

LEGEND

	ELECTRICAL SERVICES SWITCHBOARD.
	SWITCHBOARD / CONTROL PANEL NOT PROVIDED AS PART OF THE ELECTRICAL SUBCONTRACT.
	SINGLE POWER OUTLET.
	DOUBLE POWER OUTLET.
EXIST	EXISTING OUTLETS TO REMAIN AS IS UNO.
	SINGLE PHASE ISOLATOR.
	THREE PHASE ISOLATOR.
	CONDUIT ACCESS FOR ELECTRICAL VEHICLE CHARGING STATION.
	EXISTING ELECTRICAL FLOOR BOX.
	NEW ELECTRICAL FLOOR BOX.
	LIGHTING PRESENCE DETECTOR SWITCH.
	LIGHTING CONTROL SWITCH PANEL, TYPE AS NOTED.
	ONE-WAY LIGHT SWITCH.
	TWO-WAY LIGHT SWITCH.
	CIRCUIT LINE.
	SWITCH LINE.
	POWER CIRCUIT DESIGNATION. DENOTES DB AND CIRCUIT.
	LIGHTING CONTROL CHANNEL REFERENCE.
	ELECTRICAL EQUIPMENT AS NOTED.
	RJ45 COMMUNICATIONS OUTLET.
	BACKGROUND MUSIC SPEAKER.
	CIRCUIT BREAKER.
	ISOLATOR.
	DALI POT DIMMER.
	REFER TO DETAIL NOTED FOR THE AREA SHOWN HATCHED. ADDITIONAL OUTLETS & FITTINGS MAY BE SHOWN ON DETAIL.
	E1: GENERAL LED EMERGENCY LIGHT.
	EX: EMERGENCY LED EXIT LIGHT.
	L1: RECESSED DIMMABLE DOWNLIGHT.
	L2: RECESSED DIMMABLE DOWNLIGHT.
	L3: RECESSED DIMMABLE DOWNLIGHT.
	L4: RECESSED DIMMABLE DOWNLIGHT.
	L5: RECESSED DIMMABLE DOWNLIGHT.
	L6: RECESSED DIMMABLE DOWNLIGHT.

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.

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.  
- BACKGROUND MUSIC.  
- 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 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.  
- 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 2.5mm<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.

NOTES

6. POWER DISTRIBUTION

THE POWER DISTRIBUTION COMPONENT OF THIS CONTRACT INCLUDES THE UPGRADING OF THE EXISTING DISTRIBUTION BOARD DB-E TO ACCOMMODATE THE CHANGES TO THE EXISTING CIRCUITS AND NEW CIRCUITS. ALL OF THE EXISTING DB-E CIRCUITS THAT BECOME REDUNDANT ARE TO BE REMOVED AND THE LABELLING UPDATED. THE POWER DISTRIBUTION COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:  
- POWER DISTRIBUTION.  
- EARTHING.  
- REMOVAL OF EXISTING REDUNDANT CIRCUITS.  
- CIRCUITS.  
- ISOLATORS AND OUTLETS.  
- TESTING AND COMMISSIONING.

ENSURE THAT POWER IS MAINTAINED TO THE REMAINING PARTS OF THE BUILDING THAT ARE NOT PART OF THE WORKS BETWEEN 6.00AM AND 11.00PM. ANY INTERRUPTIONS TO THE POWER SUPPLY MUST BE LIMITED TO LESS THAN FOUR HOURS BETWEEN 11.00PM AND 6.00AM AND THE OPERATOR 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.  
- LIGHTING SUBCIRCUITS.  
- TESTING AND COMMISSIONING.

8. COMMUNICATIONS

THE COMMUNICATIONS CABLING COMPONENT OF THIS CONTRACT IS A CAT 6 UTP INSTALLATION AND IS TO INCLUDE THE UPGRADING OF THE EXISTING COMMUNICATIONS RACK INCLUDING NEW PATCH PANELS AS REQUIRED TO ACCOMMODATE THE MODIFIED AND NEW COMMUNICATIONS OUTLETS. THE COMMUNICATIONS CABLING IS TO MATCH THE EXISTING IN BRAND AND BE PROVIDED WITH A MANUFACTURERS SYSTEM WARRANTY. ALL OF THE EXISTING COMMUNICATION CABLES THAT BECOME REDUNDANT ARE TO BE REMOVED. THE COMMUNICATIONS CABLING COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:  
- REMOVAL OF EXISTING REDUNDANT CABLING.  
- NEW COMMUNICATIONS OUTLETS AND CABLING.  
- PATCH PANELS WITHIN THE COMMUNICATIONS RACK AS REQUIRED.  
- TESTING AND COMMISSIONING.  
- MANUFACTURERS SYSTEM WARRANTY.

ENSURE THAT THE COMMUNICATIONS SERVICES TO THE REMAINDER OF THE SITE ARE MAINTAINED OPERATIONAL BETWEEN 6.00AM AND 11.00PM. ANY INTERRUPTIONS TO THE COMMUNICATIONS SERVICES MUST BE LIMITED TO LESS THAN FOUR HOURS BETWEEN 11.00PM AND 6.00AM AND THE OPERATOR MUST BE PROVIDED WITH TWO WEEKS NOTICE PRIOR TO THE INTERRUPTION.

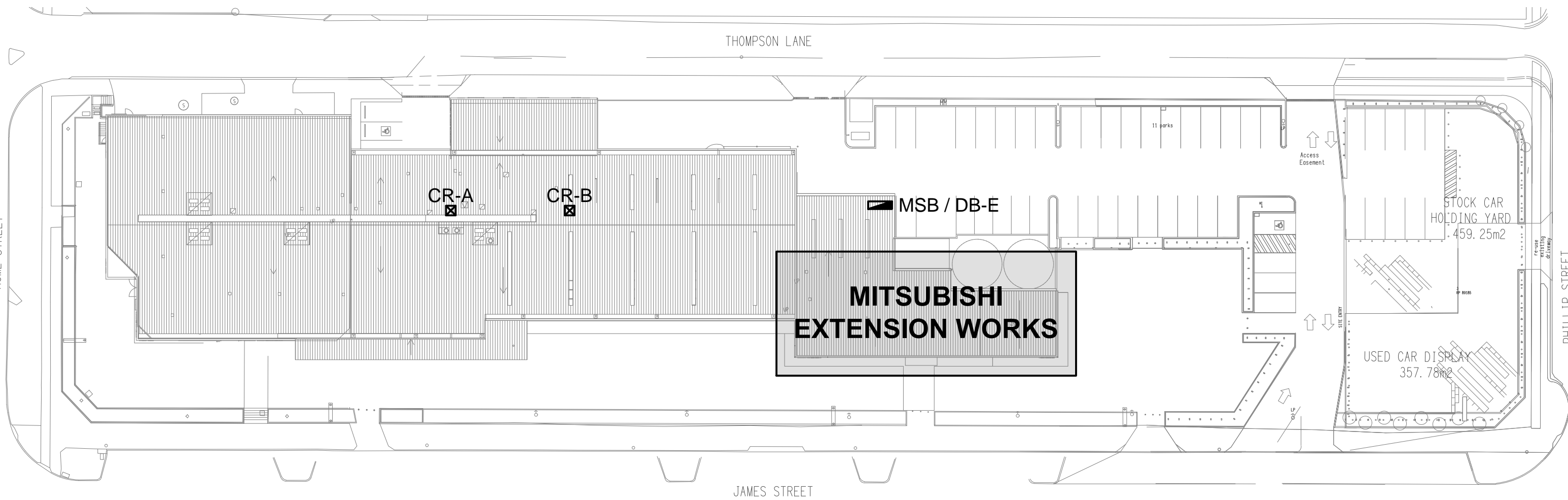
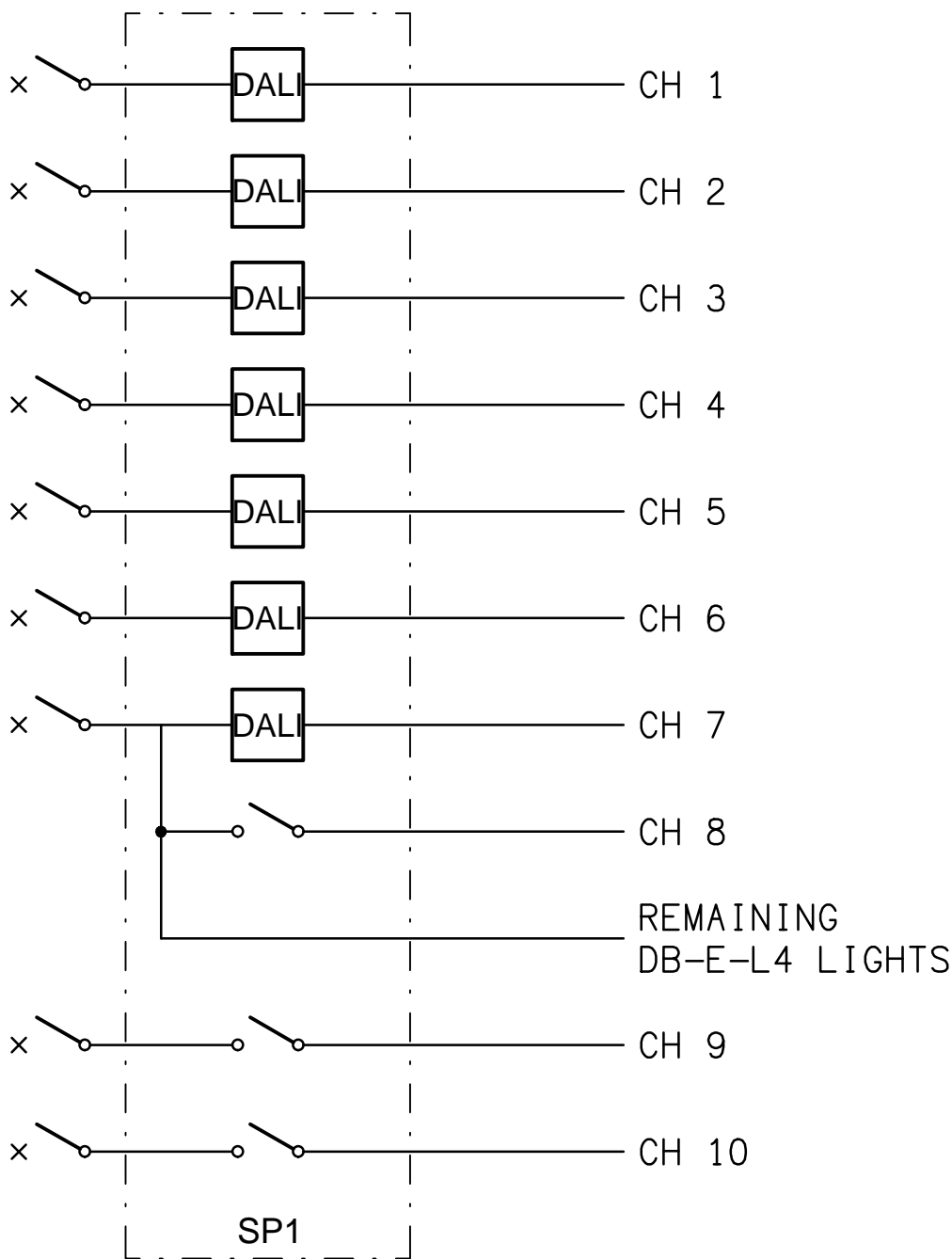
9. BACKGROUND MUSIC

THE BACKGROUND MUSIC COMPONENT OF THIS CONTRACT IS TO INCLUDE ALL NEW SPEAKERS WITHIN THE SHOWROOM AND THE RECONNECTION OF ANY EXISTING EXTERNAL SPEAKERS THAT REMAIN TO A NEW MIXER AMPLIFIER. ALL OF THE EXISTING BACKGROUND MUSIC SERVICES THAT BECOME REDUNDANT ARE TO BE REMOVED. THE BACKGROUND MUSIC COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:  
- REMOVAL OF EXISTING REDUNDANT SERVICE.  
- NEW SPEAKERS CABLING.  
- NEW MIXER AMPLIFIER.  
- RECONNECTION OF ANY EXISTING EXTERNAL SPEAKERS THAT REMAIN.  
- TESTING AND COMMISSIONING.

NOTES

10. ABBREVIATIONS

A - AMP CURRENT RATING  
AB - MOUNT ABOVE BENCH.  
AC - AIR CONDITIONING.  
AD - MOUNT TO SUIT AUTODOOR INTERFACE.  
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.  
EXIST- EXISTING OUTLET TO REMAIN AS IS UNO.  
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.  
OV - OVEN.  
RCD - CIRCUIT PROTECTED VIA A 30ma RESIDUAL CURRENT DEVICE INTEGRAL TO THE CIRCUIT BREAKER.  
REF - REFRIGERATOR.  
UNO - UNLESS NOTED OTHERWISE.  
WP - WEATHERPROOF TO IP56 UNO.  
500 - NUMBER DENOTES MOUNTING HEIGHT AFFL.



SITE PLAN

MITSUBISHI EXTENSION WORKS  
SCALE 1: 500

C	TENDER	21/10/2019
REV:	DESCRIPTION:	DATE:
DRAWING: <b>ELECTRICAL SERVICES LEGEND, NOTES &amp; SITE PLAN</b>		
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