Connection Application - Large, Multiple and Remote Connections



If you are an ASP you must provide your

accreditation number and level (1,2,3)

FORM NECF-03

Electrical Contractor Licence No.* (If E above)

Who should use this form How to submit this form to Ausgrid Use this form if you: Sydney, Central Coast and Hunter • require a new or altered service connection greater than 100 Amps OR (02) 4399 8007 Fax: 1300 662 089 • require new infrastructure to provide electricity to a subdivision of land OR Fax (local call): • require a new or altered connection at high voltage OR Email to: datanorth@ausgrid.com.au • require a new or altered service connection at 100 Amps WHERE **Upper Hunter only** - the development comprises more than 6 separate units OR Fax: (02) 6542 9037 - any item of plant or equipment is rated at 30 amps or more Email to: datamuswellbrook@ausgrid.com.au For other connections use NECF-02 Connection Application - Residential and Small Commercial Connection Total number of pages sent* 1 3 **General enquiries** More information on completing this form can be found on our website: www.ausgrid.com.au/connectingtothenetwork Fields marked with an * are mandatory. This form is to be completed using BLOCK LETTERS only Any application marked TBA or TBD will be incomplete and will be returned with advice that Ausgrid will not be able to process the application until a complete application is re-submitted. If you do not have all the required information at this stage and are only interested in determining how your proposed development will be supplied, you should consider lodging a preliminary connection enquiry, using our form NECF-01. PART A: PREMISES AND DEVELOPMENT DETAILS 1. Premises and Owner Details Retailer NMI Your NMI can be found on your electricity bill. |N|A Put NA for a new site. Property Name CIOILIL | E | G | E | C | A | T | H | E | R | I Α U LI EI YI IC A T H O L ΝĒ d Street No. or RMB* Lot No.3 DP No 3 Floor No Unit No. 5|0|7 or | 4 | 1 | 2 |1 |0 |6 |3 |9 |0 |2 Post Code* Street Name* R O A D 2 3 0 2 Nearest Cross Street Suburb* |M | E | D | O | W | I | E | | R | I | C | H | A | R | D | S | O | R QN Name of Registered Proprietor of Land* TRUSTERS OF ROAMN CATHOLIC CHURCH DIOCESE OF MAITLAND | NEWCAST the premises. Address of Registered Proprietor of Land* Post Code* 8 4 1 | | H | U | N | T | E | R | | S | T | | N | E | W | C | A | S | T | L | E | | | W | E | S | T | |2|3|0|2| 2. Retail Customer or Real Estate Developer Details Tick here if you are the land owner Now proceed to Section 3 Title, First Name, Last Name ABN (if applicable) 7 | 9 | 4 | 6 | 9 | 3 | 4 | 3 | 0 | 5 | | G | E | O | F | F | Company Name (if applicable and provide representative details above) Phone No. P| A| C| I| F| I | C | | L | I | N | K | | H | O | U | S | I | N | G | 0 | 2 | 4 | 9 | 7 | 9 | 1 | 2 | 8 | 0 Postal Address * Mobile Phone No. |P |O | B |O |X N E W C A S T L E | N S W Email Address* Fax No. | f|a|c|i | i|t|i |e|s|@|m|n|.|c|a|t|h|o|l|i|c|.|e|d|u|.|a|u| 3. About You - The Connection Applicant Questions in this section are about the person making this Connection Application. What type of applicant are you?* A = Retail Customer, D = You are applying on behalf of a retail customer or developer (write A, B, C, D,E or F) B = Real Estate Developer **E** = Electrical Contractor on behalf of a customer or developer C = Energy Retailer F = ASP on behalf of a customer or developer Title, First Name, Last Name ABN (if applicable) M A T T H E W S U T I C 6 7 0 5 3 1 1 2 5 0 Phone No. * (and/or) Company Name (if applicable and provide representative details above) |R |O |J |E |C |T |S | A U S RALIA 0 2 4 9 6 7 5 9 Postal Address * Mobile Phone No.* $B \mid O \mid X$ 0 4 2 9 6 8 7 |P |O | 6 |m |a t|t |h |e| |w| |@ |e || |e| |c || |r| |i || |a| || |r| ||o || || ||e| ||c || ||s| ||t ||r ||a| ||. ||d ||o| ||m| ||. ||a

ASP No.* (If F Above)

and/or

Level

5 0 7 M
4. Electrical Contractor Details (if available) Tick here if the same as Section 3 above_ Now proceed to Section 5
Title First Name and Last Name (or Company Name) ABN (if applicable)
Postal Address Phone No.
Email Fax No.
Electrical Contractor Licence No.
PART B: LOAD DETAILS
5. Connection Details
(i) Connection Timeframes
(a) When do you expect the construction of the premises connection assets to commence?* (b) When do you wish to energise (ie turn on the supply to) the premises?*
Premises connection assets are the components of the distribution system used to provide the connection service to the premises eg service cable, metering, new Ausgrid pole, pillar or substation etc.
(ii) Existing Connection (if applicable)
Existing Point of Common Coupling Asset No. This is the No. of the pole, pillar or substation. If there is no asset No. put Pole Pillar Substation U N K N O W N "unknown".
If you have an existing supply, is it from a substation located on the premises?* Y N X
subdivision, eg provide low voltage reticulation within an URD subdivision?* (b) No. of lots in the subdivision* (c) Nearest existing Ausgrid Asset* Pole Pillar Substation This is the number of the pole, pillar or substation. If there is no asset number put "unknown".
(iv) Proposed Point of Common Coupling * (Please tick one) Asset No. Pole Pillar Substation X U N K N O W N ■ This is the number of the pole, pillar or substation. If there is no asset number put
Pole Pillar Substation No IV V V V V V V V V V V V V V V V V V V
(v) Proposed Point of Supply* (Please tick one or if Other, please describe)
Private Pole / Pit / Pillar Main Switchboard X Front of Premises Other
(vi) Connection Type* (Please tick all that apply)
New X Upgrade Alteration Separation Amalgamation
(vii) Embedded Generation Details* (e.g. solar, wind, hydro, back-up and standby) (solar, wind, gas, etc)
(a) Does the premises have Y N X ► If Yes Rated Output kW Type:
(b) Are you upgrading or installing N N N N N N N N N N N N N N N N N N N
(c) Your Installer's Clean Energy Council Accreditation No. Only complete if embedded generation comprising of AS/NZS 4777 compliant components is being installed

Street Address	s of the Premises (to be com	pleted by applicant) * E R O A D					Post Code* 2 3 1 8
(viii) Service (Please tick	J1 -	nderground X L	JGOH	Off Pole ansformer	Busbar Supply		
(ix) Service Si		200 Amps 400	Amps	630 Amps	800 Amps	1000 Amps	
	1200 Amps	1600 Amps 2000	Amps X 2	500 Amps	3000 Amps		
	Other	Describe (Complete if Oth	er is ticked, eg high	voltage connection at	t 11KV)		
(x) Number of (Please tick		1 Phase 2 Ph	nases	3 Phases X	<u></u>		
(xi) Metering I	Details* eters being installed as par	t of this connection appli	cation?*	Y N ▶	If yes, number of m	eters in (b) below mu	st be completed
(b) Number of (enter total r		ase Three P	hase (E3) 2		ngle Phase & led Load(E2)	Controlled Controlled	
(-)	I generation metering: able or describe)	Net	Gross	Other			
(d) Will your ir	nstallation be CT metered?*	YX N ► II	f yes, <i>CT Meteri</i> i	ng Form must be so	ubmitted. Refer to that	t form for submission	details
(xii) Type and Number of Premises	Land Title Type* (Please tick one)	Premises Us (Please tick one or m	•	of Premises* er total number)		n of the following a premises?* (one mu	• •
	Torrens	Residenti	ial		ι	Jrban X	Unknown
	Strata	Commercial / Industri	ialX	1		Rural	
	Community Title	House Service	es		■ Only fill out Installation	House Services if yo	ou have Multiple
		Builder's Service	ce		installation	5	
(xiii) Calculate	ed Maximum Demand in E	Each Phase (Amps)	▼ This	question is not aski	ng about service ratin	g.	
(a) Existing Ma	aximum Demand N	A B N A	N A	Amps Ex	xisting Service Len	gth NA	m
	Maximum Demand * 2 w & Existing Load)	0 7 6 2 0 7 6	2 0 7 6	Amps Pr	roposed Service Le	ength* < 5 (0m
` '	num Demand Calculation wo	orksheet YX		NZS3000 must be at	e maximum demand o ttached to this form ur		
	I Development Details ent involves any of these, this s	<u>- </u>		•	s with this application		
Residential Po				Commercial Por Number of shops			
	drooms per unit	Y N			vith air conditioning		,293 m² m²
Gas hot water Gas cooktop ()		Y		Car park ventilation	without air conditior on current rating		Amps
	lation current rating			Car park veritilati Car park area rec	-		m ²
·	requiring lighting	m ²		Warehouse floor			m ²
Air conditioning	g (yes/no & if Yes, No. of units)	Y N		Commercial area	s for food handling	(yes/no) Y	N
Industrial Por		Amp	s (Other (eg Lifts, 0	Cranes,etc - List T	ype, No & Rating	in Amps)
No of factory u	a of all factory units	m ²	-				

Street Address	of the P	remise	S (to be completed	l by applicant) *									Po	st C	ode	*
5 0 7	ME	D	D W E	R O A [2	3	1	8

7. Location Diagram*

This section is about the physical location of your premises and an electrical schematic will not be accepted. Ensure that your diagram clearly identifies property, nearest cross street, North Point, Proposed Point of Common Coupling, Point of Supply and service cable route to main switchboard. Attach a separate paper if more space is required.

SEE ATTACHED SUPPORTING DOCUMENTS



8. Specific Equipment - Non Linear/Fluctuating Load Details (complete if installing any of the items listed below)

This section is for connections where (a) any single item of plant or equipment has a rating > 75 Amps at 230/400V, (b) any HV connections, or (c) Work where the proposed equipment may cause excessive fluctuations of voltage (eg. lifts,welders, pumps, x-ray machines).

Description	kVA/kW	Amp	No of Ops/Hr	Design Standard	Mitigation Measures
Distorting Loads					
1 Phase capacitor-filtered or conventional rectifier					
3 Phase 6-pulse capacitor filtered rectifier / VSD					
3 Phase 6 pulse capacitor filtered rectifier with series inductor > 3% or DC drive / VSD					
3 Phase 6 pulse inductor filtered rectifier / VSD					
3 Phase 12 pulse rectifier / VSD					
AC voltage regulator					
Variable voltage variable frequency (VVVF) drive					
Switch mode power supplies					
Power Factor Correction					
Other (please specify)					
Fluctuating Loads					
Rating of the largest motor					
Rating of the second largest motor					
Rating of other frequently fluctuating loads:					
Other:					
Special Equipment					
X-Ray or Magnetic Resonance Imaging Devices					
Welding plant rating					
Arc furnaces rating					
Unbalanced loads (e.g PH-N / PH-PH loads)					
Other, (incl >75A rated equipment):					
TOTAL APPARENT POWER RATING (KVA)					

Street Address of the Premises (to be completed by applicant) *	Post Code*
9. Expedited Connection (optional)	
For information regarding this section please refer to our website or the guide fo	
Are you applying for an expedited connection? Y N X	▶ If No, proceed to Section 10
If Yes, then indicate which model standing offer to provide connection	
Basic - 100 Amps connection	Standard - connection requiring Ausgrid-funded offsite works
Basic - Over 100 Amps connection	Standard - connection requiring Ausgrid-funded onsite substation
Basic - micro EG connection	Standard - ASP/1 connection
	Standard - connection requiring Ausgrid augmentation (substation upgrade)
10. Other Information	
Information you provide in this section may help Ausgrid to process y	
Was a Preliminary Connection Enquiry lodged for the premises using our form NECF-01?	Preliminary Enquiry No. Y N
Has Ausgrid provided a certified design number for a Network Augmentation project associated with the premises?	Y N X Certified Design No.
If you have appointed an ASP/1, please provide their details below of ASP/1 Name	therwise skip to next question ASP No.
AGI / I Nearlie	DA Reference No.
Do you have development consent for your proposal?	Y NX
If yes, please attach any conditions relating to electricity where not already proving	ided to Ausgrid.
Do you wish to underground/relocate electricity assets in conjunction with this connection application?	Y N X ► If yes, please provide details in section 11, or on a separate paper
11. Comments and Additional Information (if applicable)	
(e.g. References to similar existing installations, supporting information. Attach i	information on a separate paper if there is insufficient space below)

Where this application requests an expedited connection, referred to in section 9 (including the Connection Offer Sum formed with Ausgrid on the date that Ausgrid receives the a	mary) and agree th		
Where this application is being made on behalf of a retail cumake this application of their behalf, including where application		• •	
Signatory Name*		Signatory Pos	sition*
M A T T H E W S U T I C		E L E	C
Signature of Connection Applicant*		Date signed t	by the Connection Applicant*
Attachment Checklist:	Tick if done	No of pages	Remarks
This Connection Application form	n 🗸	6	Ensure all fields marked with * are filled in
AS/NZS3000 maximum demand workshee	t	1	Refer to question 5(xiii)(c)
Connection Application for Embedded & Standby Generation Form NECF-04			Required if you answered "Y' in question 5(vii)(b)
Development Plans	3 1	4	Attach if available
Location Diagram (if space in Section 7 is inadequate)		
Conditions of consent to your Development Application	ı 🗌		Refer to Section 10
Other (please specify)	1	2	
Other (please specify)			
	TOTAL*	13	
If this application is incomplete in a material respect or if Ausgrid re information. If you do not supply the requested information within 12	•		ocess the application until you provide the relevant

Post Code*
2 3 1 8

Street Address of the Premises (to be completed by applicant) *

12. Signatory

5 0 7 M E D D W I E R O A D

Signatory should be the person named in Section 3, ie the Connection Applicant.



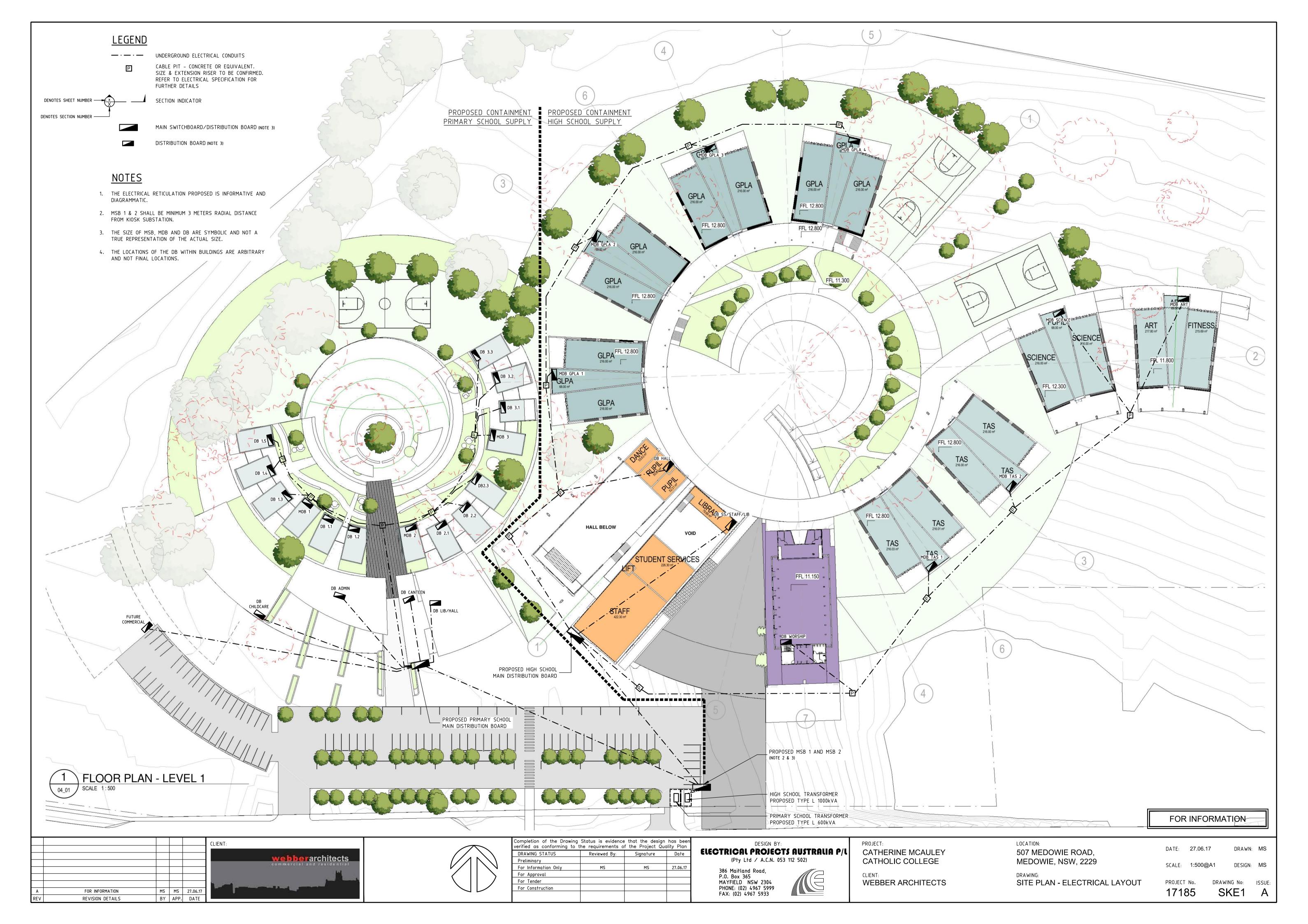
Electrical Projects Australia 17185 - Catherine McAuley Max Demand VAm²

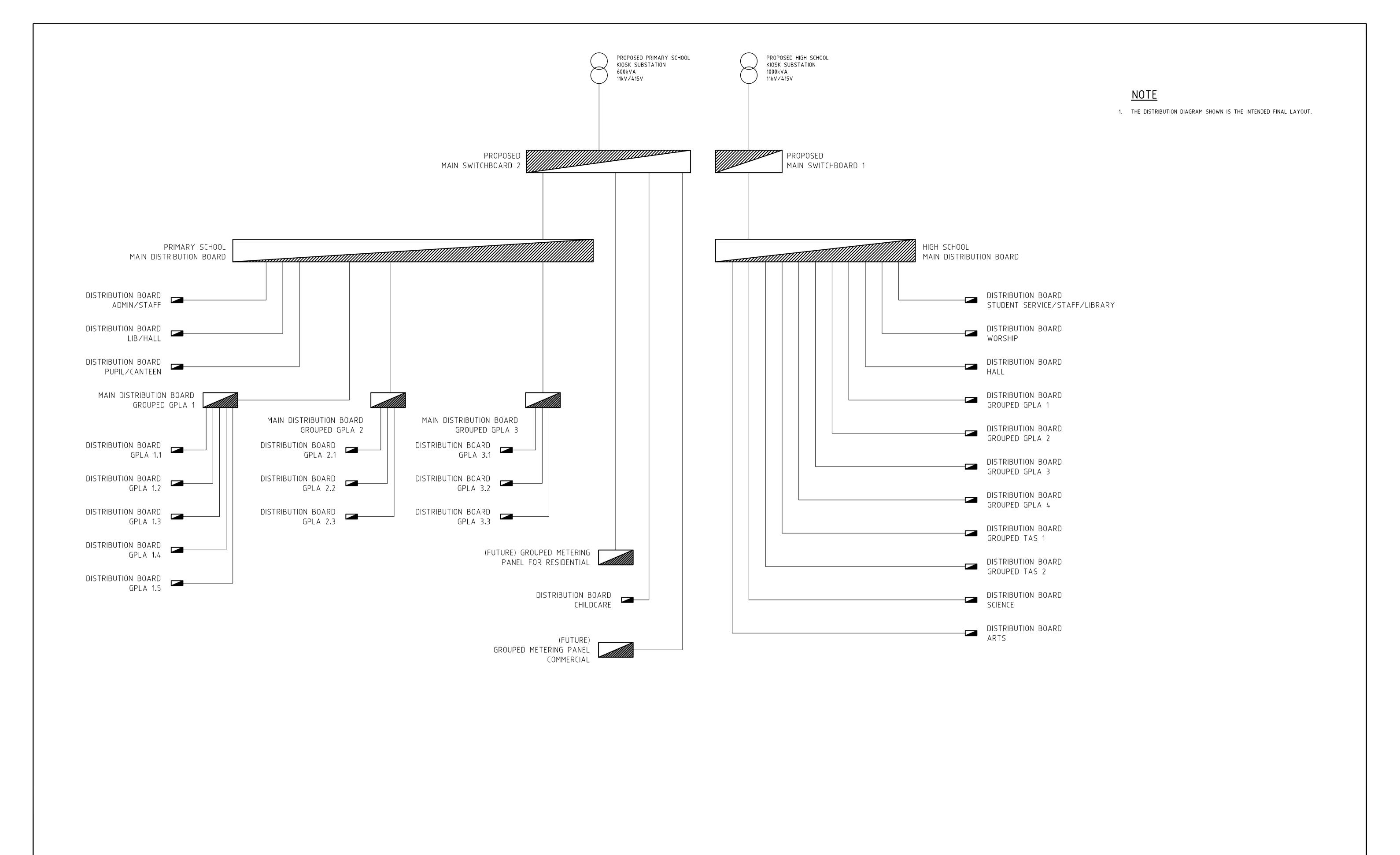
Job Number:	17185				
Project:	Catherine McAuley Catholic Development				
Site:	Medowie				
Issued By:	MS				
Date:	21.06.17	Revision:	А		

Standard Used
AS3000:2007 Table C3

Level	Description	VA/m²	Room Width (m)	Room Depth (m)	Room m²	Voltage	Phases	Total VA	Maximum Demand (A)
Gnd	Primary GPLA (all)	100			1000	415	3	100000	139.12
Gnd	Primary Admin	100			126	415	3	12600	17.53
Gnd	Primary Canteen	1000			23.46	415	3	23460	32.64
Gnd	Primary Pupil/Hall/Library	100			390	415	3	39000	54.26
Gnd	Child Care	120			615	415	3	73800	102.67
Gnd	Commercial Bld (Future)	100			940	415	3	94000	130.77
Gnd	Residential (Future)	100			800	415	3	80000	111.30
Gnd	HS Pupil/Hall/Library	90			1392	415	3	125280	174.29
Gnd	HS Admin	100			423	415	3	42300	58.85
Gnd	HS TAS (Grouped)	250			284	415	3	71000	98.78
Gnd	HS Music	100			216	415	3	21600	30.05
Gnd	HS GPLA (all)	100			2000	415	3	200000	278.24
L1	HS GPLA (all)	100			2000	415	3	200000	278.24
L1	HS TAS (Grouped)	140			1000	415	3	140000	194.77
L1	HS Science/Art/Fitness	100			1000	415	3	100000	139.12
L1	HS Staff/SS/Dance/Pupil	90			884	415	3	79560	110.68
L1	Worship	90			1000	415	3	90000	125.21
					·			-	
Total									2076.51

	Phase B	alancing					
Phase	Red	White Blu					
Total							





FOR INFORMATION

DRAWN: MS

DESIGN: MS

					webberarchitects
					commercial and residential
					LM .
					Name of Street
Α	FOR INFORMATION	MS	MS	27.06.17	
REV	REVISION DETAILS	BY	APP.	DATE	

CLIENT:

Completion of the Drawing verified as conforming to t			
DRAWING STATUS	Reviewed By:	Signature	Date
Preliminary			
For Information Only	MS	MS	27.06.17
For Approval			
For Tender			
For Construction			

DESIGN BY:

ELECTRICAL PROJECTS AUSTRALIA P/L

(Pty Ltd / A.C.N. 053 112 502)

386 Maitland Road, P.O. Box 365 MAYFIELD NSW 2304 PHONE: (02) 4967 5999 FAX: (02) 4967 5933

PROJECT:
CATHERINE MCAULEY
CATHOLIC COLLEGE
CU (51) 5
CLIENT:
WEBBER ARCHITECTS

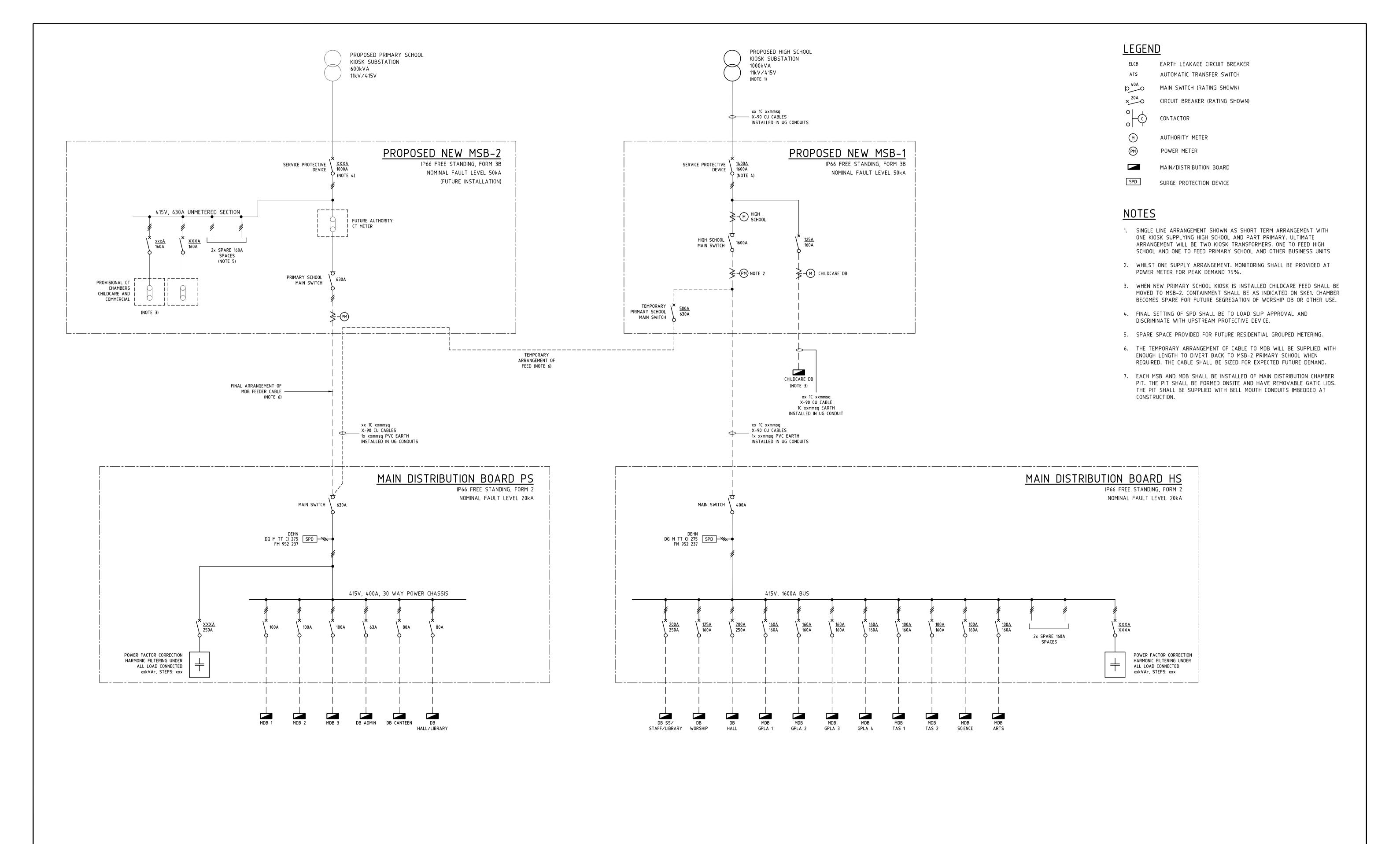
LOCATION: 507 MEDOWIE ROAD, MEDOWIE, NSW, 2229 DRAWING:

DATE: 27.06.17

SCALE: NTS

DRAWING:
SITE WIDE ELECTRICAL
DISTRIBUTION DIAGRAM
PROJECT No. DRAWING No: ISSUE:

17185
PROJECT No. DRAWING No: ISSUE:



FOR INFORMATION

					CLIENT:
					webberarchitects
A	FOR INFORMATION	MS	MS	27.06.17	
REV	REVISION DETAILS	BY	APP.	DATE	

Completion of the Drawing verified as conforming to t			
DRAWING STATUS	Reviewed By:	Signature	Date
Preliminary			
For Information Only	MS	MS	27.06.17
For Approval			
For Tender			
For Construction			

DESIGN BY:
ELECTRICAL PROJECTS AUSTRALIA P/L
(Pty Ltd / A.C.N. 053 112 502)

386 Maitland Road, P.O. Box 365 MAYFIELD NSW 2304 PHONE: (02) 4967 5999 FAX: (02) 4967 5933

CATHO
CLIENT: WEBBE

PROJECT:
CATHERINE MCAULEY
CATHOLIC COLLEGE

CLIENT:
WEBBER ARCHITECTS

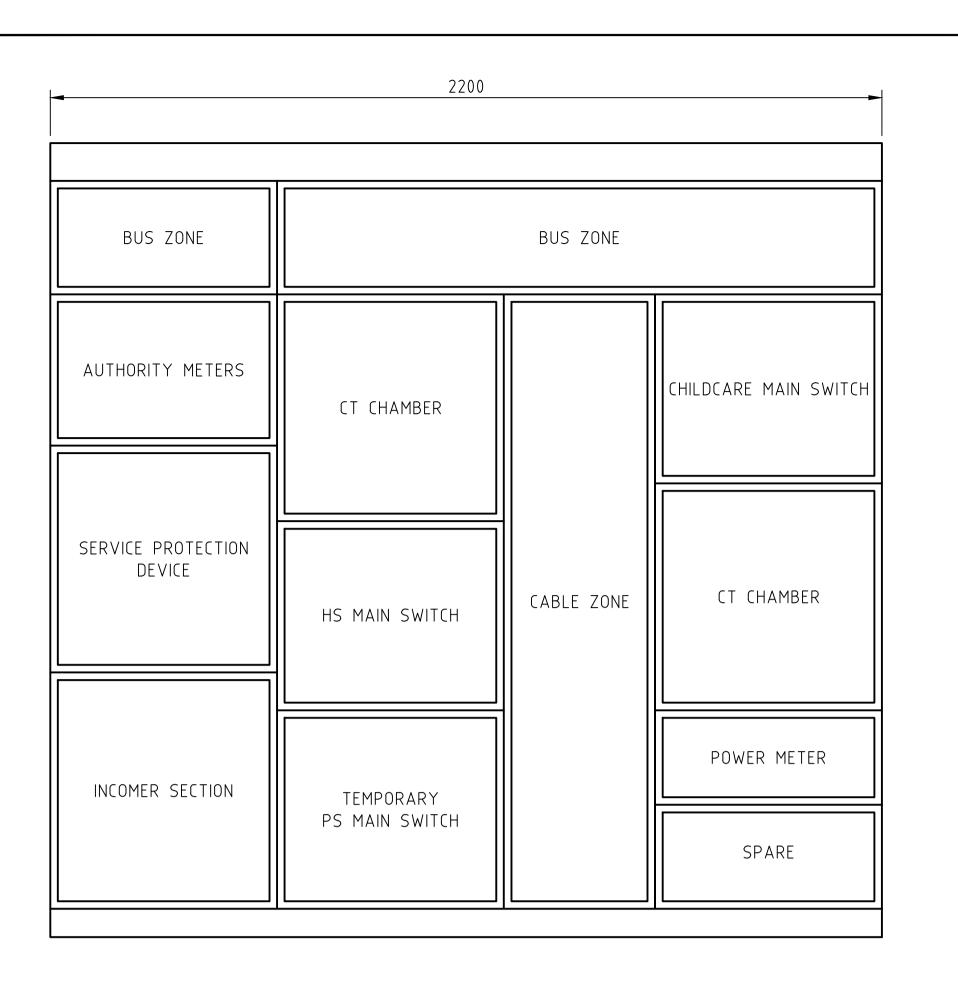
LOCATION: 507 MEDOWIE ROAD MEDOWIE, NSW, 2229

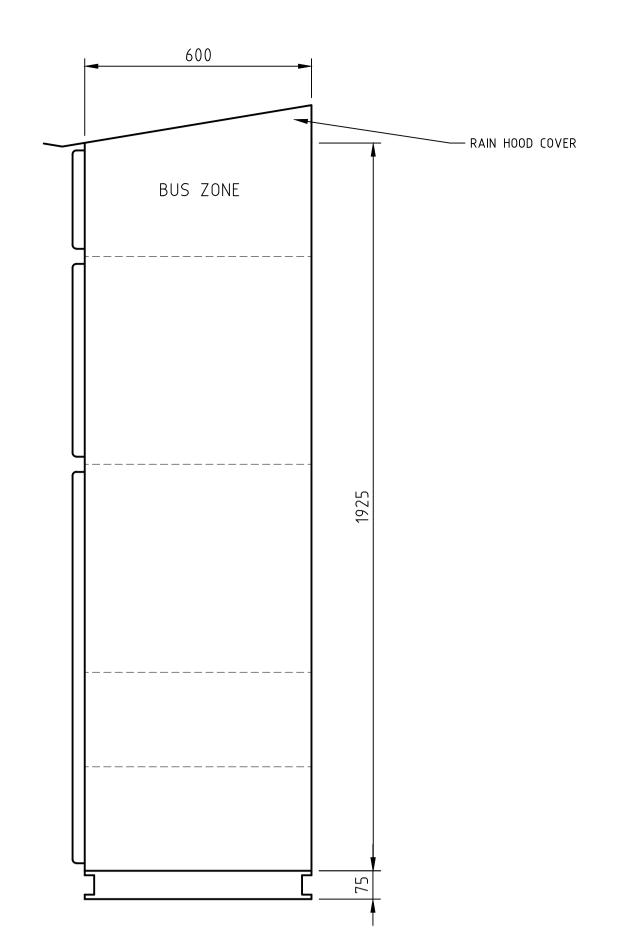
DATE: 27.06.17 DRAWN: MS

SCALE: NTS DESIGN: MS

DRAWING:
SINGLE LINE DIAGRAM
(PART OF)

PROJECT No. DRAWING No: ISSUE: 17185 SKE3 A





INDICATIVE MAIN SWITCHBOARD
FRONT ELEVATION SCALE 1:10@A1

INDICATIVE MAIN SWITCHBOARD

RHS VIEW SCALE 1:10@A1

FOR INFORMATION

					CLIENT:
					webberarchitects
A	FOR INFORMATION	MS	MS	27.06.17	
REV	REVISION DETAILS	BY	APP.		·

Completion of the Drawing verified as conforming to t			
DRAWING STATUS	Reviewed By:	Signature	Date
Preliminary			
For Information Only	MS	MS	27.06.17
For Approval			
For Tender			
For Construction			

DESIGN BY:

ELECTRICAL PROJECTS AUSTRALIA P/L

(Pty Ltd / A.C.N. 053 112 502)

386 Maitland Road, P.O. Box 365 MAYFIELD NSW 2304 PHONE: (02) 4967 5999 FAX: (02) 4967 5933

PROJECT:	
CATHERINE MCAULEY	
CATHOLIC COLLEGE	
CLIENT	

WEBBER ARCHITECTS

LOCATION:
507 MEDOWIE ROAD
MEDOWIE, NSW, 2229

DRAWING:
ELECTRICAL DETAILS

DATE: 27.06.17 DRAWN: MS

SCALE: NTS DESIGN: MS

PROJECT No. DRAWING No: ISSUE: 17185 SKE4 A



386 Maitland Road, Mayfield NSW 2304 PO Box 365, Mayfield NSW 2304 T: (02) 4967 5999

F: (02) 4967 5933

E: mail@electricalprojectsaustralia.com.au

MEMORANDUM

TO: Ausgrid – Data North ATTENTION: Contestability

DATE: 13 July 2017 **PROJECT:** Catherine McAuley Catholic College

SUBJECT: Application for Connection Overview

Dear Contestability,

Catherine McAuley Catholic College is located at 507 Medowie Road, Medowie. The Catholic College site will ultimately consist of Schools and multi-use development consisting of the following;

- 7 stream High School
- 3 stream Primary School
- Place of Worship
- 100 place Childcare
- 2x Residential Duplex
- Commercial Precinct

Preliminary design works are currently being undertaken by the consulting team and as part of the initial preliminary works we are applying for expected future load, however, the construction of the Catholic College will be in part and staged as described.

Initially the site will accommodate the High School, Place of Worship and Childcare facility. Second stage the build will be for Primary School and finally the Residential and Commercial portions of the site.

We expect initially the site will require 1 pad mounted L Type Kiosk with a secondary L Type Kiosk being required when future stages are built and increase of load. Both Kiosks to be installed in side by side arrangement at Medowie Road frontage.

We are also seeking any clarification if there are any clearance requirements from the Medowie Zone Substation and the proposed Catholic College layout.

If you have any questions on the above, or require further information, please advise or contact the undersigned.

Kind Regards,

Matthew Sutic

matthew@electricalprojectsaustralia.com.au



386 Maitland Road, Mayfield NSW 2304 PO Box 365, Mayfield NSW 2304 T: (02) 4967 5999

F: (02) 4967 5933

E: mail@electricalprojectsaustralia.com.au

REPORT

TO: Webber Architects ATTENTION: Sandra Hinchey

DATE: 27 June 2017 **PROJECT:** Catherine McAuley

Catholic College

SUBJECT: Electrical Services Concept Report

Dear Sandra,

The following describes the intended electrical services for Catherine McAuley Catholic College and is to be read in conjunction with the electrical sketch drawings 1785-SKE1, E2, E3 & E4.

Electrical Supply

Our initial maximum demand based on the current architectural drawings for both High School (HS) and Primary School (PS) yields ~1490A and ~244A respectively (refer to the attached). The provision for Air-conditioning has been allowed for in the calculations; 100VA per m² was used in most instances in calculating the demand.

The whole site will ultimately require two kiosk type L transformers, the HS 1000kVA and PS 600kVA. The PS transformer will also accommodate additional load for Childcare, Commercial and Residential buildings (up to an additional 350A). The locations of the kiosks will be on the street frontage and preferably central to minimise cable runs. Each kiosk transformer will require an easement around the area of 5.3m x 3.3m. A blast wall would most likely be required between the two kiosk transformers.

We have been informed that the site will be staged in construction with the HS, Worship and Childcare being built first. Only one transformer (HS) will be required initially and may be monitored for load increase before installing the second transformer (PS). Note both designs for the two kiosks would be completed by a Level 3 ASP at the same time.

There will be only one Main Switchboard initially, but a second one will be required when the secondary transformer is installed. Flexibility will be built into the MSB (1&2) to accommodate final arrangement and use. An indicative size the Main Switchboard is shown on SKE4. MSB-2 would be of similar size.

Electrical Distribution and Reticulation

The intended electrical distribution for HS and PS was to each be served by a Main Distribution Board. This would reside somewhere near the front of the schools and located in stage 1 construction. We have shown the Main Distribution Boards external, but they may be located within a building and ideally that would be within the external building envelope with

external doors. That way the MDB would be readily accessible and the underground duct reticulation is easily established.

From the Main Distribution Boards the electrical distribution would radially feed the other smaller MDB for grouped GPLA, TAS, Science and Arts etc. At this stage, we have only shown to this level of distribution but further DB would most likely be provided for each dedicated space.

At all other buildings DB have been shown and it's the intent that this would be the final drill down of distribution, however this could change based on staging and cost.

All MDB and DB will be required to be in a dedicated cupboard.

Electrical reticulation between buildings will be via underground duct system. We have shown the concept underground ducts on SKE1, but this be further developed to suit staging of construction and possible common trenching of other services.

Communications

Initially there may only be one lead-in communications to site, which will be to the HS. The communications may be interlinked for some time between HS and PS but will most likely be split with dedicated communications to HS and PS.

Communications will be serviced by a Campus Distributor (CD) located within the HS Administration building and in a dedicated room. Typically, there would be a least two CD, one for active equipment and one for terminations / patching.

From the CD the communications would distribute radially to each building where each building will accommodate a Building Distributor. Each BD will require a dedicated cupboard. The media link between CD and BD will be via optical fibre.

Communications will reticulate via underground ducts and in similar locations to the electrical ducts system.

Security head-end equipment will reside with the communications in the Administration building. Each building will be provided with dedicated expander panels. The security will also reticulate with the communications underground conduits.

If you have any questions relating to the above, please contact the undersigned.

Matthew Sutic

matthew@electricalprojectsaustralia.com.au



Electrical Projects Australia 17185 - Catherine McAuley Max Demand VAm²

Job Number:	17185			
Project:	Catherine McAuley Catholic Development			
Site:	Medowie			
Issued By:	MS			
Date:	21.06.17	Revision:	Α	

Standard Used
AS3000:2007 Table C3

Level	Description	VA/m²	Room Width (m)	Room Depth (m)	Room m²	Voltage	Phases	Total VA	Maximum Demand (A)
Gnd	Primary GPLA (all)	100			1000	415	3	100000	139.12
Gnd	Primary Admin	100			126	415	3	12600	17.53
Gnd	Primary Canteen	1000			23.46	415	3	23460	32.64
Gnd	Primary Pupil/Hall/Library	100			390	415	3	39000	54.26
Gnd	Child Care	120			615	415	3	73800	102.67
Gnd	Commercial Bld (Future)	100			940	415	3	94000	130.77
Gnd	Residential (Future)	100			800	415	3	80000	111.30
Gnd	HS Pupil/Hall/Library	90			1392	415	3	125280	174.29
Gnd	HS Admin	100			423	415	3	42300	58.85
Gnd	HS TAS (Grouped)	250			284	415	3	71000	98.78
Gnd	HS Music	100			216	415	3	21600	30.05
Gnd	HS GPLA (all)	100			2000	415	3	200000	278.24
L1	HS GPLA (all)	100			2000	415	3	200000	278.24
L1	HS TAS (Grouped)	140			1000	415	3	140000	194.77
L1	HS Science/Art/Fitness	100			1000	415	3	100000	139.12
L1	HS Staff/SS/Dance/Pupil	90			884	415	3	79560	110.68
L1	Worship	90			1000	415	3	90000	125.21
					·			-	
Total									2076.51

Phase Balancing									
Phase	Red	White	Blue						
Total									