	IEQ-2	Air Change Effectiveness	1	0
	IEQ-3	CO2 Monitoring and Control	1	1
	IEQ-4	Daylight	1	1
	IEQ-5	Thermal Comfort	1	1
	IEQ- 6	Hazardous Materials	1	1
	IEQ-7	Internal Noise Level	1	1
	IEQ-8	Volatile Organic Compound	3	3
	IEQ-9	Formaldehyde Minimization	1	1
	IEQ-10	Mould Prevention	1	1
		<u>SUB TOTAL</u>	14	11

Energy	Ene	Conditional Requirement	Cond Req	Yes
	Ene-1	Greenhouse Gas Emissions	20	3
	Ene-2	Energy Sub-metering	2	2
	Ene-3	Peak Energy Demand Reduction	2	1
	Ene-6	Car Park Ventilation	3	1
		<u>SUB TOTAL</u>	27	7
Transport	Tra-1	Provision of Car Parking	2	2
	Tra-2	Fuel Efficient Transport	1	1
	Tra-3	Cyclist Facilities	3	3
	Tra-4	Commuting Mass Transport	5	2
	Tra-5	Trip Reduction Mixed Use	1	1
		<u>SUB TOTAL</u>	12	9
Water	Wat-1	Occupant Amenity Water	10	5
	Wat-2	Water Meters	3	3
	Wat-3	Landscape Irrigation	1	1
	Wat-4	Heat Rejection Water	8	4
	Wat-5	Fire System Water	1	1
		<u>SUB TOTAL</u>	23	14
Material	Mat-1	Recycling Waste Storage	3	3
	Mat-2	Building Reuse	6	0
	Mat-3	Recycled content & Materials	3	1
	Mat-4	Concrete	3	1
	Mat-5	Steel	2	1
	Mat-6	PVC	2	1
	Mat-7	Sustainable Timber	2	1
	Mat-8	Design for Disassembly	1	0
	Mat-9	Dematerialization	1	1
		<u>SUB TOTAL</u>	23	9

Ecology	Eco-	Conditional Requirement	Cond Req	Yes
	Eco-1	Topsoil	1	1
	Eco-2	Reuse of Land	1	0
	Eco-3	Reclaimed Contaminated Land	2	2
	Eco-4	Change of Ecological Value of Site	4	1
		<u>SUB TOTAL</u>	8	4
Emission	Emi-1	Refrigerant ODP	1	1
	Emi-2	Refrigerant GWP	2	2
	Emi-3	Refrigerant Leaks	2	2
	Emi-4	Insulant ODP	1	1
	Emi-5	Watercourse Pollution	3	1
	Emi-6	Discharge to Sewer	5	1
	Emi-7	Light Pollution	1	1
	Emi-8	Legionella	1	1
		<u>SUB TOTAL</u>	16	10
Innovation	inn-1	Innovative Strategies and Technology	2	0
	Inn-2	Exceeding Green Star Standard	2	0
	Inn-3	Environmental Design Initiative	1	0
		<u>SUB TOTAL</u>	5	0

RETAIL**PROJECT SCORE SHEET:**

CATEGORY	AVAILABLE POINTS	POINTS ACHIEVED	CATEGORY SCORE (%)	WEIGHING FACTOR FOR NSW (%)	WEIGHTED CATEGORY SCORE
Management	15	13	0.867	10	8.67
Indoor Environment Quality	14	11	0.786	12	9.43
Energy	27	7	0.259	24	6.22
Transport	12	9	0.750	8	6.00
Water	23	14	0.609	19	11.57
Material	23	9	0.391	10	3.91
Land Use & Ecology	8	4	0.500	9	4.50
Emission	16	10	0.625	8	5.00
				SUB TOTAL	55.30
Innovation	5	0	Score added directly	TOTAL	55.30

Note: For a FOUR Star Rating, the building must achieve a total weighted category score between 45 – 59

COMMERCIAL

APPENDIX B

CREDIT TARGETTED FOR 4 STAR GREEN STAR RATING

Category	Credit	Credit Title	Max score	Target Score
Management	Man-1	Green Star Accredited Professional	2	2
	Man-2	Commissioning - Clauses	2	2
	Man-3	Building Tuning	2	2
	Man-4	Independent Commissioning Agent	1	1
	Man-5	Building User Guides	1	1
	Man-6	Environmental Management	2	2
	Man-7	Waste Management	2	2
		<u>SUB TOTAL</u>	12	12
Indoor Environmental Quality	IEQ-1	Ventilation Rates	3	1
	IEQ-2	Air Change Effectiveness	2	0
	IEQ-3	CO2 Monitoring and Control	1	1
	IEQ-4	Daylight	3	1
	IEQ-5	Day Light Glare Control	1	1
	IEQ-6	High Frequency Ballast	1	1
	IEQ-7	Electric Lighting Level	1	1
	IEQ-8	External Views	2	0
	IEQ-9	Thermal Comfort	2	2
	IEQ-10	Individual Comfort Control	2	0
	IEQ- 11	Hazardous Materials	1	1
	IEQ-12	Internal Noise Level	2	2
	IEQ-13	Volatile Organic Compound	3	2
	IEQ-14	Formaldehyde Minimization	1	1
	IEQ-15	Mould Prevention	1	1
	IEQ-16	Tenant Exhaust Riser	1	1
		<u>SUB TOTAL</u>	27	16

Energy	Ene	Conditional Requirement	Cond Req	Yes
	Ene-1	Greenhouse Gas Emissions	20	3
	Ene-2	Energy Sub-metering	2	2
	Ene-3	Lighting Power Density	3	1
	Ene-4	Lighting Zoning	2	2
	Ene-5	Peak Energy Demand Reduction	2	2
		<u>SUB TOTAL</u>	29	10
Transport	Tra-1	Provision of Car Parking	2	2
	Tra-2	Fuel Efficient Transport	1	1
	Tra-3	Cyclist Facilities	3	3
	Tra-4	Commuting Mass Transport	5	2
		<u>SUB TOTAL</u>	11	8
Water	Wat-1	Occupant Amenity Water	5	5
	Wat-2	Water Meters	1	1
	Wat-3	Landscape Irrigation	1	1
	Wat-4	Heat Rejection Water	4	2
	Wat-5	Fire System Water Consumption	1	1
		<u>SUB TOTAL</u>	12	10
Material	Mat-1	Recycling Waste Storage	2	2
	Mat-2	Building Reuse	6	0
	Mat-3	Re-used Materials	1	0
	Mat-4	Shell and Core or Integrated fitout	2	2
	Mat-5	Concrete	3	1
	Mat-6	Steel	2	1
	Mat-7	PVC	2	1
	Mat-8	Sustainable Timber	2	1
	Mat-9	Design for Disassembly	1	0
	Mat-10	Dematerialization	1	1
		<u>SUB TOTAL</u>	22	9

Land Use & Ecology	Eco-	Conditional Requirement	Cond Req	Yes
	Eco-1	Topsoil	1	0
	Eco-2	Reuse of Land	1	0
	Eco-3	Reclaimed Contaminated Land	2	1
	Eco-4	Ecological Value of Site	4	1
		<u>SUB TOTAL</u>	8	2
Emission	Emi-1	Refrigerant ODP	1	1
	Emi-2	Refrigerant GWP	2	2
	Emi-3	Refrigerant Leaks	2	2
	Emi-4	Insulant ODP	1	1
	Emi-5	Watercourse Pollution	2	1
	Emi-6	Discharge to Sewer	5	1
	Emi-7	Light Pollution	1	1
	Emi-8	Legionella	1	1
		<u>SUB TOTAL</u>	15	10
Innovation	inn-1	Innovative Strategies and Technology	2	0
	Inn-2	Exceeding Green Star Standard	2	0
	Inn-3	Environmental Design Initiative	1	0
		<u>SUB TOTAL</u>	5	0

COMMERCIAL**PROJECT SCORE SHEET:**

CATEGORY	AVAILABLE POINTS	POINTS ACHIEVED	CATEGORY SCORE (%)	WEIGHING FACTOR FOR NSW (%)	WEIGHTED CATEGORY SCORE
Management	12	12	1.000	9	9.00
Indoor Environment Quality	27	16	0.592	20	11.85
Energy	29	10	0.345	25	8.62
Transport	11	8	0.727	8	5.82
Water	12	10	0.833	12	10.00
Material	22	9	0.409	14	5.73
Land Use & Ecology	8	2	0.0.25	6	1.5
Emission	15	10	0.667	6	4.00
				SUB TOTAL	57.5
Innovation	5	0	Score added directly	TOTAL	57.5

Note: For a FOUR Star Rating, the building must achieve a total weighted category score between 45 – 59