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.
- ELECTRONIC SECURITY.
- INTRUDER DETECTION.
- PA SYSTEM.
- FIRE ALARM.
- MODIFICATION, RELOCATION AND EXTENSION AS NECESSARY OF ALL EXISTING SERVICES THAT ARE IMPACTED BY THE WORKS OR REQUIRED TO BE EXTENDED BY THE WORKS.
- REMOVAL OF ALL EXISTING SERVICES MADE REDUNDANT BY THE WORKS.
- DOCUMENTS.
- ANY TEMPORARY WORKS REQUIRED TO KEEP THE HOTEL OPERATING DURING THE CONSTRUCTION PROCESS AND ACCOMMODATE STAGING OF THE WORKS TO REFLECT THE EXECUTION OF THE MAIN CONTRACT WORKS.
- 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.

REFER TO THE EQUIPMENT SCHEDULE FOR ADDITIONAL REQUIREMENTS.

2. WORKMANSHIP

ENSURE THAT THE ELECTRICAL WORK IS PERFORMED BY THE HOLDER OF A CURRENT ELECTRICAL SUB CONTRACTOR LICENSE AND THE SERVICES COVERED BY THE ACMA IS PERFORMED BY THE HOLDER OF THE APPROPRIATE CURRENT ACMA 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.

MODIFICATION, RELOCATION AND EXTENSION AS NECESSARY OF ALL EXISTING SERVICES THAT ARE IMPACTED BY THE WORKS OR REQUIRED TO BE EXTENDED BY THE WORKS.

PROVIDE ALL TEMPORARY WORKS REQUIRED TO KEEP THE VENUE AND ALL CONSTRUCTION STAGES OPERATING INCLUDING STAGED COMMISSIONING DURING THE CONSTRUCTION PROCESS.

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.

CORRUGATED CONDUITS MUST NOT BE USED WITHIN ANY FOOD OR DRINK PREPARATION OR SERVERY AREAS.

CABLE JOINS ARE NOT ACCEPTABLE. ALL CABLING, WIRING, CONDUCTORS AND CONDUITS MUST BE CONCEALED. ALL EXISTING ELECTRICAL SERVICES INCLUDING CABLING AND SWITCHGEAR THAT IS FOUND TO BE REDUNDANT OR MADE REDUNDANT BY THE WORKS MUST BE REMOVED.

IT IS ACCEPTABLE TO USE EXISTING SWITCHGEAR, OUTLETS AND CABLING IF THEY ARE APPROPRIATELY RATED AND THE ELECTRICIAN ACCEPTS RESPONSIBILITY OVER THE SWITCHGEAR / OUTLETS / CABLE AND PROVIDES A WARRANTY OVER IT AS IF IT WAS INSTALLED NEW BY THE ELECTRICIAN.

3. STANDARDS

IRRESPECTIVE OF INFORMATION CONTAINED IN THE ELECTRICAL SERVICES DOCUMENTS OR IN INSTRUCTIONS, IT IS THE ELECTRICAL SUB CONTRACTORS 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.
- AS1670.1.
- QUEENSLAND FIRE DEPARTMENT.
- WORKPLACE HEALTH AND SAFETY ACT.
- TELECOMMUNICATIONS ACT.
- ACMA REQUIREMENTS.

NOTES

4. 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.

5. POWER DISTRIBUTION

UTILISE THE EXISTING PRIMARY SCHOOL MAIN SWITCHBOARD MSB-P (WHICH DOES NOT NEED TO COMPLY WITH AS/NZS 61439) TO PROVIDE NEW UNDERGROUND SUBMAINS TO THE NEW SWITCHBOARDS MDB-A, DB-B AND DB-G. THE NEW SWITCHBOARD DB-1 IS SUPPLIED FROM DB-G. THE MDB-A IS TO SUPPLY THE NEW MSSB AND SOLAR INVERTER.

PROVIDE NEW UNDERGROUND CONDUITS FROM THE EXISTING PIT AND CONDUIT SYSTEM TO ACCOMMODATE THE NEW SUBMAINS. PROVIDE A FLUSH HOUSING AROUND THE CABLES RISING UP THE COVERED AREA STRUCTURE.

ALL OF THE EXISTING CIRCUITS, CABLING AND OUTLETS THAT BECOME REDUNDANT ARE TO BE REMOVED.

THE POWER SUPPLY TO THE REMAINDER OF THE SCHOOL MUST BE MAINTAINED AT ALL TIMES THE SCHOOL IS OPEN INCLUDING THE AFTER HOURS CARE. ANY INTERRUPTION TO THE POWER SUPPLY MUST BE ADVISED TO THE SCHOOL IN WRITING TWO WEEKS PRIOR.

PROVIDE ENERGY MONITORING AS PER J9D3 OF THE NCC BCA 2022 UTILISING DIN RAIL MOUNTED SCHNEIDER iEM3265 BACnet/MSTP METERS CONNECTED TO THE SCHOOLS BMS.

ALL CIRCUIT BREAKERS AND CIRCUIT SCHEDULES MUST BE LABELLED / CONTAIN THE SUBMAIN / CIRCUIT USE AND LOCATION SUCH THAT THE CONNECTION / OUTLET CAN BE SIMPLY IDENTIFIED.

OUTLETS ARE TO BE PROVIDED WITH A NEAT HAND WRITTEN CIRCUIT DESIGNATION BY INDELIBLE INK ON THE FACEPLATE SUCH THAT IT IS NOT VISIBLE WHEN THE COVER IS CONCEALED.

THE POWER DISTRIBUTION COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:
- POWER DISTRIBUTION.
- DISTRIBUTION BOARDS.
- CABLE ACCESS WAYS.
- CIRCUITS.
- ISOLATORS AND OUTLETS.
- TESTING AND COMMISSIONING.
- REMOVAL OF ALL EXISTING REDUNDANT SERVICES.
- RECONNECTION OF ALL EXISTING SERVICES THAT REMAIN.
- PROVIDE AN INFRARED SCAN OF THE MSB AND ALL DISTRIBUTION BOARDS PROVIDED AS PART OF THE WORKS ONE WEEK AFTER PRACTICAL COMPLETION. PROVIDE A LOGGING CHART RECORDING OF THE MAINS CURRENT, VOLTAGE, FREQUENCY FOR THE FIRST 14 DAYS FOLLOWING PRACTICAL COMPLETION AND SUBMIT THE THERMOSCAN AND CHART RECORDING AND FOR APPROVAL.

REFER TO THE POWER SCHEMATIC AND DISTRIBUTION BOARD SCHEDULES FOR ADDITIONAL REQUIREMENTS AND CIRCUIT DETAILS.

PROVIDE DISTRIBUTION BOARDS MDB-A, DB-B, DB-G AND DB-1 AS FOLLOWS:
- WALL MOUNTED.
- EACH CUBICAL IS TO HAVE A MINIMUM WIDTH OF 600MM.
- IP44 FORM 1.
- LIGHT GREY ENCLOSURE WHITE ESCUTCHEON.
- 3 POINT 92268 KEY LOCKABLE HANDLES ON ALL DOORS.
- LIFT OFF HINGES ON ALL DOORS AND ESCUTCHEONS.
- 1/4 TURN LATCHES AND D HANDLES ON ALL ESCUTCHEONS.
- ALL SWITCHGEAR TO BE NHP/ TERASAKI.
- PROVIDE SHOP DRAWINGS INCLUDING THE LIGHTING CONTROLS FOR APPROVAL.
- ALL COMPONENTS ARE TO BE LABELLED WITH NON-STICK LABELS.
- PROVIDED WITH A LABEL CONTAINING: SOURCE NAME, SOURCE OVERLOAD RATING IN AMPS, SUBMAIN CABLE TYPE, SIZE, CONFIGURATION AND LENGTH.
- EACH CIRCUIT CONTROLLED VIA A TIME CLOCK AND OR PE CELL IS TO BE PROVIDED WITH AN ON/OFF/AUTO SELECTOR SWITCH ON THE ASSOCIATED DISTRIBUTION BOARDS ESCUTCHEON. ENSURE ALL THREE PHASE CIRCUITS ARE PROVIDED WITH CORRECT PHASE ROTATION.

ENSURE ALL OUTLETS AND ISOLATORS ARE POSITIONED SUCH THAT THEY ARE NOT COVERED BY THE EQUIPMENT. THE FINAL POSITION OF ALL OUTLETS AND ISOLATORS ARE TO BE CONFIRMED ON SITE BY THE TENANTS REPRESENTATIVE.

6. SOLAR PV SYSTEM

PROVIDE A 100KW SOLAR PV INSTALLATION AS FOLLOWS:
- UNDERTAKEN BY AN INSTALLER WITH SOLAR ACCREDITATION AUSTRALIA (SAA) DESIGN AND INSTALLATION ACCREDITATION.
- ENERGEX APPROVALS, FEES AND CHARGES.
- RPEQ ENGINEERING AND DESIGN.
- SUPPLY AND INSTALLATION OF ALL COMPONENTS FORMING PART OF THE SOLAR SYSTEM INSTALLATION.
- ALL CABLING MUST BE COPPER.
- PROVIDE A ALUMINIUM OR HOT DIPPED GALVANIZED PV PANEL SUPPORT SYSTEM.
- PROVIDE THE SOLAR SYSTEM DC AND AC CABLING THAT HAS A LESS THAN COMBINED LOSS LESS THAN 3%.
- PROVIDE SHOP DRAWINGS AND TECHNICAL DETAILS OF THE SOLAR SYSTEM INCLUDING ALL COMPONENTS AND THE PV PANEL LAYOUTS FOR APPROVAL.
- PROVIDE A HARD COPY OF THE ENTIRE SYSTEM DESIGN AND ALL INFORMATION ASSOCIATED WITH THE SOLAR SYSTEM IN A PERMANENT DOCUMENT HOLDER ADJACENT THE INVERTER.
- SIGNAGE AND LABELS.
- AC AND DC CABLING.
- AC AND DC ISOLATORS.
- PROVIDE THE INVERTER WITH GRID PROTECTION INCLUDING ALL NECESSARY WORKS TO THE MSB.

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.
- LIGHTING SUBCIRCUITS.
- EMERGENCY AND EXIT LIGHTING.
- TESTING AND COMMISSIONING.

PROVIDE THE FORUM WITH A PROGRAMMABLE ZEN CONTROL LIGHTING CONTROL SYSTEM CONFIGURED AS DIRECTED BY THE SCHOOL AT PRACTICAL COMPLETION. ALLOW TO RECONFIGURE THE FORUM ZEN CONTROL LIGHTING CONTROL SYSTEM TWICE MORE DURING THE DEFECT AND LIABILITY PERIOD. ALL OF THE DALI LIGHTING CONTROL OUTSIDE OF THE FORUM IS TO BE VIA MANUAL DALI KNOBS.

NOTES

8. EMERGENCY AND EXIT LIGHTING

PROVIDE A SINGLE POINT EMERGENCY LIGHTING SYSTEM THAT COMPLIES WITH THE LATEST ISSUE OF ALL PARTS AS2293 AND THE RELEVANT PARTS OF THE NCC BCA. INSTALL EMERGENCY LIGHT FITTINGS NOMINATED AS MAINTAINED WITH THE LAMP PERMANENTLY ON SUPPLIED VIA AN UNSWITCHED ACTIVE MAINS SUPPLY WHEN THE MAINS SUPPLY IS AVAILABLE. WHEN THE MAINS SUPPLY IS NOT AVAILABLE, THE LAMP IS TO REMAIN ON SUPPLIED BY THE EMERGENCY PACK. SINGLE LAMP MAINTAINED EMERGENCY LIGHTS ARE NOT SWITCHED WITH THE LOCAL GENERAL AREA LIGHTING. (THE LAMP IS ALWAYS ON.)

INSTALL EMERGENCY LIGHT FITTINGS NOMINATED AS NON-MAINTAINED AS FOLLOWS:
- IF THE FITTING IS NOT BEING SWITCHED, THE LAMP IS TO REMAIN OFF WHEN THE MAINS SUPPLY IS AVAILABLE. WHEN THE MAINS SUPPLY IS NOT AVAILABLE THE LAMP IS TO BE SWITCHED ON SUPPLIED BY THE EMERGENCY PACK. UNSWITCHED SINGLE LAMP NON-MAINTAINED EMERGENCY LIGHTS ARE NOT SWITCHED WITH THE LOCAL GENERAL AREA LIGHTING. (THE LAMP IS ON ONLY WHEN THE MAINS SUPPLY IS NOT AVAILABLE.)
- IF THE FITTING IS BEING SWITCHED, THE LAMP IS TO BE SUPPLIED AND CONTROLLED WITH THE LOCAL GENERAL AREA LIGHTING WHEN THE MAINS SUPPLY IS AVAILABLE. WHEN THE MAINS SUPPLY IS NOT AVAILABLE THE LAMP IS TO BE SWITCHED ON, SUPPLIED BY THE EMERGENCY PACK. (THE LAMP IS ON WHEN TURNED ON WITH THE LOCAL GENERAL LIGHTING OR THE MAIN SUPPLY IS NOT AVAILABLE.)

INSTALL EMERGENCY LIGHTS SUCH THAT THE STATUS INDICATOR L.E.D. IS CLEARLY VISIBLE AND THE TEST BUTTONS ARE READILY ACCESSIBLE. LABEL EACH CIRCUIT BREAKER WHICH CONTROLS THE UNSWITCHED ACTIVE TO EXIT LIGHTS WITH A LABEL FIXED ADJACENT; ENGRAVED PLASTIC LAMINATE, GREEN BACKGROUND WITH WHITE CHARACTERS: –

WARNING
INTERRUPTING SUPPLY WILL DISCHARGE
EMERGENCY LIGHTING BATTERIES

PROVIDE WRITTEN EVIDENCE OF THE INITIAL COMMISSIONING AND TESTING AND TESTING FOR THE DURATION OF THE MAINTENANCE PERIOD IN ACCORDANCE WITH AS 2293.2.

THIS EVIDENCE IS TO BE IN THE FORM OF A LOG BOOK SIMILAR TO THE GENERAL LIGHTING SERVICE PTY LTD "EMERGENCY LIGHTING MAINTENANCE LOG BOOK AND MANUAL" WHICH IS TO BE PROVIDED BY THE ELECTRICAL SUB-CONTRACTOR AND HAVE ALL ENTRIES FULLY COMPLETED AND BE PRESENTED FOR INSPECTION AT PRACTICAL COMPLETION. THE LOG BOOK IS TO BE RETAINED BY THE ELECTRICAL SUB-CONTRACTOR FOR THE DURATION OF THE MAINTENANCE PERIOD, AND THE SIX MONTHLY TEST AND MAINTENANCE RESULTS ENTERED. THE LOG BOOK IS TO BE PRESENTED FOR APPROVAL AT FINAL COMPLETION (EXPIRY OF THE MAINTENANCE PERIOD) AND WILL BE FORWARDED TO THE OPERATOR FOR THEIR USE.

PROVIDE MAINTENANCE OF THE EMERGENCY AND EXIT LIGHTING INSTALLATION INCLUDING RECORDS IN ACCORDANCE WITH THE LATEST ISSUE OF ALL PARTS AS2293 AND THE RELEVANT PARTS OF THE NCC BCA. PROVIDE THE EMERGENCY LIGHTING SYSTEM WITH A SUPPLY SENSING AND TESTING FACILITY IN ACCORDANCE WITH AS 2293.1.

9. COMMUNICATIONS

QUEENSLAND DATA N ELECTRICAL SERVICES (07) 3889 7733 RORY CROSS 0411 704 385 rory@qlddata.com.au IS TO BE ENGAGED AS A NOMINATED SUBCONTRACTOR TO THE ELECTRICAL SUB-CONTRACTOR TO INSTALL THE COMMUNICATIONS CABLING. ALL OF THE EXISTING COMMUNICATION CABLES THAT BECOME REDUNDANT ARE TO BE REMOVED. A NEW 12 CORE MULTIMODE FIBRE IS TO BE SPLICED INTO THE EXISTING MULTI MODE CABLE FROM THE REDUNDANT PREP SCHOOL RACK AT THE EXISTING FIBRE TERMINATION PILLAR AND EXTENDED TO CR-56. THE COMMUNICATIONS CABLING COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:
- REMOVAL OF EXISTING REDUNDANT CABLING.
- COMMUNICATIONS OUTLETS.
- COMMUNICATIONS PLUGS FOR CCTV CAMERAS AND VAPE SENSORS CABLED VIA PURPLE CAT6 CABLE.
- COMMUNICATIONS RACK CR-56.
- AV RACK.
- FOBOTS WITHIN CR-56.
- PATCH PANELS WITHIN CR-56 AS REQUIRED.
- 12 CORE OS2 UNDERGROUND FIBRE CABLE FULLY TERMINATED WITH LC CONNECTORS LINKING THE FIBRE TERMINATION PILLAR TO CR-56.
- 4 CORE FIBRE CABLE FULLY TERMINATED WITH LC CONNECTORS LINKING THE NEW FIP TO CR-56.
- TESTING AND COMMISSIONING.

10. ELECTRONIC SECURITY

A.B.C. ALARMS PTY. LTD. ANDRE CAFUN andrec@abcalarms.com.au PH (07) 3849 1939 MOB: 0408 917 505 IS TO BE ENGAGED AS A NOMINATED SUBCONTRACTOR TO THE ELECTRICAL SUB CONTRACTOR TO UNDERTAKE ALL WORKS ASSOCIATED WITH THE SECURITY SERVICES INCLUDING THE INTRUDER DETECTION AND ACCESS CONTROL SYSTEM AS AN EXPANSION OF THE SCHOOLS EXISTING SECURITY SERVICES.

THE SECURITY COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:
- ACCESS CONTROL.
- EXPANDER PANELS.
- INTRUDER DETECTORS.
- PIEZO SIRENS.
- ARMING / DISARMING KEY PANEL.
- FIBRE MODEMS.
- CARD READERS.
- ELECTRIC STRIKES.
- CONCEALED DOOR CONTROLLERS.
- INTERFACE THE ACCESS CONTROL SYSTEM TO THE FIP TO UNLOCK THE NOMINATED DOORS UPON ALARM.
- INTERFACE THE ACCESS CONTROL SYSTEM TO THE LIFT TO ALLOW IT TO BE CALLED VIA AN AUTHORISED CARD.
- INTERFACE THE INTRUDER DETECTION SYSTEM TO THE LIGHTING SUCH THAT ALL INTERNAL LIGHTING IN PROTECTED AREAS IS TURNED OFF WHEN THE SECURITY SYSTEM IS ARMED.
- TESTING AND COMMISSIONING.

11. PA SYSTEM

A.B.C. ALARMS PTY. LTD. ANDRE CAFUN andrec@abcalarms.com.au PH (07) 3849 1939 MOB: 0408 917 505 IS TO BE ENGAGED AS A NOMINATED SUBCONTRACTOR TO THE ELECTRICAL SUB CONTRACTOR TO UNDERTAKE ALL WORKS ASSOCIATED WITH THE PA SYSTEM.

THE SCHOOLS EXISTING TERACOM TERR-EX IP-AUDIO SYSTEM IS TO BE EXPANDED TO SUPPLY ALL OF THE PA SYSTEM SPEAKERS.

THE PUBLIC ADDRESS SYSTEM COMPONENT OF THIS CONTRACT INCLUDES MULTI TAP 100V SPEAKERS AND HORNS CABLED TO POWER AMPLIFIERS MOUNTED WITH IN THE TOP OF COMMUNICATIONS RACK CR-562. PROVIDE SEPARATE AMPLIFIERS CONFIGURED AS SEPARATE ZONES BEING EXTERNAL, COVERED COURT, BASEMENT INTERNAL, GROUND LEVEL INTERNAL, AND FIRST LEVEL INTERNAL. PRIOR TO PRACTICAL COMPLETION, PROVIDE A TEMPORARY MUSIC SOURCE TO AIM / BALANCE THE SPEAKERS AND HORNS ON SITE AS DIRECTED BY THE SCHOOL.

THE PUBLIC ADDRESS SYSTEM COMPONENT OF THIS CONTRACT INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:
- SPEAKERS AND HORNS.
- AMPLIFIERS AND IP-AUDIO CONVERTERS LOCATED IN CR-56.
- CO-ORDINATION.
- TESTING, COMMISSIONING AND BALANCING.
- MAINTENANCE.
- AS CONSTRUCTED DOCUMENTS INCLUDING DRAWINGS DETAILING THE LOOP PATH OF EACH SPEAKER CABLE.
- CABLING, CABLE SUPPORT SYSTEMS AND ACCESS.
- ALL MINOR COMPONENTS AND INCIDENTAL WORKS NOT SPECIFICALLY REFERRED TO, HOWEVER NECESSARY TO COMPLETE THE PUBLIC ADDRESS SYSTEM INSTALLATION SUCH THAT IT IS HANDED OVER COMPLETE, OPERATIONAL AND FIT FOR THE INTENDED USE.

NOTES

12. FIRE ALARM

FVS SERVICES GROUP, 1300 387 387, MARK WESTON, 0418 129 610, mark@fvs.com.au IS TO BE ENGAGED AS A NOMINATED SUBCONTRACTOR TO THE ELECTRICAL SUB CONTRACTOR TO UNDERTAKE ALL WORKS ASSOCIATED WITH THE PA FIRE ALARM SYSTEM. THE FIRE ALARM COMPONENT OF THIS CONTRACT IS TO INCLUDES AN AS1670.1 COMPLIANT ADDRESSABLE FIRE DETECTION AND ALARM SYSTEM CONNECTED TO THE SCHOOLS EXISTING BRIGADE MONITORED SYSTEM.

THE FIRE ALARM COMPONENT OF THIS CONTRACT IS TO INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:
- FIP INCORPORATING THE FDCIE AND EWCIE.
- MANUAL CALL POINT ON THE FDCIE.
- INTERFACE THE FIP TO THE ACCESS CONTROL SYSTEM TO UNLOCK THE ASSOCIATED DOORS UPON ALARM.
- SPEAKERS.
- ADDRESSABLE SMOKE DETECTORS.
- ADDRESSABLE ASPIRATING SMOKE DETECTOR SYSTEM TO PROTECT THE LIFT SHAFT.
- ADDRESSABLE THERMAL DETECTORS.
- ADDRESSABLE CONCEALED SPACE DETECTORS C/W REMOTE INDICATORS AND REMOTE ACCESS BRACKETS AS REQUIRED.
- CABLING.
- VISUAL INDICATOR.
- SYSTEM DIAGRAM.
- AS CONSTRUCTED DOCUMENTS INCLUDING DRAWINGS DETAILING THE LOOP PATH AND EACH COMPONENT ADDRESS.
- PROVISION OF ANY ADDITIONAL SPEAKERS TO ACHIEVE EVACUATION SOUND LEVELS WITH A MINIMUM OF 10DB (A) ABOVE AMBIENT, AND NOT LESS THAN 65DB (A) AND NO MORE THAN 105DB (A).
- TESTING AND COMMISSIONING.
- LOG BOOK.
- MAINTENANCE DURING THE DEFECTS AND LIABILITY PERIOD IN ACCORDANCE WITH MP6.1 OF THE QDC AND AS1851.
- PAY ALL COSTS ASSOCIATED WITH THE ISOLATION AND RECONNECTION OF THE BRIGADE MONITORING OF THE FIRE ALARM SYSTEM.

THE CONTRACTOR IS RESPONSIBLE FOR PAYING ANY CALL OUT FEES ISSUED BY QFES THAT ARE THE RESULT OF DEFECTIVE WORKS, CABLING OR SYSTEM COMPONENTS

ENSURE ALL WORKS INSTALLED UNDER THE FIRE ALARM SYSTEM COMPONENT OF THE ELECTRICAL SUB-CONTRACT IS UNDERTAKEN BY, OR UNDER THE DIRECTION OF A SUITABLY QUALIFIED AND EXPERIENCED FIRE ALARM SYSTEM INSTALLER WHO HOLD THE REQUIRED QBCC AND FIRE PROTECTION CONTRACTORS REGISTRATION BOARD OF QUEENSLAND INC REGISTRATIONS.

13. DOCUMENTATION

WITHIN TWO WEEKS OF PRACTICAL COMPLETION PROVIDE THE FOLLOWING DOCUMENTATION.

AS CONSTRUCTED DRAWINGS INCLUDING:
- ELECTRICIANS NAME AND CONTACT DETAILS.
- PROJECT NAME, ADDRESS AND DATE OF PRACTICAL COMPLETION.
- FITTING POSITIONS AND TYPES CROSS REFERENCED TO A FITTING / EQUIPMENT SCHEDULE.
- OUTLET, SWITCH, AND CONNECTION POSITIONS CROSS REFERENCED TO A FITTING / EQUIPMENT SCHEDULE.
- REMOTE DRIVER LOCATIONS.
- CIRCUITS CROSS REFERENCED TO A DISTRIBUTION BOARD SCHEDULE.
- LIGHTING CONTROL CHANNELS CROSS REFERENCED TO A LIGHTING CONTROL SCHEDULE.
- POWER SCHEMATIC.
- SWITCHBOARD SHOP DRAWINGS.
- CABLE ACCESS ROUTES.

A FITTING / EQUIPMENT SCHEDULE INCLUDING.
- FITTING DETAILS INCLUDING THE MANUFACTURERS CATALOGUE NUMBERS WITH THE TYPES CROSS REFERENCED TO THE AS CONSTRUCTED DRAWINGS.
- OUTLETS AND SWITCHES INCLUDING THE MANUFACTURERS CATALOGUE NUMBERS WITH THE TYPES CROSS REFERENCED TO THE AS CONSTRUCTED DRAWINGS.

DISTRIBUTION BOARD SCHEDULES CROSS REFERENCED TO THE AS CONSTRUCTED DRAWINGS.

LIGHTING CONTROL SCHEDULE CROSS REFERENCED TO THE AS CONSTRUCTED DRAWINGS.

PHOTOS OF EACH SWITCHBOARD INCLUDING:
- CLOSED POSITION SUCH THAT THE SWITCHBOARD DESIGNATION AND CLEARANCE IS VISIBLE.
- THE SUBMAIN LABEL.
- DOOR/S OPEN ESCUTCHEON/S CLOSED SUCH THAT THE SPARE CAPACITY AND LABELLING IS VISIBLE.
- DOOR/S OPEN ESCUTCHEON/S REMOVED SUCH THAT THE SWITCHGEAR AND INTERNAL CABLING IS VISIBLE.

14. ABBREVIATIONS

A	–	AMP CURRENT RATING
AB	–	MOUNT ABOVE BENCH.
AD.	–	AUTO DOOR.
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.
HWS	–	HOT WATER SYSTEM.
MCB	–	MINIATURE CIRCUIT BREAKER.
MSB	–	MAIN SWITCHBOARD.
MSSB	–	MECHANICAL SERVICES SWITCHBOARD.
MW	–	MICROWAVE.
N	–	NEON / LED INDICATOR WHEN ON.
NTS	–	NOT TO SCALE.
OV	–	OVEN.
RCBO	–	CIRCUIT PROTECTED VIA A 30mA RESIDUAL CURRENT DEVICE INTEGRAL TO THE CIRCUIT BREAKER. 3-PHASE RCBO TO BE 4-POLE.
REF	–	REFRIGERATOR.
RK	–	RECESS KIT.
SUS	–	MOUNT SUSPENDED FROM CEILING.
UNO	–	UNLESS NOTED OTHERWISE.
WP	–	WEATHERPROOF TO IP56 UNO.
500	–	NUMBER DENOTES MOUNTING HEIGHT AFFL.

REV:	DESCRIPTION:	DATE:
T2	TENDER	07/10/2026

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ALL DIMENSIONS TO BE VERIFIED ONSITE.

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PROJECT:
ANGLICAN CHURCH GRAMMAR SCHOOL
YEAR 5 & 6 PRECINCT

OAKLANDS PARADE, EAST BRISBANE

DRAWING:
ELECTRICAL SERVICES
NOTES

SCALE: NOT TO SCALE AT A1

PROJECT NO:	DRAWING NO:	REVISION:
C3733a	E02	T2