



# ELECTRICAL DESIGN GROUP

ELECTRICAL BUILDING SERVICES CONSULTANTS

P.O. Box 15, SHERWOOD Q. 4075

Phone: (07) 3278 4375

Website: www.edg.net.au Email: brisbane@edg.net.au

C3042a - ST ANTHONYS CATHOLIC COLLEGE DEERAGUN - FOOD TECHNOLOGY CENTRE

C3042a-0001(B).xls

ELECTRICAL SERVICES CONTRACT DOCUMENT SCHEDULE

REVISION B - 20 SEPTEMBER 2023















ISSUING INFORMATION				DATE OF ISSUE							
	DAY	MONTH	YEAR	18	20						
				09	09						
				23	23						
				P	P						
REASON FOR ISSUE											
A = APPROVAL		C = CONSTRUCTION		N = COORDINATION		P = PRELIMINARY		T = TENDER			


DISTRIBUTION				NUMBER OF COPIES							
WWW.EDG.NET.AU				1E	1E						
G & D GROUP				1E	1E						
ST ANTHONYS CATHOLIC COLLEGE - PAUL VENN					1E						
P = PRINT    T = TRACING    D = DISC    E = EMAIL    F = FAX											


DOCUMENTS		REVISION									
C3042a-E01.dwg	LEGEND & SITE PLAN	A	B								
C3042a-E02.dwg	NOTES	A	B								
C3042a-E03.dwg	FLOOR PLAN	A	B								
C3042a-E04.dwg	REFLECTED CEILING PLAN	A	B								
C3042a-0001.xls	CONTRACT DOCUMENT SCHEDULE	A	B								
C3042a-0002.xls	EQUIPMENT SCHEDULE										
C3042a-0003.xls	STANDARDS SCHEDULE										
C3042a-0004.xls	UNIT RATES SCHEDULE										
C3042a-0005.xls	TENDER BREAK-UP SCHEDULE										
C3042a-0006.xls	INFO TO BE SUBMITTED BY SUBCONTRACTOR										
C3042a-0007.xls	LIGHTING CONTROL SCHEDULE										
C3042a-0008.xls	ABBREVIATIONS SCHEDULE										
C3042a-0009.xls	DISTRIBUTION BOARD DB## SCHEDULE										
C3042a-0010.xls	DISTRIBUTION BOARD DB## SCHEDULE										
C3042a-0001.doc	ELECTRICAL SERVICES SPECIFICATION										
C3042a-0001.zip	FITTING & OUTLET DATASHEETS										





LEGEND


-  ELECTRICAL SERVICES SWITCHBOARD.
-  SWITCHBOARD / CONTROL PANEL NOT PROVIDED AS PART OF THE ELECTRICAL SUBCONTRACT.
-  SINGLE POWER OUTLET.
-  DOUBLE POWER OUTLET.
-  DOUBLE POWER OUTLET PLUS APPLIANCE SWITCH.
-  SINGLE PHASE ISOLATOR.
-  THREE PHASE ISOLATOR.
-  THERMAL ALARM.
-  ONE-WAY LIGHT SWITCH.
-  TWO-WAY LIGHT SWITCH.
-  CEILING FAN.
-  CEILING FAN SWITCH / SPEED CONTROLLER.
-  CIRCUIT LINE.
-  SWITCH LINE.
- DB-x - Py


POWER CIRCUIT DESIGNATION. DENOTES DB AND CIRCUIT.
-  ELECTRICAL EQUIPMENT AS NOTED.
- RK




RJ45 CAT-6A COMMUNICATIONS OUTLET C/W RECESS KIT.
- 

UTERMINATED CAT-6 CABLE FOR THE SALTO ACCESS CONTROL SYSTEM.
- 


SECURITY DIRECTIONAL MOTION DETECTOR.
- 

TV POWERED MULTI-TAP CONE SPEAKER.
- 


SCHOOL BELL MULTI -TAP CONE SPEAKER.
- E1




E1: GENERAL RECESSED LED EMERGENCY LIGHT.
- EX



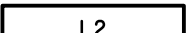
EX: EMERGENCY LED EXIT LIGHT.
- Lx




Lx: LIGHT FITTING TYPE AS NOTED C/W INTEGRAL NON-MAINTAINED EMERGENCY PACK.
- L1




L1: 600 x 600 LED T-BAR FLAT PANEL TROFFER.
- L2



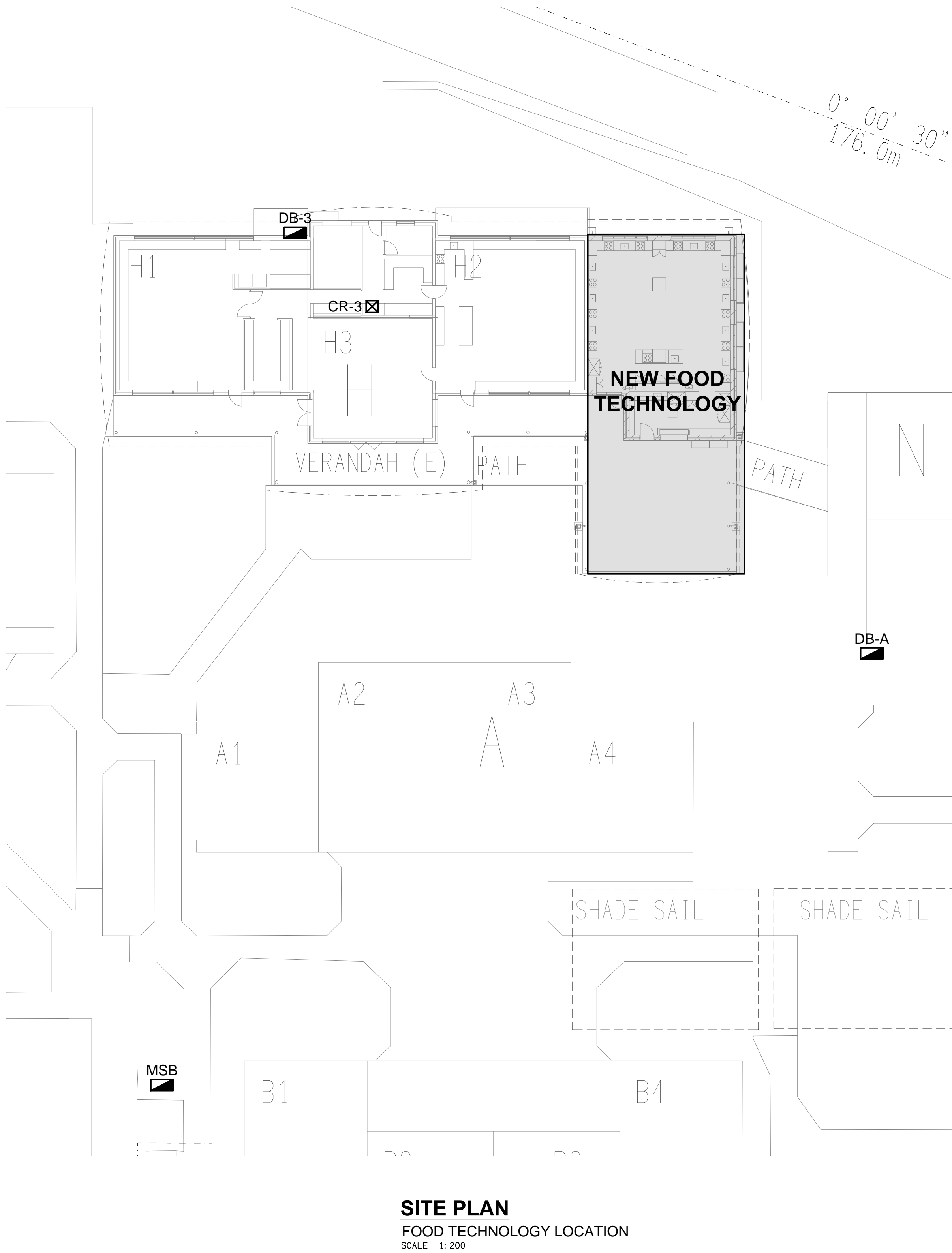
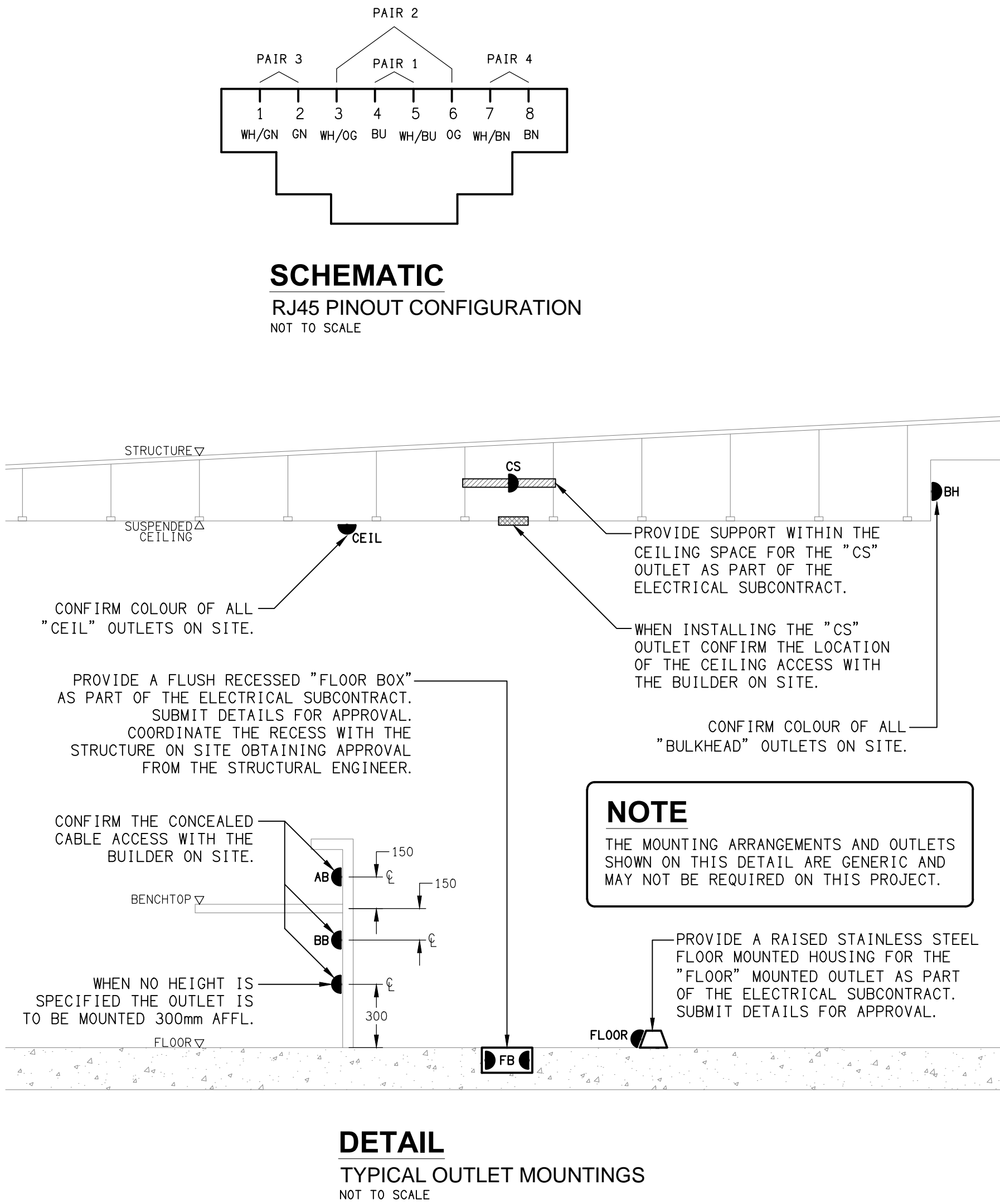
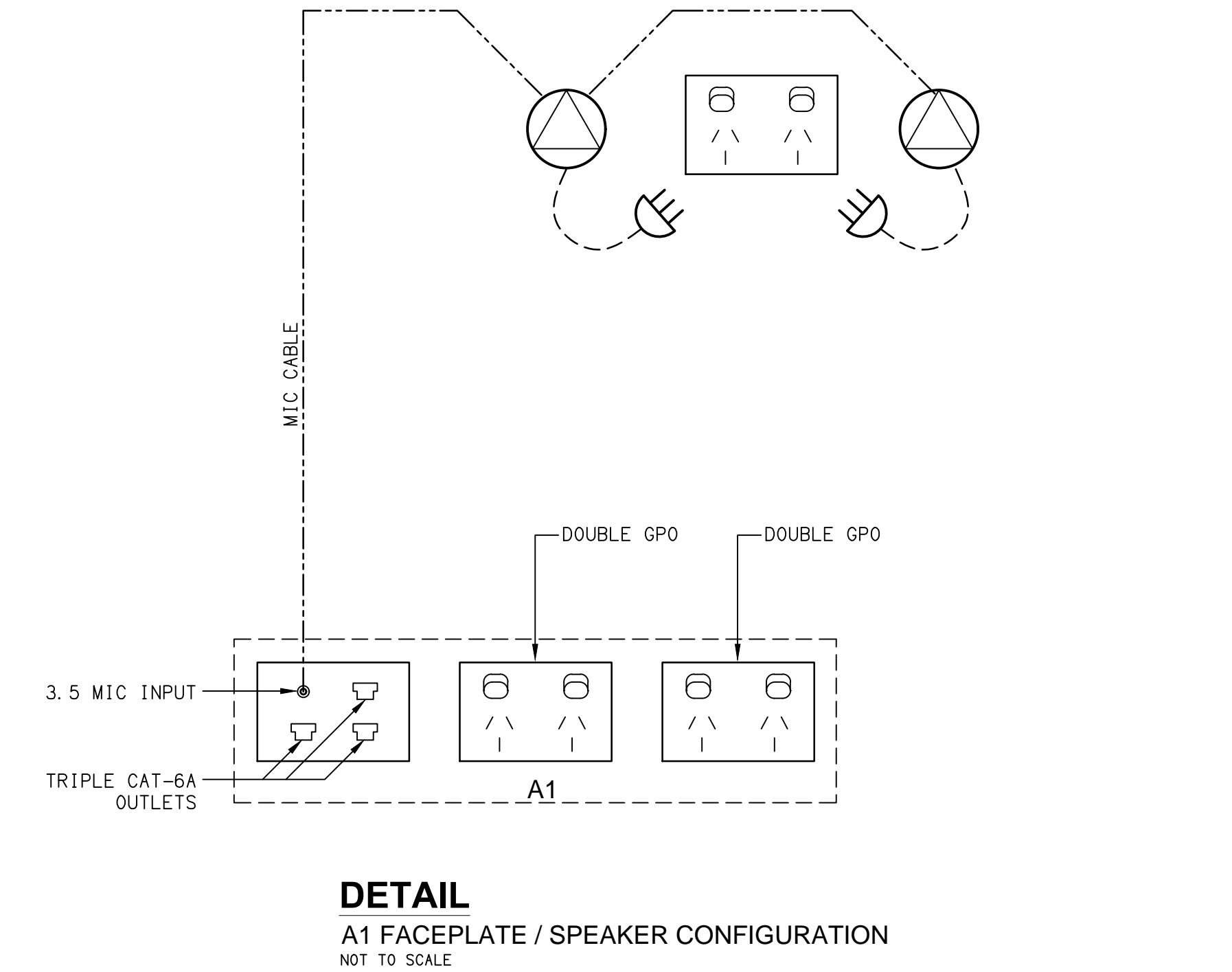
L2: 300 x 1200 LED PLASTERBOARD FLAT PANEL TROFFER.
- L3



L3: 1200 LONG CEILING MOUNTED IP56 LED BATTEN.
- L4



L4: 1200 LONG WALL MOUNTED IP65 LED BATTEN.





NOTES

1. EXTENT OF WORKS

THE ELECTRICAL SERVICES SUB-CONTRACT INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:

- SUPPLY AND INSTALLATION OF ALL COMPONENTS FORMING PART OF THE ELECTRICAL SERVICES.
- CO-ORDINATION.
- INSPECTIONS.
- TESTING AND COMMISSIONING.
- MAINTENANCE.
- CABLING, CABLE SUPPORT SYSTEMS AND ACCESS.
- POWER DISTRIBUTION.
- LIGHTING.
- COMMUNICATIONS CABLING.
- INTRUDER DETECTION.
- SCHOOL BELL.
- ALL MINOR COMPONENTS AND INCIDENTAL WORKS NOT SPECIFICALLY REFERRED TO, HOWEVER NECESSARY TO COMPLETE THE ELECTRICAL SERVICES INSTALLATION SUCH THAT IT IS HANDED OVER COMPLETE, OPERATIONAL AND FIT FOR THE INTENDED USE.

SUPPLY ALL LABOUR, MATERIALS, EQUIPMENT, AND ALL OTHER ITEMS, WHETHER MENTIONED IN DETAIL OR NOT, REQUIRED FOR THE SATISFACTORY COMPLETION OF THE ELECTRICAL SERVICES INSTALLATION, LEAVING IN FULL WORKING ORDER TO THE SATISFACTION OF THE PROJECT MANAGER.

ACCEPT FULL RESPONSIBILITY FOR LIASING, ARRANGING AND CO-ORDINATION OF ALL WORKS THAT HAVE AN EFFECT ON OR WILL BE AFFECTED BY THE ELECTRICAL SERVICES.

REMOVE ALL OF THE EXISTING ELECTRICAL SERVICES THAT BECOME REDUNDANT DUE TO THE WORKS.

EXTEND THE EXISTING PIT AND CONDUIT SYSTEM AS REQUIRED TO SERVICE THE NEW BUILDING. REINSTATE ALL TRENCHING TO THE ORIGINAL CONDITIONS.

2. WORKMANSHIP

ENSURE THAT THE WORK IS PERFORMED BY THE HOLDER OF A CURRENT ELECTRICAL SUB CONTRACTOR LICENSE. ENSURE THE INSTALLATION AND ALL COMPONENTS, FIXTURES, FITTINGS, OUTLETS AND CABLES ARE SUPPLIED AND INSTALLED TO A HIGH STANDARD THROUGHOUT, AND INSTALLED IN A NEAT AND TRADESMAN LIKE MANNER, TO THE CURRENT INDUSTRY STANDARDS. ENSURE ALL MATERIALS AND COMPONENTS OF A SIMILAR TYPE ARE OF THE SAME MANUFACTURER AND INSTALLED IN A UNIFORM MANNER.

IT IS THE ELECTRICAL SUB CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE INSTALLATION IS FIT FOR PURPOSE AND IS PROVIDED AS A COMPLETE WORKING INSTALLATION. IT IS THE ELECTRICAL SUB CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL COMPONENTS, FITTINGS, FIXTURES, SYSTEMS, PROGRAMMING ETC IRRESPECTIVE OF THE LEVEL DETAILED IN THE DOCUMENTS SUCH THAT THE INSTALLATION IS PROVIDED AS A COMPLETE WORKING INSTALLATION.

CONCEAL ALL WIRING AND CONDUITS. EXPOSED CABLING OR CONDUITS ARE GENERALLY NOT ACCEPTABLE. IT IS NOTED THAT CHASING AND REINSTATEMENT WILL BE REQUIRED. ENSURE ALL COMPONENTS, EQUIPMENT AND MATERIALS SUPPLIED ARE NEW, UNUSED, DESIGNED AND SELECTED TO ENSURE SATISFACTORY OPERATION UNDER VARYING ATMOSPHERIC, CLIMATIC, HUMID TROPICAL CONDITIONS WITHOUT DISTORTION AND DETERIORATION IN ANY PART AFFECTING EFFICIENCY AND RELIABILITY OF THE SYSTEMS. DESIGN AND SELECT ALL EQUIPMENT TO PROVIDE THE NECESSARY SAFETY TO HUMAN LIFE AND PROPERTY DURING OPERATION AND MAINTENANCE WITH PARTICULAR ATTENTION GIVEN TO ELECTRICAL SAFETY AND SEGREGATION PRECAUTIONS.

CHECK THE FINISHED PAINTWORK AROUND THE AREA OF EACH INSTALLATION AND TOUCH UP ALL DAMAGED PARTS AND FINISHES AFTER THE INSTALLATION OF THE ELECTRICAL SERVICES.

ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE BUILDER'S PROGRAM. ENSURE ALL FINAL LOCATIONS OF OUTLETS AND FITTINGS ARE CO-ORDINATED ONSITE WITH THE ARCHITECT AND ALL OTHER SERVICES, TO THE APPROVAL OF THE PROJECT MANAGER. ALLOW TO CO-ORDINATE THE FINAL LOCATION OF ALL EQUIPMENT, FITTINGS, & OUTLETS, SUCH THAT THEY ARE INSTALLED IN ACCORDANCE WITH THE AS3000 RESTRICTED ZONES, AND ARE NOT COVERED INAPPROPRIATELY.

ENSURE THAT ALL METAL SURFACES ARE SUITABLY PROTECTED AGAINST CORROSION, AND THAT ALL PLASTIC MATERIALS ARE UV STABILISED.

PROVIDE ALL MATERIALS AS NEW, AND OF THE HIGHEST CLASS AVAILABLE FOR THEIR RESPECTIVE TYPES. ENSURE ALL ASPECTS OF THE WORK ARE OF A HIGH STANDARD THROUGHOUT, AND INSTALLED IN A NEAT AND TRADESMAN LIKE MANNER, TO THE CURRENT INDUSTRY STANDARDS.

3. STANDARDS

IRRESPECTIVE OF INFORMATION CONTAINED IN THE ELECTRICAL SERVICES DOCUMENTS OR IN INSTRUCTIONS, IT IS THE ELECTRICAL SUB CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL ELECTRICAL SERVICES WORKS ARE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FOLLOWING. REFER ANY DISCREPANCIES BETWEEN THE REQUIREMENTS OF THE FOLLOWING AND/OR THE ELECTRICAL SERVICES DOCUMENTS AND INSTRUCTIONS TO THE ARCHITECT FOR CLARIFICATION PRIOR TO THE PLACING OF ORDERS, FABRICATION OR INSTALLATION OF THE ITEMS/METHODS IN DISCREPANCY.

- NCC BUILDING CODE OF AUSTRALIA.
- ELECTRICITY ACT.
- ELECTRICAL SAFETY ACT.
- AS/NZS3000.
- AS3008.
- WORKPLACE HEALTH AND SAFETY ACT.
- TELECOMMUNICATIONS ACT.
- ACMA REQUIREMENTS.

4. AUTHORITIES

ENSURE ALL OF THE ELECTRICAL SERVICES COMPLY WITH THE REQUIREMENTS OF ALL REGULATORY AUTHORITIES HAVING JURISDICTION OVER THE SITE INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- ACMA.
- LOCAL COUNCIL.
- LOCAL SUPPLY AUTHORITY.
- STATE GOVERNMENT DEPARTMENT OF ENVIRONMENT AND HERITAGE.
- QLD GOVERNMENT, DIVISION OF WORKPLACE, HEALTH AND SAFETY.
- QLD FIRE AND RESCUE AUTHORITY.

5. CABLES

UNLESS OTHERWISE SPECIFIED, INSTALL AND TERMINATE CABLES IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS. DETERMINE THE FINAL ROUTES TO SUIT THE BUILDING STRUCTURE AND SITE CONDITIONS. UNLESS NOTED OTHERWISE, PROVIDE ALL 240 VOLT POWER AND LIGHTING WIRING AS 2.5mm² TWIN & EARTH STRANDED COPPER CONDUCTORS, PVC INSULATED 0.6/1kV V75 GRADE TO AS3174, PROTECTED BY A 20 AMP CIRCUIT BREAKER. ALL CONDUIT AND FITTINGS TO BE RIGID UPVC TO AS2053, UNLESS NOTED OTHERWISE.

NOTES

6. POWER DISTRIBUTION

THE POWER DISTRIBUTION COMPONENT OF THIS CONTRACT INCLUDES THE PROVISION OF A NEW DISTRIBUTION BOARD CUBICAL AS PART OF DB-3. THE NEW CUBICAL IS TO BE KNOWN AS DB-3B AND THE EXISTING DB-3 CHASSIS KNOWN AS DB-3A. PROVIDE THE NEW CUBICAL WITH AN 84 POLE 250 AMP THREE PHASE CHASSIS. REMOVE THE EXISTING LOAD CENTRE TO MAKE WAY FOR THE NEW DB-3B CUBICAL. RECONNECT THE EXISTING CIRCUITS SUPPLIED FROM THE LOAD CENTRE FROM THE NEW DB-3B WITH NEW AS3000 COMPLIANT RCD PROTECTED SWITCHGEAR. SUPPLY THE DB-3B CHASSIS FROM THE LINE SIDE OF THE EXISTING DB-3A MAIN SWITCH. THE NEW DB-3B CUBICAL IS TO BE OF THE SAME BRAND AS THE EXISTING DB-3 CUBICAL AND MATCH IT IN STYLE, COLOUR AND EXTERNAL DIMENSIONS. THE POWER DISTRIBUTION COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:

- POWER DISTRIBUTION.
- EARTHING.
- REMOVAL OF EXISTING LOAD CENTRE ADJACENT DB-3.
- NEW DB-3B CUBICAL.
- CONNECTION OF THE EXISTING DB-3 LOAD CENTRE CIRCUITS TO DB-3B.
- CIRCUITS.
- ISOLATORS AND OUTLETS.
- TESTING AND COMMISSIONING.

ANY INTERRUPTIONS TO THE POWER SUPPLY MUST BE LIMITED TO LESS THAN FOUR HOURS BETWEEN 11.00PM AND 6.00AM AND THE SCHOOL MUST BE PROVIDED WITH TWO WEEKS NOTICE PRIOR TO THE INTERRUPTION.

7. LIGHTING

ALL OF THE LIGHT FITTINGS, LAMPS AND ACCESSORIES ARE TO BE PROVIDED AS PART OF THIS CONTRACT. THE LIGHTING COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:

- LIGHTING.
- LIGHT FITTINGS AND ACCESSORIES.
- EMERGENCY AND EXIT LIGHTING.
- EARTHING OF THE LIGHTING INSTALLATION.
- LIGHTING CONTROL.
- LIGHTING SUBCIRCUITS.
- TESTING AND COMMISSIONING.

8. COMMUNICATIONS

THE COMMUNICATIONS CABLING COMPONENT OF THIS CONTRACT INCLUDES AN INTEGRATED TELEPHONE AND DATA EIA/TIA 568-A CATEGORY 6A SHIELDED TWISTED PAIR COMMSCOPE CERTIFIED RJ45 CABLING SOLUTION WITH A 25 YEAR COMMSCOPE WARRANTY. THE NEW COMMUNICATIONS CABLING IS TO BE RUN TO A NEW PATCH PANEL IN THE EXISTING COMMUNICATIONS RACK CR-3.

THE COMMUNICATIONS CABLING COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:

- NEW PATCH PANEL IN CR-3.
- NEW COMMUNICATIONS OUTLETS AND ASSOCIATED CABLING..
- TESTING AND COMMISSIONING.

9. INTRUDER DETECTION

THE SECURITY SYSTEM COMPONENT OF THIS CONTRACT INCLUDES THE EXPANSION OF THE SCHOOLS EXISTING SECURITY SYSTEM WITH THE NEW SECURITY DETECTORS SUPPLIED FROM THE EXISTING BUILDING 3 DATA GATHERING PANEL. THE INTRUDER DETECTION COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:

- EXPANSION OF THE EXISTING BUILDING 3 DATA GATHERING PANEL AS REQUIRED.
- THERMAL ALARMS.
- MOVEMENT SENSORS.
- TESTING AND COMMISSIONING.

10. SCHOOL BELL

THE SCHOOL BELL COMPONENT OF THIS CONTRACT INCLUDES THE EXPANSION OF THE SCHOOLS EXISTING SCHOOL BELL SYSTEM WITH THE NEW SPEAKERS CONNECTED TO THE EXISTING BUILDING 3 SCHOOL BELL AMPLIFIER.

THE SCHOOL BELL COMPONENT OF THIS CONTRACT INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:

- BARIX ETHERNET TO AUDIO INTERFACE UNITS.
- CABLING.
- TESTING AND COMMISSIONING.
- TV POWERED SPEAKERS.
- TV MICROPHONE OUTLET / CABLE.

11. ABBREVIATIONS

- A - AMP CURRENT RATING
- AB - MOUNT ABOVE BENCH.
- AFFL - ABOVE FINISHED FLOOR LEVEL.
- BB - MOUNT BELOW BENCH.
- BH - MOUNT ON BULKHEAD.
- CEIL - MOUNT ON CEILING.
- CS - MOUNT WITHIN CEILING SPACE.
- C/W - COMPLETE WITH.
- DW - DISHWASHER.
- HP - HOT PLATE.
- MCB - MINIATURE CIRCUIT BREAKER.
- MSB - MAIN SWITCHBOARD.
- MSSB - MECHANICAL SERVICES SWITCHBOARD.
- MW - MICROWAVE.
- N - NEON / LED INDICATOR WHEN ON.
- NTS - NOT TO SCALE.
- O/V - OVEN.
- RCD - CIRCUIT PROTECTED VIA A 30mA RESIDUAL CURRENT DEVICE INTEGRAL TO THE CIRCUIT BREAKER.
- REF - REFRIGERATOR.
- SUS - MOUNT SUSPENDED FROM CEILING.
- UNO - UNLESS NOTED OTHERWISE.
- WP - WEATHERPROOF TO IP56 UNO.
- 500 - NUMBER DENOTES MOUNTING HEIGHT AFFL.

EQUIPMENT:

TEST - TEST PUSH BUTTON MOUNTED ON THE DISTRIBUTION BOARD ESCUTCHEON.

RESET - RESET PUSH BUTTON MOUNTED ON THE DISTRIBUTION BOARD ESCUTCHEON.

LAMP - AMBER TEST INDICATING LAMP MOUNTED ON THE DISTRIBUTION BOARD ESCUTCHEON.

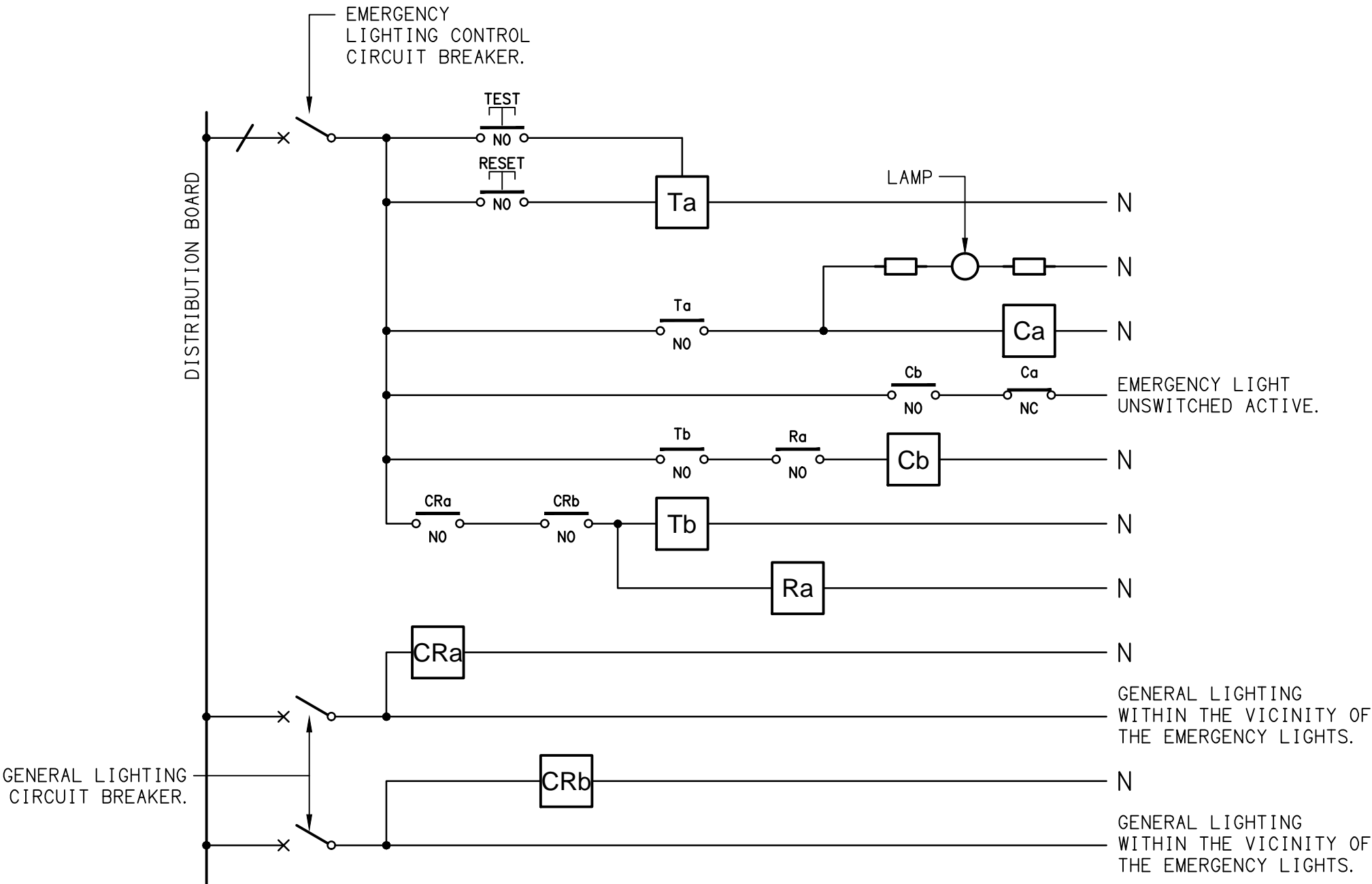
Ta - ADJUSTABLE 0-3 HOUR TIMED RELAY.

Tb - 15 MINUTE RUN-ON TIMER TO OPERATE UPON THE RETURN OF MAINS POWER.

Cx - CONTACTOR x.

CRx - CONTROL RELAY x.

Rx - RELAY x.



NOTES

1. THE EMERGENCY LIGHT UNSWITCHED ACTIVE / GENERAL LIGHTING SWITCHED ACTIVE CIRCUIT ARRANGEMENT AND CONTROL IS TYPICAL FOR ALL CIRCUITS SUPPLYING EMERGENCY LIGHTS.

2. PROVIDE ADDITIONAL CONTROL RELAYS (CRx) CONFIGURED AS PER CRa AND CRb FOR ALL ADDITIONAL LIGHTING CIRCUITS THAT SUPPLY LIGHTS IN THE VICINITY OF THE EMERGENCY LIGHTS.

SCHEMATIC

EMERGENCY LIGHTING

NOT TO SCALE

CLIENT

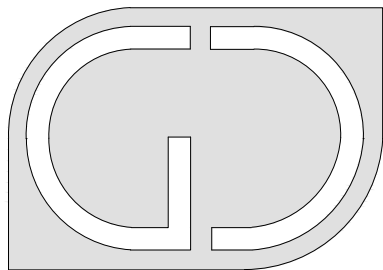
THE ROMAN CATHOLIC TRUST CORPORATION FOR THE DIOCESE OF TOWNSVILLE

PROJECT

ST ANTHONYS CATHOLIC COLLEGE, DEERAGUN FOOD TECHNOLOGY CENTRE CORNER JOANNE STREET & VEALES ROAD

DRAWING TITLE

ELECTRICAL SERVICES NOTES



G+D GROUP (QLD)  
Level 3 Toowong Terraces  
31 Sherwood Road Toowong Q 4066  
T (07) 3870 3722  
F (07) 3870 3822  
E admin@gdgroupqld.com.au

DATE  
SCALE NTS  
DRAWN  
CHECKED

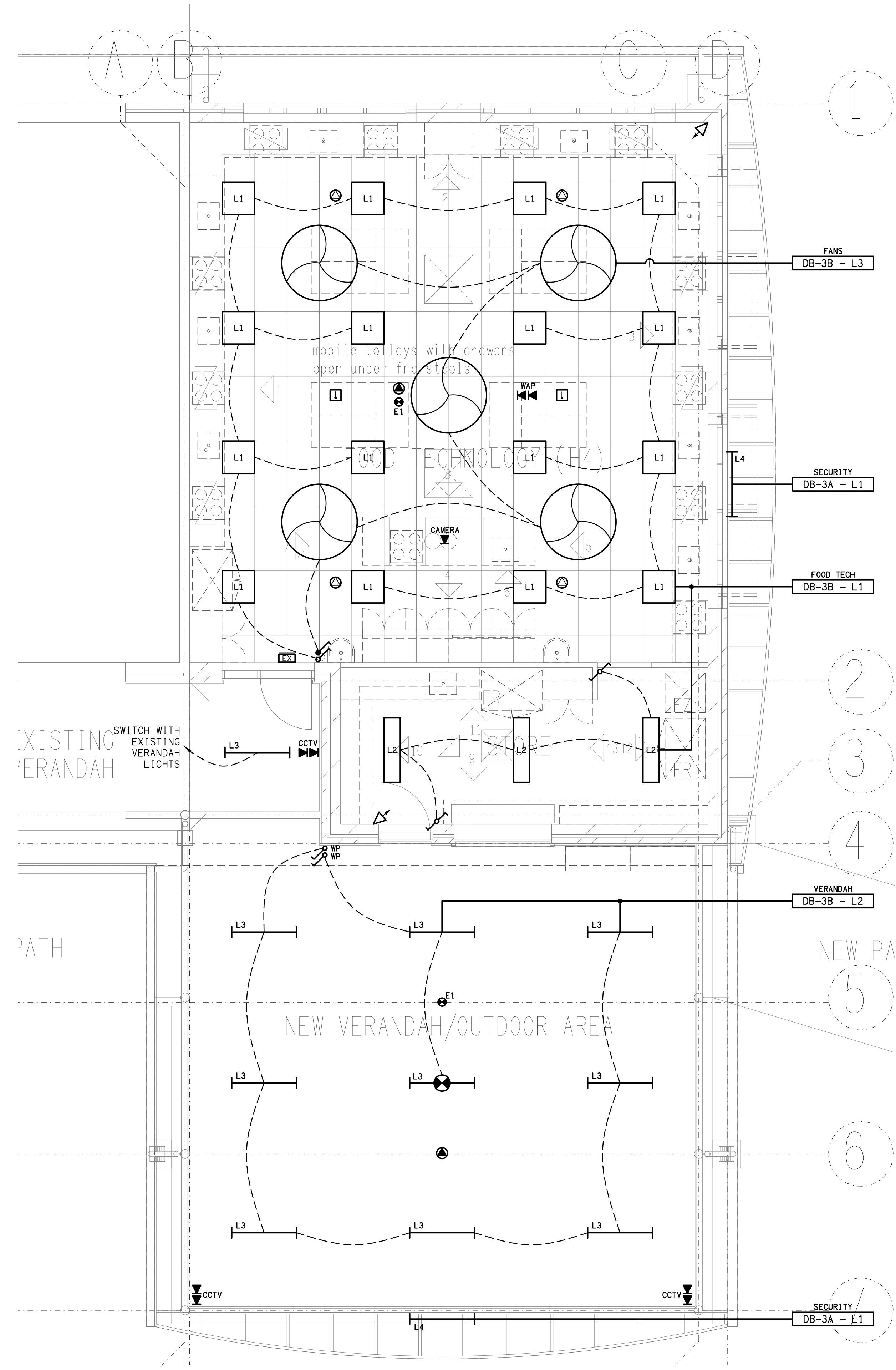
C3042a  
EDG PROJECT No.  
E02 B  
EDG DWG No. REV






DATE		<b>C3042a</b> EDG PROJECT No. <b>E03 B</b> EDG DWG No. REV
SCALE 1:50	A1	
DRAWN	AT	
CHECKED		





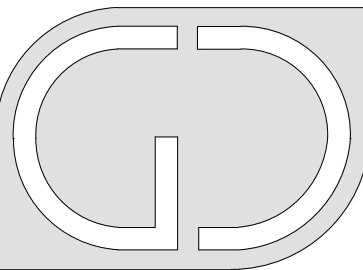
REV	DATE	DESCRIPTION
B	20/09/2023	PRELIMINARY

**ELECTRICAL DESIGN GROUP**  
ELECTRICAL BUILDING SERVICES CONSULTANTS  
BRISBANE  
P.O. Box 15, Sherwood Q. 4075  
Phone: (07) 3278 4375  
Email: brisbane@edg.net.au  
Web: www.edg.net.au  
GOLD COAST

● CLIENT  
**THE ROMAN CATHOLIC TRUST CORPORATION FOR THE DIOCESE OF TOWNSVILLE**

● PROJECT  
**ST ANTHONYS CATHOLIC COLLEGE, DEERAGUN  
FOOD TECHNOLOGY CENTRE  
CORNER JOANNE STREET & VEALES ROAD**

● DRAWING TITLE  
**ELECTRICAL SERVICES  
REFLECTED CEILING PLAN**

**G+D GROUP (QLD)**  
Level 3 Toowong Terraces  
31 Sherwood Road Toowong Q 4066  
T (07) 3870 3722  
F (07) 3870 3822  
E admin@gdgroupqld.com.au

DATE	SCALE	AT
	1:50	A1

DRAWN	CHECKED

**C3042a**  
EDG PROJECT No.  
**E04 B**  
EDG DWG No. REV