

MASTERPLANNING MAXIMUM DEMAND CALCULATION

Project Name:	Yarralumla Brickworks
Project No:	S4B20002400
Date:	11-02-2022



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Block	Units / Area	Demand per unit / area	Total (kVA)	Comments
Precinct 1				
Apartments	114	3000	342	Allows for instantaneous electric hot water
Townhouses	20	5500	110	extra allowance for additional AC load.
Basement carparking	11500	15	173	
lifts	8	14	112	
Electric vehicle charging common areas	57	3600	154	Allowance for 3.6kW standard charger for 50% of apartments @75% diversity factored into the 15W/m for the carparking
890 kVA				
Precinct 2				
Terrace housing	21	5500	116	extra allowance for additional AC load.
carparking	45	15	24	from road hierarchy plan
lifts	0	14	0	walk ups
common areas				factored into the 15W/m for the carparking
139 kVA				
Precinct 3				
Terrace housing	22	5500	121	extra allowance for additional AC load.
carparking	7200	15	108	from road hierarchy plan
lifts	0	14	0	walk ups
common areas				factored into the 15W/m for the carparking
229 kVA				
Precinct 4				
Apartments	44	3000	132	assumed instantaneous hot water
carparking	88	15	46	average 2 per apartment
lifts	2	14	28	assumed 2 cores
Electric vehicle charging common areas	22	3600	59	Allowance for 3.6kW standard charger for 50% of apartments @75% diversity factored into the 15W/m for the carparking
266 kVA				
Heritage Core				
Retail precinct	4020	180	724	existing heritage precinct areas from DIS traffic study. Load increased to cater for food retail and swimming pool/spa facility
EV fast chargers	3	50000	150	
external lighting	2000	3	6	estimated area
880 kVA				
Precinct 5				
Apartments	80	3000	240	assumed instantaneous hot water
carparking	163	15	86	from road hierarchy plan
lifts	4	14	56	assumed two cores, one lift per core
Electric vehicle charging common areas	40	3600	108	Allowance for 3.6kW standard charger for 50% of apartments @75% diversity factored into the 15W/m for the carparking
490 kVA				
Precinct 6				
Townhouses	31	6000	186	extra allowance for additional AC load.
carparking	75	15	39	from road hierarchy plan
lifts	2	14	28	assumed two cores, one lift per core
common areas				factored into the 15W/m for the carparking
253 kVA				
Precinct 7				
Townhouses	18	6000	108	extra allowance for additional AC load.
carparking	75	15	39	from road hierarchy plan
lifts	2	14	28	assumed two cores, one lift per core
Electric vehicle charging common areas	9	3600	24	Allowance for 3.6kW standard charger for 50% of apartments @75% diversity factored into the 15W/m for the carparking
200 kVA				
Precinct 8				
Townhouses	10	5500	55	extra allowance for additional AC load.
carparking	25	15	13	from road hierarchy plan
lifts	0	14	0	walk ups
Electric vehicle charging common areas	5	3600	14	Allowance for 3.6kW standard charger for 50% of apartments @75% diversity factored into the 15W/m for the carparking
82 kVA				
T2,3,4,5,6	10	5500	55	Stand alone house blocks
55 kVA				
T7-21	14	5500	77	Stand alone houses
77 kVA				
Site total			3560 kVA total	

Notes
 Typical allowance of 3.0kVA per apartment to allow for electric instantaneous hot water
 Typical allowance of 5.5kVA per townhouse/terrace house to allow for electric instantaneous hot water and increased AC loads
 Basement carparks assumed to be 35m2/ space