
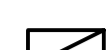















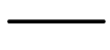
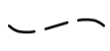
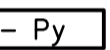





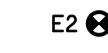



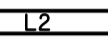
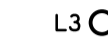








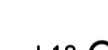

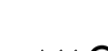

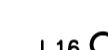


**LEGEND**

-  ELECTRICAL SERVICES SWITCHBOARD.
-  SWITCHBOARD / CONTROL PANEL NOT PROVIDED AS PART OF THE ELECTRICAL SUBCONTRACT.
-  SINGLE POWER OUTLET.
-  DOUBLE POWER OUTLET.
-  SPECIAL PURPOSE POWER OUTLET.
-  SIGNAGE CONNECTION.
-  NEW ELECTRICAL FLOOR BOX.
-  EXISTING ELECTRICAL FLOOR BOX TO REMAIN AS IS.
-  EXISTING ELECTRICAL FLOOR BOX TO BE REMOVED.
-  LIGHTING CONTROL SWITCH PANEL 1.
-  LIGHTING CONTROL SWITCH PANEL 2.
-  LIGHTING CONTROL SWITCH PANEL 3.
-  ELECTRIC VEHICLE CHARGING UNIT.
-  TABLE POWER OUTLETS.
-  ONE-WAY LIGHT SWITCH.
-  ELECTRICAL EQUIPMENT AS NOTED.
-  LIGHTING CONTROL CHANNEL REFERENCE.
-  CIRCUIT LINE.
-  SWITCH LINE.
-  POWER CIRCUIT DESIGNATION. DENOTES DB AND CIRCUIT.
-  RJ45 CAT 6 COMMUNICATIONS OUTLET.
-  RJ45 CAT 6 CCTV OUTLET.
-  BACKGROUND MUSIC SPEAKER, WHITE IN COLOUR UNO. Zx DENOTES ZONE AS NOTED. BK DENOTES BLACK IN COLOUR.

**LEGEND**

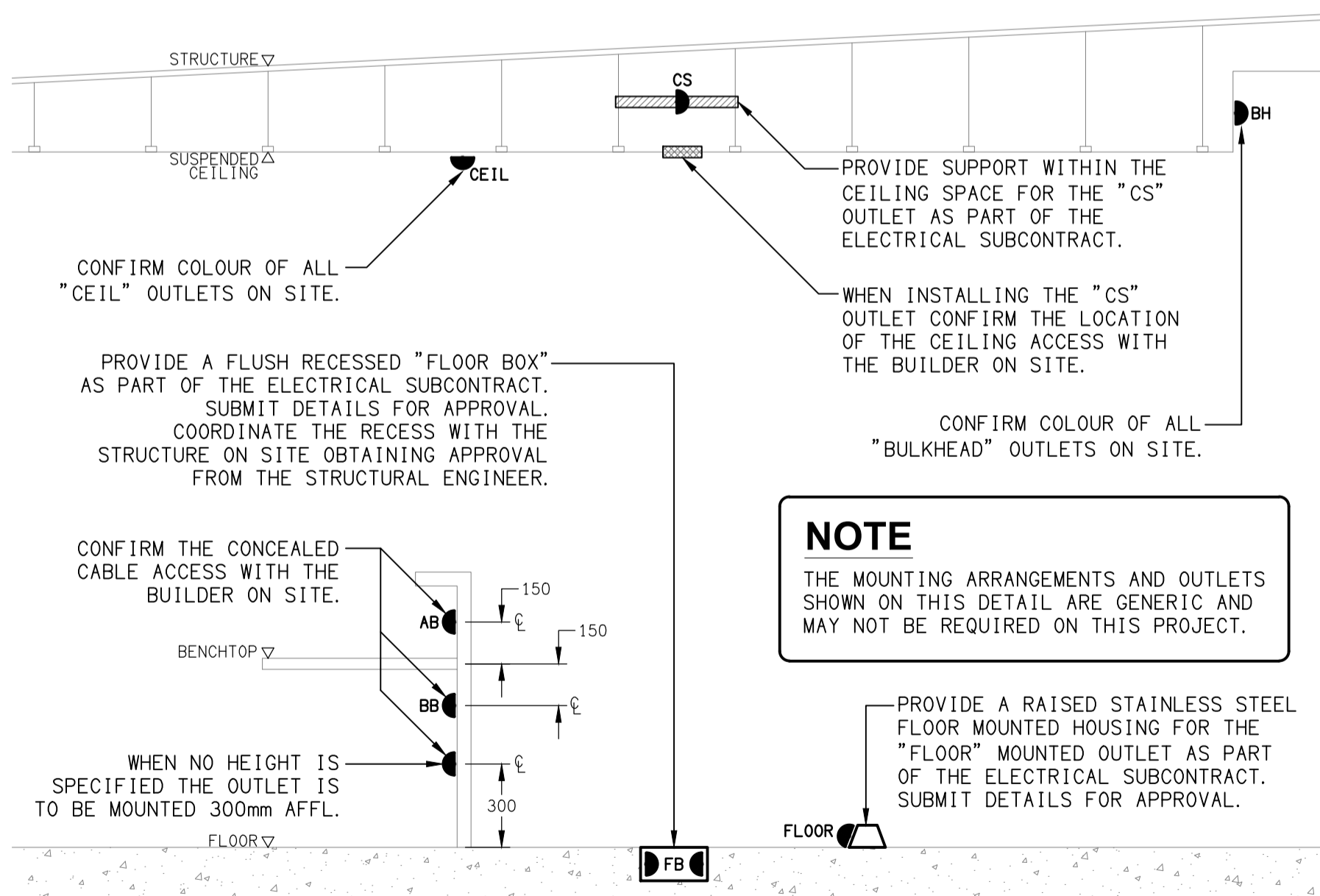
-  REFER TO DETAIL NOTED FOR THE AREA SHOWN HATCHED. ADDITIONAL OUTLETS & FITTINGS MAY BE SHOWN ON DETAIL.
-  E1: NON MAINTAINED LED EMERGENCY LIGHT WHITE.
-  E2: NON MAINTAINED LED EMERGENCY LIGHT BLACK.
-  EX: MAINTAINED EMERGENCY LED EXIT LIGHT WHITE.
-  EX BK: MAINTAINED EMERGENCY LED EXIT LIGHT BLACK.
-  L1: KIA LOOP LIGHT RED LED.
-  L2: FLUSH CEILING RECESSED CUSTOMER LED EXTRUSION.
-  L3: FLUSH WALL RECESSED CUSTOMER LED EXTRUSION.
-  L4: KIA SHOWROOM AREA DOUBLE HEAD LED RECESSED DOWN LIGHTS MOUNTED IN CEILING RECESS.
-  L5: MITSUBISHI SHOWROOM RECESSED ADJUSTABLE LED DOWNLIGHT BLACK.
-  L6: MITSUBISHI SHOWROOM RECESSED ADJUSTABLE LED DOWNLIGHT BLACK.
-  L7: MITSUBISHI SALES DESK PENDANT.
-  L8: 600 x 600 T BAR LED FLAT PANEL TROFFER.
-  L9: 600 x 600 PLASTER BOARD LED FLAT PANEL TROFFER.
-  L10: MITSUBISHI OFFICE RECESSED LED DOWNLIGHT WHITE.
-  L11: CIRCULATION RECESSED LED DOWNLIGHT WHITE.
-  L12: EXTERNAL SOFFIT RECESSED LED DOWNLIGHT WHITE.
-  L13: KIA SUSPENDED FEATURE LIGHT.
-  L14: KIA DELIVERY RECESSED DOWNLIGHT.
-  L15: EXTERNAL WALL MOUNTED AREA LIGHT.
-  L16: CARPARK POLE LIGHT.

**NOTES**

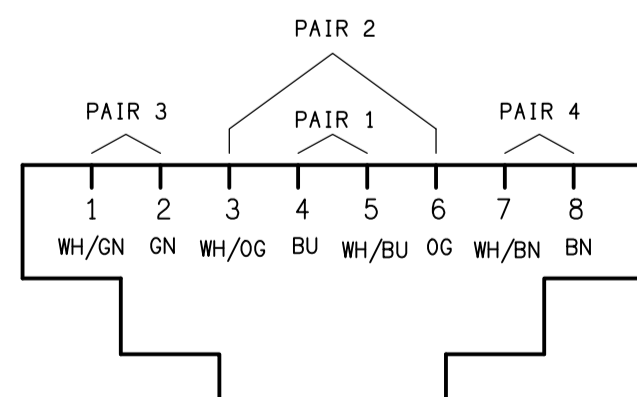
1. EXTENT OF WORKS
  - THE ELECTRICAL SERVICES SUB-CONTRACT INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:
    - SUPPLY AND INSTALLATION OF ALL COMPONENTS FORMING PART OF THE ELECTRICAL SERVICES.
    - INSPECTIONS.
    - TESTING AND COMMISSIONING.
    - MAINTENANCE.
    - CABLING, CABLE SUPPORT SYSTEMS AND ACCESS.
    - POWER DISTRIBUTION.
    - LIGHTING.
    - COMMUNICATIONS CABLING.
    - REMOVE ALL EXISTING ELECTRICAL SERVICES MADE REDUNDANT BY THE WORKS.
    - THE EXISTING ELECTRICAL SERVICES NOT REFERENCED OR SHOWN ARE TO REMAIN AS IS.
    - 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.
  - PRIOR TO COMMENCING WORK CONSULT SITE MANAGEMENT FOR ANY HAZARDOUS MATERIAL AND OR ASBESTOS REGISTERS AS WELL AS UNDERTAKE A THOROUGH INSPECTION OF THE SITE TO IDENTIFY ANY POTENTIAL HAZARDOUS MATERIALS, ASBESTOS AND HEALTH OR SAFETY RISKS. ADVISE THE CONTRACTOR OF ANY POTENTIAL HAZARDOUS MATERIALS, ASBESTOS AND HEALTH OR SAFETY RISKS IF IDENTIFIED AND DO NOT COMMENCE WORK UNTIL AN APPROPRIATE MANAGEMENT PLAN HAS BEEN DEVELOPED AND AGREED TO BY ALL PARTIES.
  - 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.
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 EMERGENCY SERVICES.

**NOTES**

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 2.5mm<sup>2</sup> 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.
6. POWER DISTRIBUTION
  - THE POWER DISTRIBUTION COMPONENT OF THIS CONTRACT INCLUDES THE MODIFICATION AND NEW CIRCUITS TO DB-1, DB-2 AND DB-3. UPGRADE THE SALES BUILDING MSB TO ACCOMMODATE A 100AMP MCCB TO SUPPLY THE NEW MSSB.
  - REFER TO DRAWING C3284A-E02.DWG FOR THE SCOPE OF WORK REGARDING THE CARPARK SITE MSB UPGRADE AND THE PROVISION OF THE KIA EV CHARGER. IT IS ACCEPTABLE TO UTILISE THE EXISTING CIRCUITS RETAINED OR REDUNDANT TO SUPPLY THE NEW OUTLETS IF THEY HAVE SUFFICIENT CAPACITY AND COMPLY WITH THE CURRENT VERSION OF AS3000.
  - ALL OF THE EXISTING CIRCUITS, CABLING AND OUTLETS THAT BECOME REDUNDANT ARE TO BE REMOVED.
  - ANY INTERRUPTION TO THE POWER SUPPLY TO ANY SERVICES OUTSIDE OF THE AREA OF WORKS MUST BE RESTRICTED TO OUTSIDE OF THE VENUES OPERATING HOURS AND MUST BE ADVISED TO THE OPERATOR IN WRITING TWO WEEKS PRIOR.
  - THE POWER DISTRIBUTION COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:
    - POWER DISTRIBUTION.
    - DISTRIBUTION BOARD MODIFICATIONS AND UPGRADES.
    - CABLE ACCESS WAYS.
    - CIRCUITS.
    - ISOLATORS AND OUTLETS.
    - FLOOR BOXES.
    - TESTING AND COMMISSIONING.
    - REMOVAL OF ALL EXISTING REDUNDANT SERVICES.
    - RECONNECTION OF ALL EXISTING SERVICES THAT REMAIN.
7. LIGHTING
  - ALL OF THE LIGHT FITTINGS, LAMPS AND ACCESSORIES ARE TO BE PROVIDED AS PART OF THIS CONTRACT. THE EXISTING FITTINGS ARE TO BE REPLACED WITH 50,000 HOUR SOLID STATE LED FITTINGS. 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.
    - RECONNECTION OF THE EXISTING LIGHTING THAT REMAINS.
    - REMOVAL OF ALL EXISTING REDUNDANT LIGHTING SERVICES.
8. COMMUNICATIONS CABLING
  - THE COMMUNICATIONS CABLING COMPONENT OF THIS CONTRACT INCLUDES REPLACING THE EXISTING 110 CABLING SYSTEM WITH A NEW RACK AND ALL NECESSARY PATCH PANELS.
  - ANY INTERRUPTION TO THE VENUES COMMUNICATIONS SERVICES OUTSIDE OF THE AREA OF WORKS MUST BE RESTRICTED TO OUTSIDE OF THE VENUES OPERATING HOURS AND MUST BE ADVISED TO THE OPERATOR IN WRITING TWO WEEKS PRIOR.
  - THE COMMUNICATIONS CABLING COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:
    - COMMUNICATIONS RACK CR-A.
    - PATCH PANELS IN CR-A AS NECESSARY.
    - CAT 6 COMMUNICATIONS OUTLETS AND CABLING.
    - CABLE ACCESS WAYS.
    - TESTING AND COMMISSIONING.
    - REMOVAL OF ALL EXISTING COMMUNICATIONS CABLING MADE REDUNDANT BY THE WORKS.
9. 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.
  - EXIST - EXISTING OUTLET.
  - HWS - HOT WATER SYSTEM.
  - MCB - MINIATURE CIRCUIT BREAKER.
  - N - NEON / LED INDICATOR WHEN ON.
  - NTS - NOT TO SCALE.
  - RCBO - CIRCUIT BREAKER C/W AN INTEGRAL 30mA RESIDUAL CURRENT DEVICE.
  - RCI - CIRCUIT PROTECTED VIA A 30mA RESIDUAL CURRENT DEVICE.
  - REF - REFRIGERATOR.
  - RK - RECESS KIT.
  - UNO - UNLESS NOTED OTHERWISE.
  - WP - WEATHERPROOF TO IP56 UNO.
  - 500 - NUMBER DENOTES MOUNTING HEIGHT AFFL.



**NOTE**  
THE MOUNTING ARRANGEMENTS AND OUTLETS SHOWN ON THIS DETAIL ARE GENERIC AND MAY NOT BE REQUIRED ON THIS PROJECT.



**DETAIL**  
TYPICAL OUTLET MOUNTINGS  
NOT TO SCALE

**SCHEMATIC**  
RJ45 PINOUT CONFIGURATION  
NOT TO SCALE