



# ELECTRICAL DESIGN GROUP

ELECTRICAL BUILDING SERVICES CONSULTANTS

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C2824a - RYAN CATHOLIC COLLEGE - COVERED AREA BALL COURTS

C2824a-0001(F).xls

ELECTRICAL SERVICES CONTRACT DOCUMENT SCHEDULE

REVISION F - 12 JULY 2023

ISSUING INFORMATION				DATE OF ISSUE							
	DAY	30	05	12	13	26	12				
	MONTH	11	12	12	12	05	07				
	YEAR	22	22	22	22	23	23				
REASON FOR ISSUE				P	P	T	T	C	C		
A = APPROVAL C = CONSTRUCTION N = COORDINATION				P = PRELIMINARY T = TENDER							

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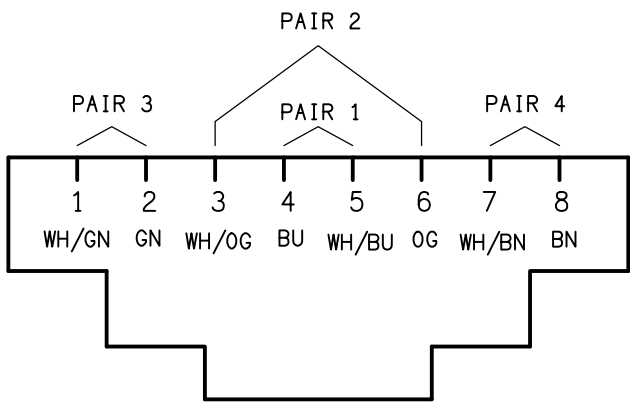
DOCUMENTS		REVISION									
C2824a-E01.dwg	LEGEND & SCHEMATICS	A	B	C	D	E					
C2824a-E02.dwg	SITE PLAN	A		B		C					
C2824a-E03.dwg	FLOOR - REFLECTED CEILING PLAN	A	B	C	D	E	F				
C2824a-E04.dwg	NOTES & ELEVATION	A	B	C	D	E					
C2824a-E05.dwg	SWITCH PANEL SCHEMATICS & DETAILS		A	B	C	D	E				
C2824a-0001.xls	CONTRACT DOCUMENT SCHEDULE	A	B	C	D	E	F				
C2824a-0001.zip	FITTING & OUTLET DATASHEETS	A	B								

LEGEND

THE EQUIPMENT SUPPLIER CONTACT DETAILS MAY BE AVAILABLE ON THE EDG WEBSITE VIA THE FOLLOWING LINK <a href="http://www.edg.net.au/links.html">www.edg.net.au/links.html</a>				
TYPE	LAMPS	DESCRIPTION	COLOUR / ACCESSORY	CATALOGUE No
L1	L1	IP65 120DEG HIGH BAY C/W INTEGRAL DRIVER. SURFACE MOUNT THE FITTING TO THE CEILING WITH AN ADJUSTABLE BRACKET WITH THE FITTINGS SET TO HORIZONTAL	BLACK FITTING AND BRACKET	GAMMA ILLUMINATION ORBIT 881537-4K PLUS SURFACE BRACKET 483.
L2	L2	IP65 120DEG HIGH BAY C/W INTEGRAL DRIVER. SURFACE MOUNT THE FITTING TO THE CEILING WITH AN ADJUSTABLE BRACKET WITH THE FITTINGS SET TO HORIZONTAL	BLACK FITTING AND BRACKET	GAMMA ILLUMINATION ORBIT 881538-4K PLUS SURFACE BRACKET 483.
L3	L3	1200 LONG SURFACE MOUNTED IP65 DIFFUSED BATTEN C/W INTEGRAL ELECTRONIC CONTROL GEAR AND PRESENCE DETECTION SENSOR	LIGHT GREY	GAMMA ILLUMINATION STORM 1558-CCT-36W-MS
L4	L4	IP65 FLOOD LIGHT C/W INTEGRAL DRIVER MOUNTED AT HIGH LEVEL ADJUSTABLE BELOW THE ROOF. CONFIRM THE AIMING ANGLE ON SITE WITH THE SCHOOLS MAINTENANCE STAFF	BLACK	GAMMA ILLUMINATION ALTUS 1696-4K-120W
E1	LED	EMERGENCY LIGHT: RECESSED NON-MAINTAINED EMERGENCY LIGHT. AS2293 CLASSIFICATION C0-D63 - C90-D63.	WHITE	CLEVERTRONICS CLIFE-PRO
SP		PROVIDE THE LIGHTING CONTROL SWITCH PANEL AS A FLUSH RECESSED IP66 316 STAINLESS STEEL ENCLOSURE C/W HINGED LOCKABLE LID CONTAINING TWO MULTI GANG FACEPLATES THE TV SHUTTER CONTROL SWITCH A6 AND THE SECURITY KEY PANEL AS PER THE SP DETAIL. THE LOCK IS TO BE KEYED TO THE SCHOOLS EXISTING KEY SYSTEM. PROVIDE THE ENCLOSURE WITH A FLUSH MOUNTING TRIM AND ENSURE THERE ARE NO PROTRUSIONS OUT FROM THE WALL MORE THAN 20MM. ALL PROTRUSIONS AND ACCESSIBLE EDGES ARE TO BE ROUNDED SUCH THAT THERE ARE NO SHARP EDGES OR CORNERS. WALL MOUNTED AT 1000mm AFFL.	STAINLESS STEEL ENCLOSURE WHITE FACEPLATES	ENCLOSURE PLUS CLIPSAL C2000 SERIES FACEPLATES
IP65	DOUBLE IP65 POWER OUTLET	DOUBLE POWER OUTLET C/W CIRCUIT IDENTIFICATION ON THE FACEPLATE BEHIND THE SURROUND MOUNT ABOVE BENCH U.N.O	WHITE	TRANSCO NEPTUNE P2DWS
	SINGLE POWER OUTLET	SINGLE POWER OUTLET C/W CIRCUIT IDENTIFICATION ON THE FACEPLATE BEHIND THE SURROUND MOUNT ABOVE BENCH U.N.O	WHITE	CLIPSAL C2000 SERIES
	DOUBLE POWER OUTLET	DOUBLE POWER OUTLET C/W CIRCUIT IDENTIFICATION ON THE FACEPLATE BEHIND THE SURROUND MOUNT ABOVE BENCH U.N.O	WHITE	CLIPSAL C2000 SERIES
CR-1	COMMUNICATIONS RACK CR-1	EXISTING POOL COMMUNICATIONS RACK UPGRADE THE EXISTING FOBOT TO ACCOMMODATE THE ADDITIONAL CR-B FIBRE CABLE		
CR-B	COMMUNICATIONS RACK CR-B	PROVIDE A LOCKABLE 600 DEEP 22RU MINIMUM WALL MOUNTED COMMUNICATIONS RACK TO BE USED TO FACILITATE THE NEW COMMUNICATIONS CABLE PATCH PANELS, FOBOT LOCAL PA EQUIPMENT AND SCHOOL BELL EQUIPMENT. CONFIRM THE LAYOUT OF THE NEW EQUIPMENT IN THE RACK WITH THE SCHOOLS IT STAFF. LOCATE THE ASSOCIATED POWER OUTLET WITHIN THE RACK AND PROVIDE A 6 PORT POWER RAIL ALONG THE REAR OF THE RACK. CONNECT THE NEW RACK TO THE EXISTING CENTRAL ADMINISTRATION BUILDING RACK WITH A NEW UNDERGROUND FIBRE CABLE. MOUNT THE RACK AT HIGH LEVEL.		
	CAT 6 COMMUNICATIONS OUTLET	RJ45 CAT-6A SHIELDED COMMUNICATIONS OUTLET, CABLED BACK TO THE COMMUNICATIONS RACK. TERMINATED ONTO FACILITY PATCH PANELS VIA 4-PAIR CAT-6 SHIELDED TWISTED PAIR CABLE. MOUNT UP TO 3 RJ45 OUTLETS PER MULTI-GANG FACEPLATE WITH SEPARATE PERMANENT LABELLING FOR EACH OUTLET. POSITION THE CEIL MOUNTED OUTLET FACEPLATES 50MM ON THE PLASTER BOARD 50MM FROM THE EDGE OF THE EXPOSED STEEL.	WHITE	CLIPSAL "C2000 SERIES" COMMSSCOPE OUTLET
	SCHOOL BELL RECESSED SPEAKER	FLUSH RECESSED MULTI TAPPED 60W COAXIAL CAN SPEAKER CONNECTED TO A HIGH SCHOOL EXTERNAL SCHOOL BELL SYSTEM AMPLIFIER MOUNTED IN THE COMMUNICATIONS RACK CR-B BALANCE THE SPEAKER / ADJUST THE TAPS TO THE SATISFACTION OF THE SCHOOLS MAINTENANCE STAFF	WHITE	AUSTRALIAN MONITOR QF60CS
	PA SYSTEM RECESSED SPEAKER	FLUSH RECESSED MULTI TAPPED 60W COAXIAL CAN SPEAKER CONNECTED TO THE LOCAL RADIO MICROPHONE PA SYSTEM AMPLIFIER MOUNTED IN THE COMMUNICATIONS RACK CR-B BALANCE THE SPEAKER / ADJUST THE TAPS TO THE SATISFACTION OF THE SCHOOLS MAINTENANCE STAFF	WHITE	AUSTRALIAN MONITOR QF60CS
	RADIO MICROPHONE ANTENNA	IMPACT RESISTANT RADIO MICROPHONE ANTENNA CONNECTED TO THE LOCAL RADIO MICROPHONE PA SYSTEM AMPLIFIER MOUNTED IN THE COMMUNICATIONS RACK CR-B		
DGP	SECURITY DATA GATHERING PANEL (DGP)	SECURITY DATA GATHERING PANEL CONNECTED TO THE SCHOOLS EXISTING SECURITY SYSTEM VIA FIBRE MODEMS. LOCATE THE DATA GATHERING PANEL AT 2400 ADJACENT THE CR-B AND LOCATE THE GPO WITHIN THE PANEL. PROVIDE A CONCEALED FIBRE PATCH LEAD FROM THE DGP THROUGH THE WALL INTO THE COMMUNICATIONS RACK FOR CONNECTION INTO THE FOBOT. THE DGP TYPE IS TO MATCH THE EXISTING DGPS. PROGRAM THE SECURITY SYSTEM AS REQUIRED TO ACCOMMODATE THE NEW DGPS AND CHANGES TO THE SATISFACTION OF THE OPERATOR.		
	SECURITY PIEZO SIREN	SURFACE PIEZO SIREN. SUBMIT DETAILS FOR APPROVAL PRIOR TO ORDERING		
	SECURITY INTRUDER DETECTOR	DUAL-TECHNOLOGY MOVEMENT DETECTORS WALL MOUNTED AS PER THE MANUFACTURER'S SPECIFICATION. CONNECT TO THE LOCAL SECURITY EQUIPMENT WITH ONE DETECTOR PER ZONE. TYPE TO MATCH THE EXISTING JUNIOR SCHOOL DETECTORS. PROGRAM THE SECURITY SYSTEM AS REQUIRED TO ACCOMMODATE THE NEW DETECTORS AND CHANGES TO THE SATISFACTION OF THE OPERATOR. SUBMIT DETAILS FOR APPROVAL PRIOR TO ORDERING		
KP	SECURITY SYSTEM KEYPAD (KP)	LCD KEYPAD TYPE TO MATCH THE EXISTING MOUNTED WITHIN THE SP ENCLOSURE. CONNECT TO THE LOCAL SECURITY EQUIPMENT. PROGRAM THE SECURITY SYSTEM AS REQUIRED TO ACCOMMODATE THE NEW KEY PANELS AND CHANGES TO THE SATISFACTION OF THE OPERATOR. SUBMIT DETAILS FOR APPROVAL PRIOR TO ORDERING		
DB-B	DB-B	PROVIDE DB-B A NEW IP44 METAL DISTRIBUTION BOARD AS PER THE NOTES AND DISTRIBUTION SCHEDULE. SUPPLY THE NEW DISTRIBUTION BOARD FROM A NEW 40 AMP MCB IN DB-14 VIA A NEW CORE 50mm Cu XLPE / PVC + E UNDERGROUND SUBMAIN. PROVIDE A TOOL REMOVABLE COLOURBOND HAT SECTION FROM THE DISTRIBUTION BOARD TO THE FLOOR. PROVIDE A SHOP DRAWING FOR APPROVAL.		
DB-14	DB-14	EXISTING SCIENCE BUILDING DISTRIBUTION BOARD TO BE PROVIDED WITH A NEW MCB TO SUPPLY DB-B UPDATE THE LABEL AND SCHEDULE ACCORDINGLY.		

LEGEND

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TYPE	LAMPS	DESCRIPTION	COLOUR / ACCESSORY	CATALOGUE No
A1		A PRE-TERMINATED HDMI 2 CABLE WITH A LENGTH LESS THAN 5M FROM THE TV (A1) TO EACH OF THE A2 FACEPLATES. PROVIDE A RCA AUDIO CONNECTION FROM THE TV (A1) TO THE RADIO MICROPHONE PA SYSTEM MIXER AMPLIFIER IN CR-B. PROVIDE A BRUSH CABLE ACCESS FACEPLATE ON THE WALL BEHIND THE TV TO FACILITATE CABLE ACCESS FROM THE WALL ONTO THE ACCESS WAY TO THE TV PROVIDED BY THE BUILDER.		
A2		HDMI OUTLET ON A FACEPLATE C/W HINGED COVER MATCHING THE ADJACENT GPO FACEPLATE. MOUNT THE HDMI OUTLET ADJACENT THE IP65 GPO. CONNECT THE HDMI OUTLET TO THE A1 OUTLET VIA A HDMI 2 CABLE CONCEALED WITHIN THE WALL.		
A3		BACKBOARD MOTOR. TERMINATE THE CONTROL WIRING AND POWER SUPPLY INTO THE MOTOR CONTROLLER MOUNTED BELOW THE CEILING AS PER THE MOTOR CONTROLLER INSTRUCTIONS.		
A4		3 CORE 2.5MM 240V CONTROL CABLE RUN FROM THE A4 LOCATION WALL MOUNTED AT 1000 AFFL TO THE A3 LOCATION TO CONTROL THE BACKBOARD. TERMINATE THE CONTROL WIRING INTO THE KEY SWITCH AS PER THE KEY SWITCH INSTRUCTIONS		
C-A		PROVIDE A 100 DIA POWER CONDUIT UNDERGROUND FROM PIT 1 TO RISE UP WITHIN THE MECHANICAL SERVICES PLANT ENCLOSURE AS PER THE DB-14 CABLE ACCESS DETAIL. PROVIDE HAT SECTION OVER THE CABLE FROM THE SLAB PENETRATION TO DB-14 MODIFYING THE EXISTING MECHANICAL SERVICES HAT SECTIONS AS NECESSARY. PROVIDE THE CONDUIT WITH A SPARE DRAW WIRE.		
C-B		PROVIDE TWO 100 DIA POWER CONDUITS UNDERGROUND BETWEEN PIT 1 AND PIT 1. PROVIDE THE CONDUITS EACH WITH A SPARE DRAW WIRE.		
C-C		PROVIDE A 100 DIA POWER CONDUIT UNDERGROUND FROM PIT 2 TO RISE UP INTO A HAT SECTION BELOW DB-B. PROVIDE THE CONDUIT WITH A SPARE DRAW WIRE.		
C-D		PROVIDE TWO X 50 DIA COMMUNICATIONS CONDUITS UNDERGROUND FROM THE EXISTING COMMUNICATIONS PIT TO RISE UP AGAINST THE WALL INTO CR-B. PROVIDE THE CONDUITS EACH WITH A SPARE DRAW WIRE.		
PIT 1		PROVIDE PIT 1 AS A NEW POWER PIT WITH A CLASS C INFILL LID C/W PROPRIETARY PRECAST CONCRETE LID SURROUND, PRECAST CONCRETE PIT AND PRECAST CONCRETE RISERS AS REQUIRED. ENSURE THE TOP OF THE PIT IS FLUSH WITH THE FINAL SURROUNDING LEVELS. STAMP THE PIT LID WITH THE WORD "ELECTRICITY" DRAIN THE PIT TO STORM WATER AND PROVIDE THE PIT WITH A WEEP HOLE IN THE BASE INTO A 1 M CUBED GRAVEL SOAKAGE PIT. PROVIDE DETAILS OF THE PIT / LIDS FOR APPROVAL PRIOR TO ORDERING. PROVIDE A 150 WIDE X 150 DEEP MIN SURROUND AROUND THE TOP OF EACH PIT WITH A 10MM FALL AWAY FROM THE PIT LID. PROVIDE PHOTOS OF THE COMPLETED PITS. INSTALLATION SHOWING ALL CONDUITS AND CABLING. MARK UP THE PHOTOS WITH THE SIZE AND DESTINATION OF EACH CONDUIT.	POWER PIT 450 X 4400 OPENING X 700 MIN DEPTH	"DURHAM CAC44C S44B, R4XX AND P444-C
PIT 2		PROVIDE PIT 2 AS A NEW POWER PIT WITH A CLASS C INFILL LID C/W PROPRIETARY PRECAST CONCRETE LID SURROUND, PRECAST CONCRETE PIT AND PRECAST CONCRETE RISERS AS REQUIRED. ENSURE THE TOP OF THE PIT IS FLUSH WITH THE FINAL SURROUNDING LEVELS. STAMP THE PIT LID WITH THE WORD "ELECTRICITY" DRAIN THE PIT TO STORM WATER AND PROVIDE THE PIT WITH A WEEP HOLE IN THE BASE INTO A 1 M CUBED GRAVEL SOAKAGE PIT. PROVIDE DETAILS OF THE PIT / LIDS FOR APPROVAL PRIOR TO ORDERING. PROVIDE A 150 WIDE X 150 DEEP MIN SURROUND AROUND THE TOP OF EACH PIT WITH A 10MM FALL AWAY FROM THE PIT LID. PROVIDE PHOTOS OF THE COMPLETED PITS. INSTALLATION SHOWING ALL CONDUITS AND CABLING. MARK UP THE PHOTOS WITH THE SIZE AND DESTINATION OF EACH CONDUIT.	POWER PIT 450 X 4400 OPENING X 700 MIN DEPTH	"DURHAM CAC44C S44B, R4XX AND P444-C
EXISTING		EXISTING ELECTRICAL PIT TO REMAIN AS IS		



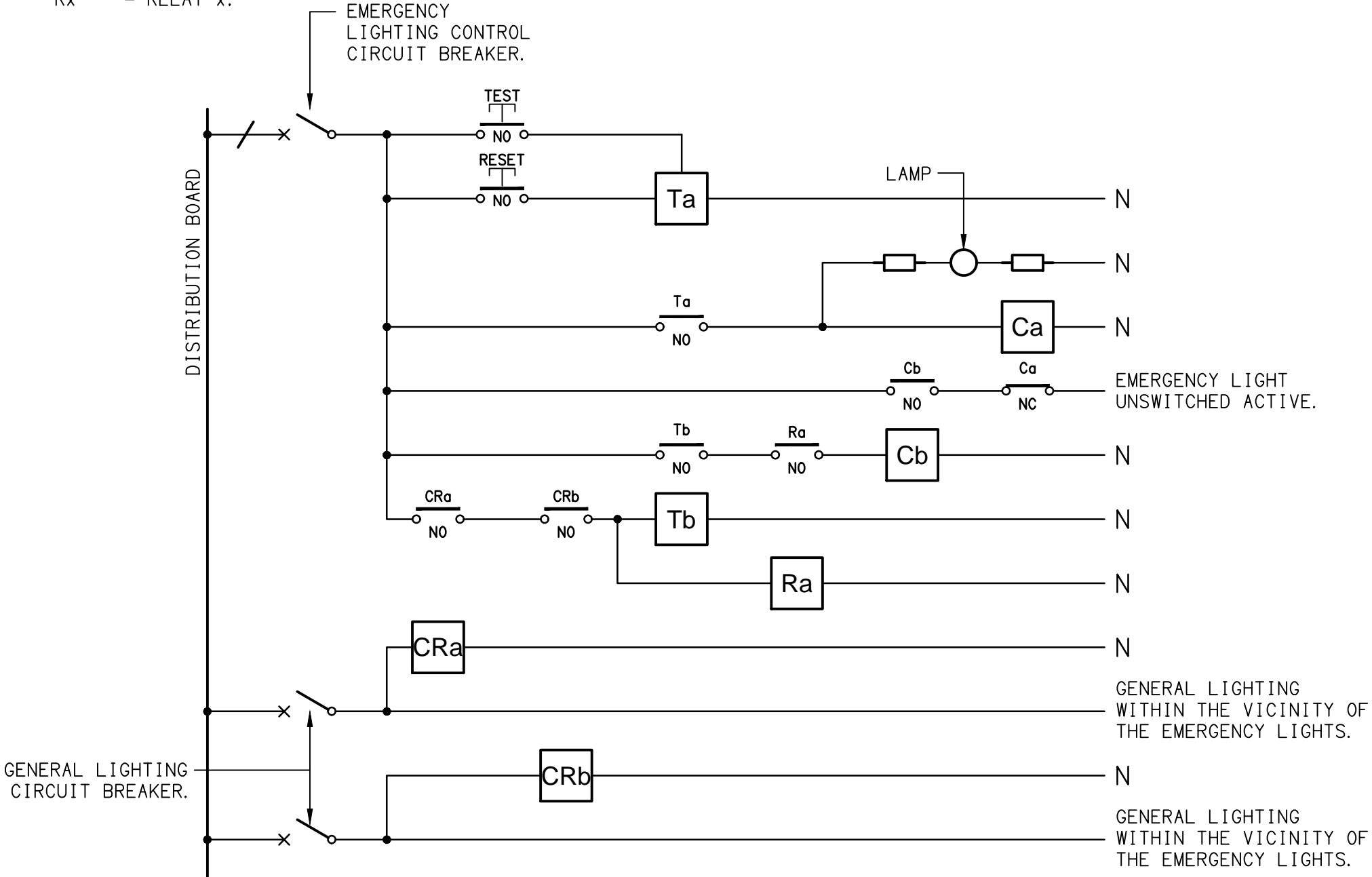
SCHEMATIC  
RJ45 PINOUT CONFIGURATION  
NOT TO SCALE

NOTE

ALL ELECTRICAL PENETRATIONS THROUGH THE ROOF SHEETING ARE TO BE IN LINE WITH THE STRUCTURAL OR MECHANICAL SERVICES PENETRATIONS TO AVOID DEDICATED FLASHINGS FOR THE ELECTRICAL SERVICES.

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

RYAN CATHOLIC COLLEGE,  
COVERED AREA BALL COURTS

DRAWING TITLE

ELECTRICAL SERVICES  
LEGEND

59 CANTERBURY ROAD, KIRWAN, QLD

**ELECTRICAL DESIGN GROUP**

ELECTRICAL BUILDING SERVICES CONSULTANTS

BRISBANE

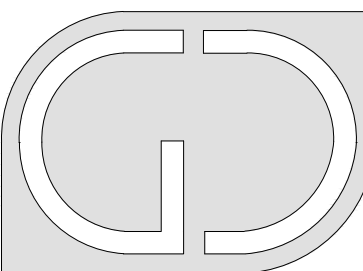
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GOLD COAST

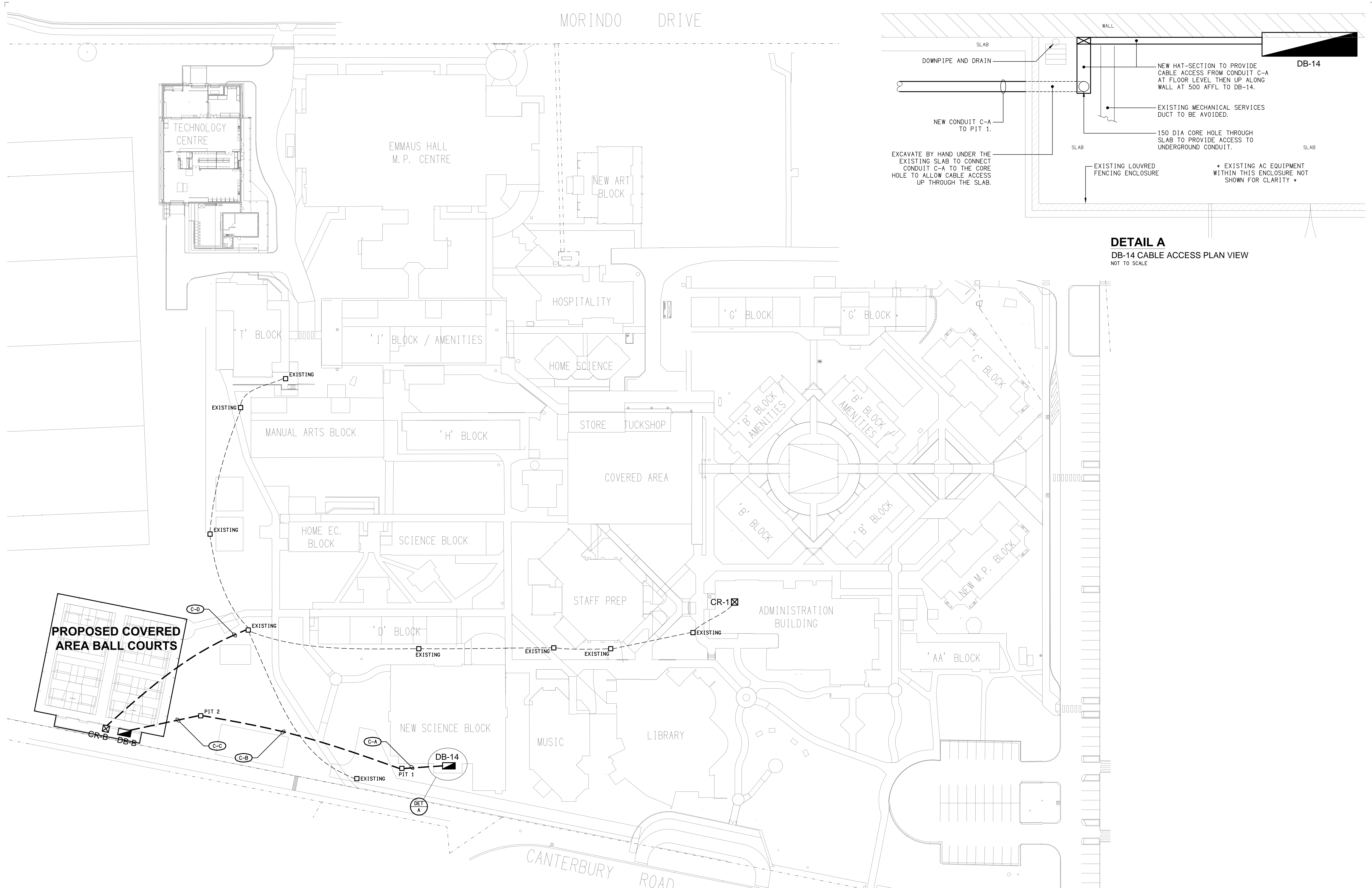


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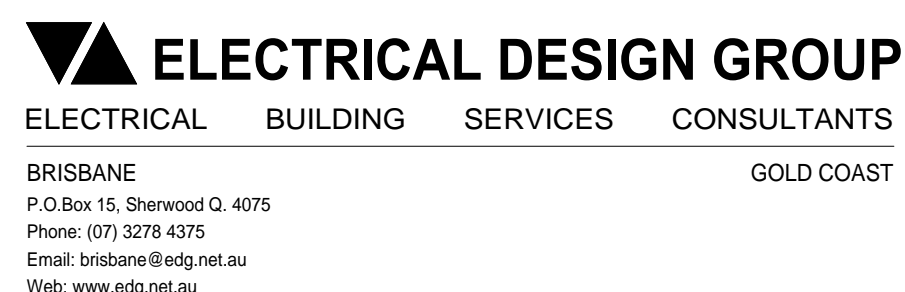
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EDG PROJECT No.  
**E01**  
EDG DWG No. REV





**DETAIL A**  
DB-14 CABLE ACCESS PLAN VIEW  
NOT TO SCALE

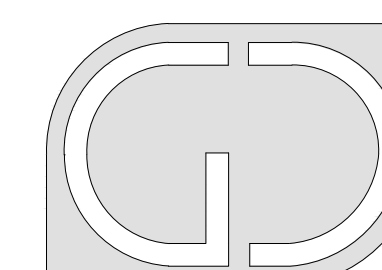
REV	DATE	DESCRIPTION
B	12/12/2022	TENDER
C	26/05/2023	CONSTRUCTION



THE ROMAN CATHOLIC TRUST  
CORPORATION FOR THE DIOCESE  
OF TOWNSVILLE

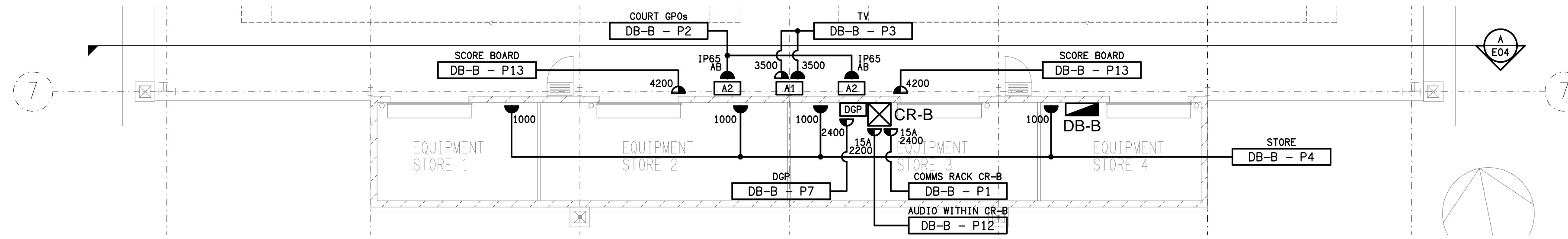
PROJECT	DRAWING TITLE
RYAN CATHOLIC COLLEGE, COVERED AREA BALL COURTS	<b>ELECTRICAL SERVICES SITE PLAN</b>

59 CANTERBURY ROAD, KIRWAN, QLD



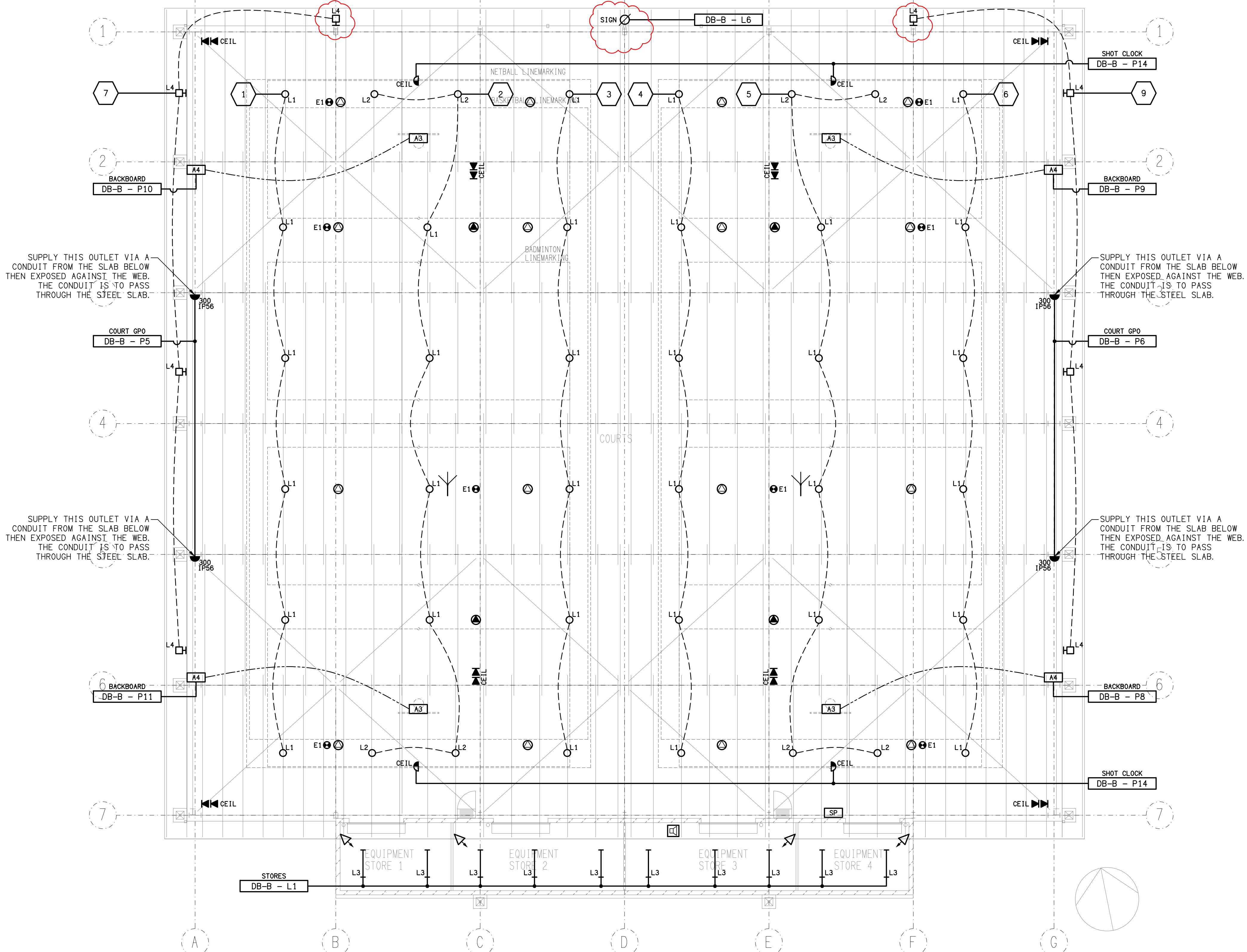
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EQUIPMENT STORE ROOMS

FLOOR PLAN  
SCALE 1:100



REV	DATE	DESCRIPTION
C	12/12/2022	TENDER
D	13/12/2022	TENDER
E	26/05/2023	CONSTRUCTION
F	12/07/2023	CONSTRUCTION

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GOLD COAST

CLIENT

THE ROMAN CATHOLIC TRUST  
CORPORATION FOR THE DIOCESE  
OF TOWNSVILLE

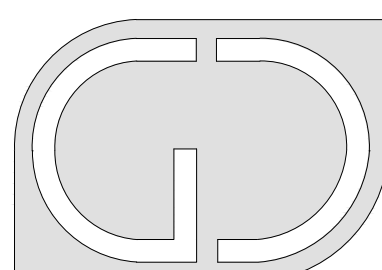
PROJECT

RYAN CATHOLIC COLLEGE,  
COVERED AREA BALL COURTS

DRAWING TITLE

ELECTRICAL SERVICES  
FLOOR / REFLECTED CEILING  
PLAN

59 CANTERBURY ROAD, KIRWAN, QLD



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**C2824a**  
EDG PROJECT No.  
**E03**  
EDG DWG No. REV  
**F**



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 SYSTEM.
- RADIO MICROPHONE PA SYSTEM.
- 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.

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.
- AS1670.
- 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 CIRCUIT BREAKER IN THE EXISTING DB-14 TO SUPPLY A NEW DB-B VIA A NEW UNDERGROUND SUBMAIN. A UNDERGROUND PIT AND CONDUIT SYSTEM IS TO BE PROVIDED ALONG WITH HAT SECTION IN THE EXISTING MECHNAICAL SERVICES PLANT ENCLOSURE TO FACILITATE CABLE ACCESS FOR THE NEW SUBMAIN FROM DB-14 TO DB-B.

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

- POWER DISTRIBUTION.
- EARTHING.
- UNDERGROUND PITS AND CONDUITS.
- HAT SECTIONS.
- SUBMAIN.
- DB-14 UPGRADE.
- NEW DISTRIBUTION BOARD DB-B.
- CIRCUITS.
- INSTALLATION OF THE BACKBOARD CONTROL SYSTEM.
- TV SHUTTER CONTROL SYSTEM.
- ISOLATORS AND OUTLETS.
- TESTING AND COMMISSIONING.

ENSURE THAT POWER IS MAINTAINED TO THE EXISTING SCIENCE BUILDING BETWEEN 6.00AM AND 1.00AM. ANY INTERRUPTIONS TO THE POWER SUPPLY MUST BE LIMITED TO LESS THAN TWO HOURS BETWEEN 1.00AM 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.
- LAMPS.
- EARTHING OF THE LIGHTING INSTALLATION.
- LIGHTING CONTROL.
- SWITCH PANEL ENCLOSURE.
- 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. PROVIDE A 6 CORE SINGLE MODE OSM FIBRE CABLE FULLY TERMINATED WITH LC CONNECTORS BETWEEN THE NEW COMMUNICATIONS RACK CR-B AND THE EXISTING ADMINISTRATION BUILDING COMMUNICATIONS RACK CR-1.

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

- UPGRADING OF CR-1 TO ACCOMMODATE THE NEW FIBRE.
- NEW UNDERGROUND FIBRE CABLES FROM CR-1 TO AND CR-B.
- COMMUNICATIONS RACK CR-B.
- EXTENSION OF THE EXISTING UNDERGROUND CONDUIT SYSTEM FROM THE EXISTING COMMUNICATIONS PIT TO CR-B.
- COMMUNICATIONS OUTLETS.
- FIBER, PATCH PANELS WITHIN CR-B AS REQUIRED.
- HDMI OUTLETS AND CABLES.
- TESTING AND COMMISSIONING.

9. INTRUDER DETECTION

THE SECURITY SYSTEM COMPONENT OF THIS CONTRACT INCLUDES THE EXPANSION OF THE SCHOOLS EXISTING SECURITY SYSTEM WITH ALL NEW INTER BUILDING (SECURITY NETWORK) CONNECTIONS VIA THE COMMUNICATIONS SYSTEM OPTICAL FIBRE CABLING. UPGRADE THE EXISTING EQUIPMENT AS REQUIRED TO ACCOMMODATE THE OPTICAL FIBRE CONNECTIONS.

PROVIDE NEW DATA GATHERING PANELS / SECURITY PANEL ADJACENT COMMUNICATION RACK CR-B. PROVIDE A ARMING / DISARMING KEY PANEL WITHIN THE SP ENCLOSURE.

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

- FIBRE MODEMS.
- DATA GATHERING PANEL.
- KEY PANEL.
- MOVEMENT SENSORS.
- PIEZO SIREN.
- TESTING AND COMMISSIONING.

NOTES

10. SCHOOL BELL SYSTEM

PETER STEPHENS OF STEPHENS COMPUTER & ELECTRONIC SERVICES, UNIT 16, 58 KENT STREET CURRAJONG 4812 IS TO BE ENGAGED AS A NOMINATED SUB-CONTRACTOR TO SUPPLY AND INSTALL THE PA SYSTEM. PHONE (07) 4775 5924 MOBILE 0417 144 834 e-mail peter@scses.net.au

THE SCHOOL BELL PA SYSTEM COMPONENT OF THIS CONTRACT INCLUDES THE EXPANSION OF THE SCHOOLS EXISTING SCHOOL BELL PA SYSTEM IN THE ADMINISTRATION BUILDING WITH THE AUDIO SIGNAL DISTRIBUTED AS AN IP SIGNAL OVER THE SCHOOLS ETHERNET NETWORK.

WITHIN THE COMMUNICATIONS RACK CR-B PROVIDE A NEW ETHERNET TO AUDIO INTERFACE UNIT AND A NEW AMPLIFIER TO POWER THE SPEAKERS WITHIN THE BUILDING. THE AMPLIFIER/S IS TO BE SIZED AT 200% OF THE INITIAL NOMINAL SPEAKER LOAD.

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

- ETHERNET TO AUDIO INTERFACE UNIT.
- AMPLIFIER.
- SPEAKERS.
- TESTING AND COMMISSIONING.

11. RADIO MICROPHONE PA SYSTEM

PETER STEPHENS OF STEPHENS COMPUTER & ELECTRONIC SERVICES, UNIT 16, 58 KENT STREET CURRAJONG 4812 IS TO BE ENGAGED AS A NOMINATED SUB-CONTRACTOR TO SUPPLY AND INSTALL THE LOCAL RADIO MICROPHONE PA SYSTEM. PHONE (07) 4775 5924 MOBILE 0417 144 834 e-mail peter@scses.net.au

THE LOCAL RADIO MICROPHONE PA SYSTEM COMPONENT OF THIS CONTRACT INCLUDES THE PROVISION OF A STANDALONE RADIO MICROPHONE PA SYSTEM INCLUDING A REMOTE RADIO MICROPHONE ANTENNA SYSTEM AND AN AUDIO INPUT FROM THE LARGE SCREEN TV (A1).

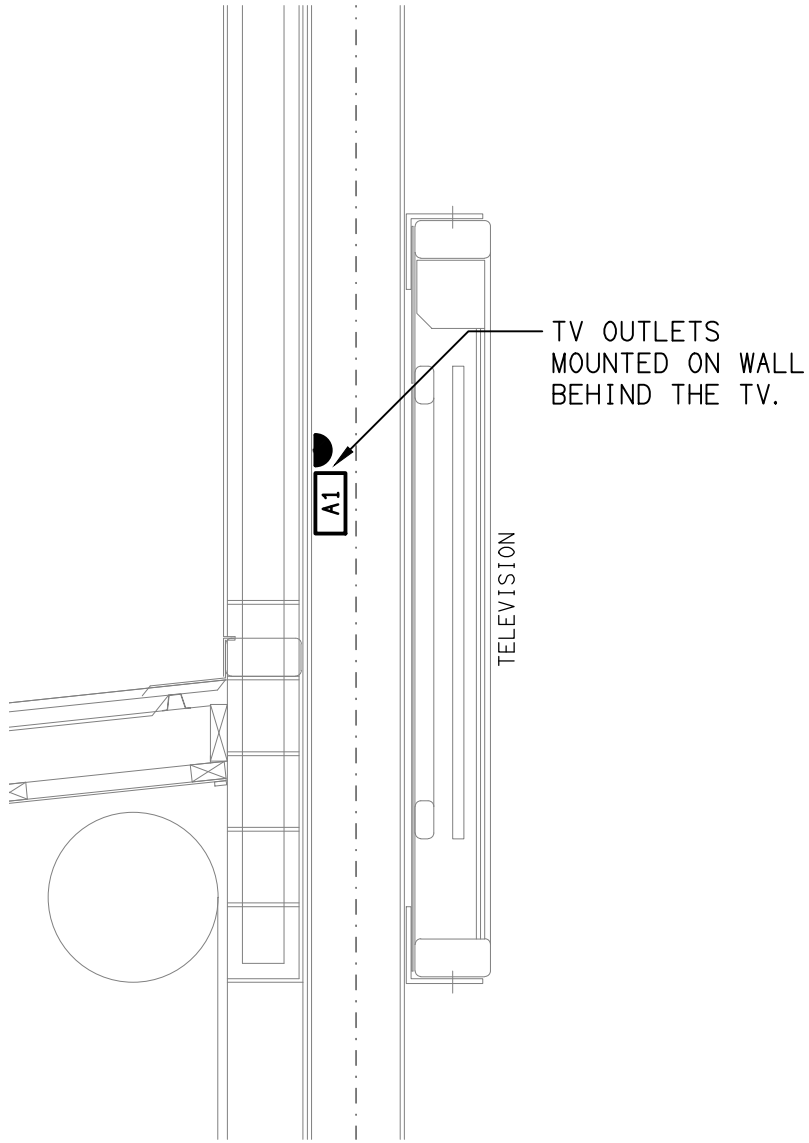
THE DEDICATED MIXER AMPLIFIER AND RADIO MICROPHONE RECEIVERS ARE TO BE MOUNTED WITHIN COMMUNICATIONS RACK CR-B. THE AMPLIFIER/S IS TO BE SIZED AT 200% OF THE INITIAL NOMINAL SPEAKER LOAD.

THE LOCAL RADIO MICROPHONE PA SYSTEM COMPONENT OF THIS CONTRACT IS TO INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:

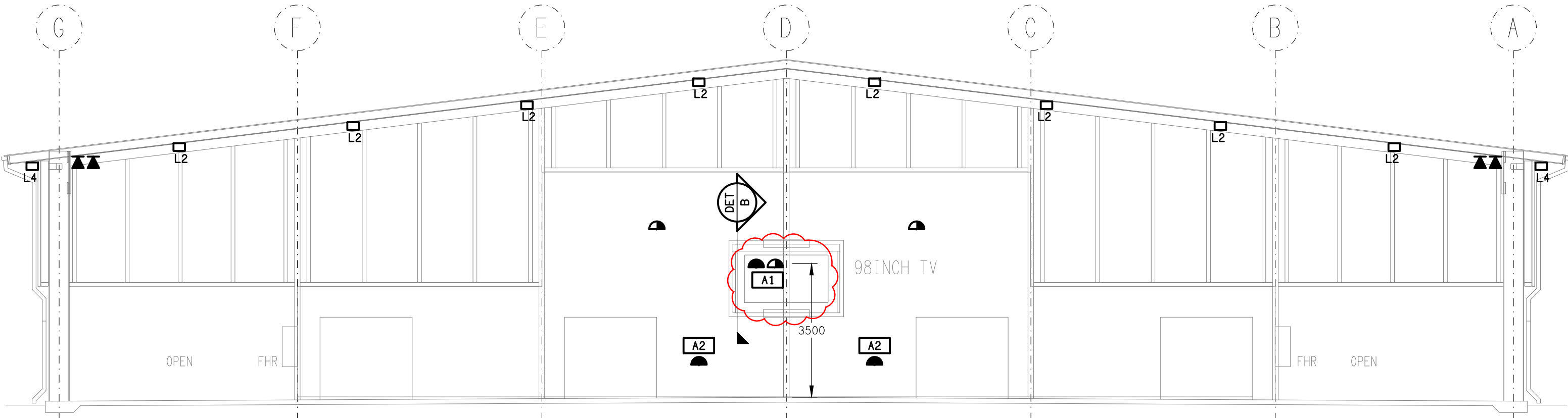
- TWO RECHARGEABLE HAND HELD RADIO MICROPHONES THAT MATCH THE EXISTING USED THROUGHOUT THE SCHOOL.
- RADIO MICROPHONE RECEIVER/S.
- RADIO MICROPHONE ANTENNA SYSTEM.
- MIXER AMPLIFIER/S.
- TV AUDIO INPUT.
- SPEAKERS.
- TESTING AND COMMISSIONING.

12. 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.  
N - NEON / LED INDICATOR WHEN ON.  
NTS - NOT TO SCALE.  
RCBO - CIRCUIT PROTECTED VIA A 30mA RESIDUAL CURRENT DEVICE INTEGRAL TO THE CIRCUIT BREAKER. 3-PHASE RCBO TO BE 4-POLE.  
RSD - ROLLER SHUTTER DOOR.  
SSS - MOUNT SUSPENDED FROM CEILING.  
UNO - UNLESS NOTED OTHERWISE.  
WP - WEATHERPROOF TO IP56 UNO.  
500 - NUMBER DENOTES MOUNTING HEIGHT AFFL.



DETAIL B  
TV OUTLET MOUNTING  
NOT TO SCALE



DETAIL A  
SOUTHERN WALL ELEVATION  
SCALE 1:100

CLIENT

THE ROMAN CATHOLIC TRUST  
CORPORATION FOR THE DIOCESE  
OF TOWNSVILLE

PROJECT

RYAN CATHOLIC COLLEGE,  
COVERED AREA BALL COURTS

ELECTRICAL SERVICES  
NOTES & ELEVATION

DRAWING TITLE

59 CANTERBURY ROAD, KIRWAN, QLD

ELECTRICAL DESIGN GROUP

ELECTRICAL BUILDING SERVICES CONSULTANTS

GOLD COAST

BRISBANE

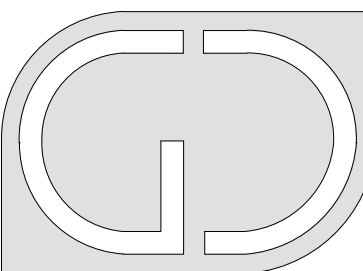
P.O.Box 15, Sherwood Q. 4075

Phone: (07) 3278 4375

Email: brisbane@edg.net.au

Web: www.edg.net.au

REV	DATE	DESCRIPTION
C	12/12/2022	TENDER
D	13/12/2022	TENDER
E	26/05/2023	CONSTRUCTION



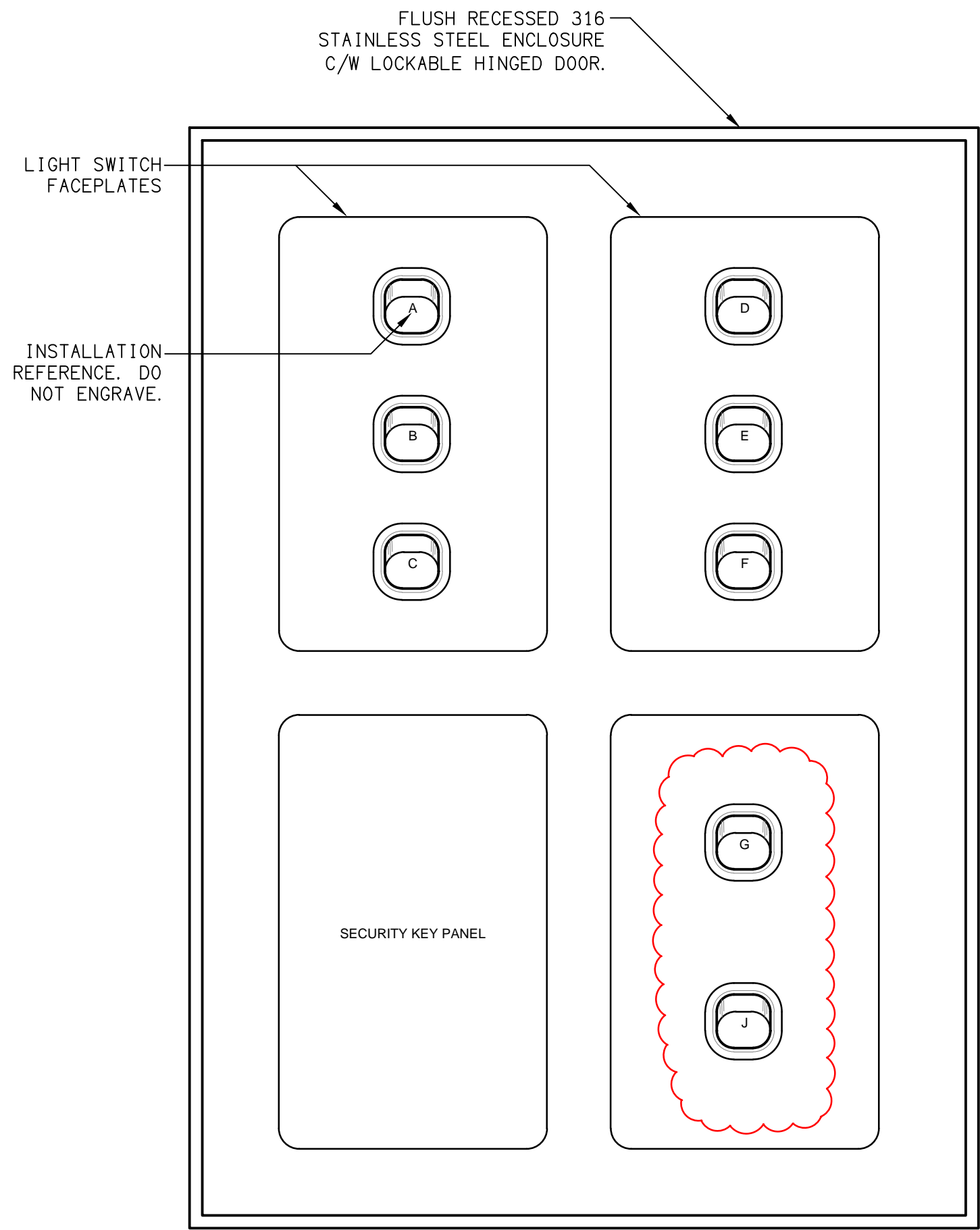
G+D GROUP (QLD)  
Level 3 Toowong Terraces  
31 Sherwood Road Toowong Q 4066  
T (07) 3870 3722  
F (07) 3870 3822  
E admin@gdggroupqld.com.au

DATE	
SCALE 1:100	A1
DRAWN	AT
CHECKED	

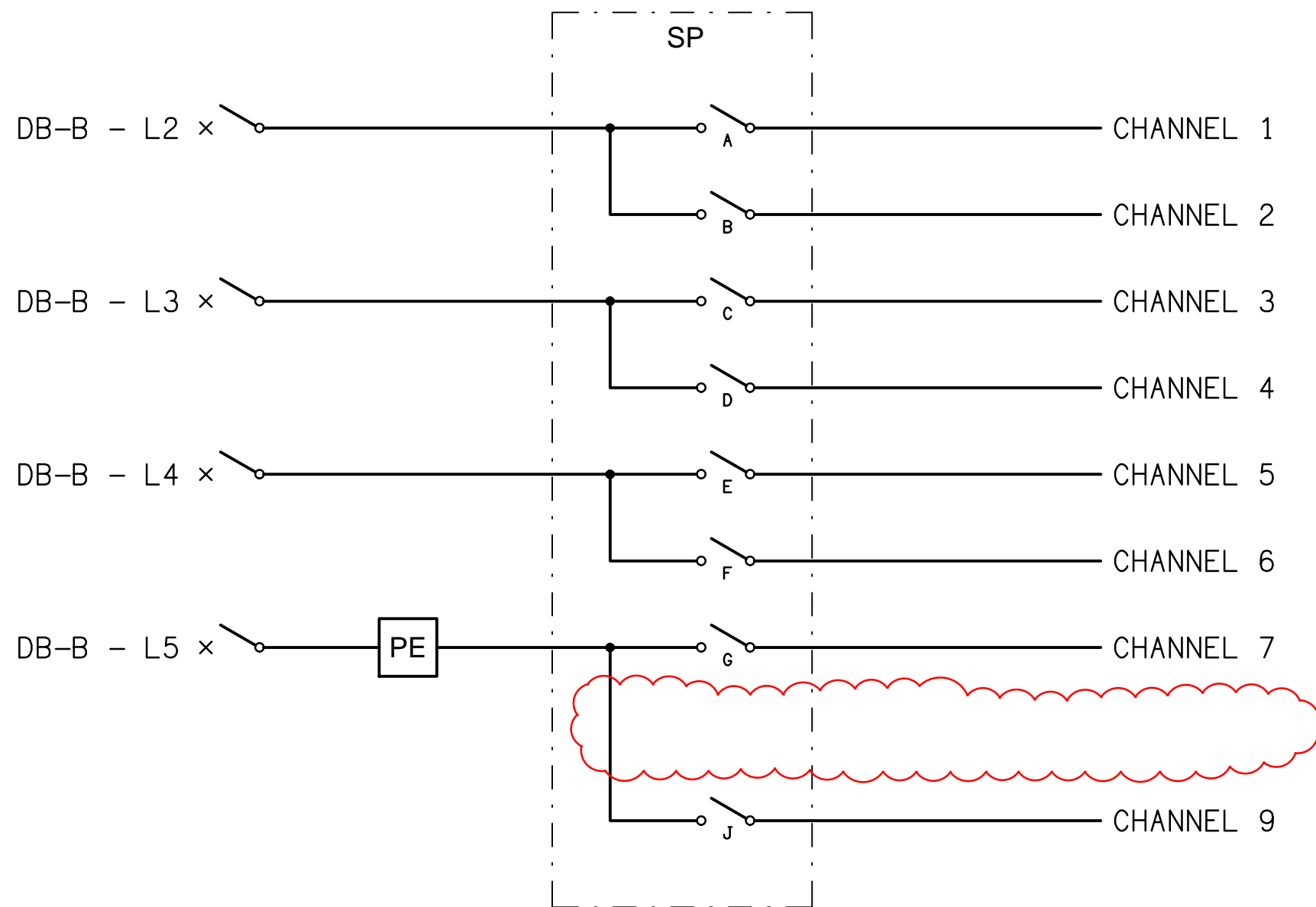
C2824a  
EDG PROJECT No.  
E04 E  
EDG DWG No. REV



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**DETAIL**  
SWITCH PANEL ELEVATION  
NOT TO SCALE



**SCHEMATIC**  
SWITCH PANEL CONTROL  
NOT TO SCALE

**DISTRIBUTION BOARD DB-B SCHEDULE**

FAULT CURRENT:		6KA		MAIN SWITCH:		160A NON AUTO LOAD BREAK ISOLATOR
CHASSIS SIZE:		48 POLES		SUPPLIED FROM:		DB 14
CHASSIS RATING:		250A		SUPPLY CABLE:		4C 50
PHASES:		3				
PROVIDE THE DB WITH A FULL WIDTH EMPTY DIN RAIL CIRCUIT BREAKER WITH THE USE AND THE POSITION.				TO ACCOMMODATE FUTURE CONTACTORS AND CONTROLS. ACCURATELY LABEL EACH PROVIDE THE DB WITH AN AS2293 EMERGENCY LIGHT TESTING FACILITY		
CIRC	PH	CIRCUIT BREAKER (amps)	CONTROL EQUIPMENT	CABLE SIZE (mm2)	LOCATION	CIRCUIT USE
P1	1	20	RCBO	2.5	STORES	CR-B
P2	1	20	RCBO	2.5	COURT	GPOs
P3	1	20	RCBO	2.5	COURT	TV
P4	1	20	RCBO	2.5	STORES	GPOs
P5	1	20	RCBO	4.0	COURT	GPOs
P6	1	20	RCBO	4.0	COURT	GPOs
P7	1	20	RCBO	2.5	STORES	DGP
P8	1	20	RCBO	4.0	COURT	BACKBOARD
P9	1	20	RCBO	4.0	COURT	BACKBOARD
P10	1	20	RCBO	4.0	COURT	BACKBOARD
P11	1	20	RCBO	4.0	COURT	BACKBOARD
P12	1	20	RCBO	2.5	CR-B	AUDIO
P13	1	20	RCBO	2.5	COURT	SCORE BOARDS
P14	1	20	RCBO	2.5	COURT	SHOT CLOCKS
L1	1	20	RCBO	2.5	STORES	LIGHTS
L2	1	20	RCBO	4.0	COURT	LIGHTS
L3	1	20	RCBO	4.0	COURT	LIGHTS
L4	1	20	RCBO	4.0	COURT	LIGHTS
L5	1	20	RCBO	4.0	EXTERNAL	FLOOD LIGHTS
L6	1	20	RCBO TC ON / OFF	2.5	EXTERNAL	SIGN

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