COMMUNITY INFRASTRUCTURE DEPOT 252 COAL ROAD, MUSWELLBROOK NSW 2333 ELECTRICAL SERVICES

LIGHTING LEGEND

IMAGE	PREFIX	DESCRIPTION	SUPPLIER	MODEL
	ODI	12W LED RECESSED FIXED IP44 DOWNLIGHT WITH WHITE TRIM, 90° BEAM, FIXED OUTPUT DRIVER AND 3000K LEDS.	DA LIGHTING	DA3109
0	o ^{D2}	23W LED RECESSED FIXED DOWNLIGHT WITH WHITE TRIM, 60° BEAM, FIXED OUTPUT TRIDONIC DRIVER AND 4000K LEDS.	DA LIGHTING	D8062
	O H1	100W LED HIGHBAY LIGHT IP65, HIGH LUMEN UFO LED HIGHBAY IP65 AND 4000K LEDS.	DA LIGHTING	AGUB0201
	ĬI .	31W IP44 RECESSED 1200mm x 300mm WHITE PANEL WITH 120 DEGREE BEAM ANGLE, FROSTED DIFFUSER, FIXED OUTPUT DRIVER AND 4000K LEDS.	DA LIGHTING	DA33033
	V1	34W 1200mm LED IP66 IK07 SURFACE MOUNTED LUMINAIRE COMPLETE WITH POLYCARBONATE OPAL DIFFUSER, STAINLESS STEEL CLIPS, FIXED OUTPUT DRIVER AND 4000K LEDS.	CLEVERTRONICS	AGROPRO-1200
1	Юwı	28W LED IP65 CYLINDRICAL UP/DOWN WALL MOUNTED LUMINAIRE WITH BLACK ALUMINUM HOUSING, VERY WIDE BEAM, DRIVER AND 4000K LEDS. WALL MOUNT AT 2200mm AFFL.	LIGMAN	JET 35
	PI	58W IP66 POLE MOUNTED BLACK FLOODLIGHT WITH TYPE 3 MEDIUM OPTIC, FIXED OUTPUT DRIVER AND 4000K LEDS. MOUNT ON 6.1 METRE BLACK SQUARE POLE.	ADVANCE LIGHTING	CREE OSQ SERIES LUMINAIRE AND 6.1 METRE CREE DELTAGUARD BLACK SQUARE POLE
	P2 —	58W IP66 BACK-BACK OUTREACH ARM POLE MOUNTED BLACK FLOODLIGHT WITH TYPE 3 MEDIUM OPTIC, FIXED OUTPUT DRIVER AND 4000K LEDS. MOUNT ON 6.1 METRE BLACK SQUARE POLE.	ADVANCE LIGHTING	CREE OSQ SERIES LUMINAIRE AND 6.1 METRE CREE DELTAGUARD BLACK SQUARE POLE + BACK-BACK OUTREACH ARM
	⊗ ^{E1}	3W LED NON-MAINTAINED RECESSED ROUND WHITE EMERGENCY LIGHT WITH L10 LITHIUM BATTERY. C0=D40; C90=D40 CLASSIFICATION.	CLEVERTRONICS	LIFELIGHT LLIFE
	E2 	3W LED NON-MAINTAINED SURFACE MOUNTED WHITE UNO EMERGENCY LIGHT WITH L10 LITHIUM BATTERY. C0=D40; C90=D40 CLASSIFICATION. B=BLACK.	CLEVERTRONICS	LLIFE-SMS
2 9	E3 	SURFACE MOUNTED FLOOD EMERGENCY LIGHT FITTING WHITE WITH L10 LITHIUM BATTERY.	CLEVERTRONICS	CFLLED
	E3 ► ■	34W 1200mm LED IP65 IK07 SURFACE MOUNTED LUMINAIRE WITH CLEVERTEST PLUS LED EMERGENCY POD LIGHT, L10 LITHIUM BATTERY, HI/LO MICROWAVE SENSOR POLYCARBONATE, OPAL DIFFUSER, STAINLESS STEEL CLIPS, FIXED OUTPUT DRIVER AND 4000K LEDS. PROGRAM SENSOR TO 100% DETECTION AREA, 25 MINUTES HOLD TIME, 0% DIMMING LEVEL, DISABLED DAYLIGHT SENSOR AND 1 MINUTE STAND-BY PERIOD. C0=D80; C90=D80 CLASSIFICATION.	CLEVERTRONICS	AGROPRO-1200-SEN-L10 POD
	E4 ▼	34W 1200mm LED IP65 IK07 SURFACE MOUNTED LUMINAIRE WITH CLEVERTEST PLUS LED EMERGENCY POD LIGHT, L10 LITHIUM BATTERY, POLYCARBONATE OPAL DIFFUSER, STAINLESS STEEL CLIPS, FIXED OUTPUT DRIVER AND 4000K LEDS. C0=D80; C90=D80 CLASSIFICATION.	CLEVERTRONICS	AGROPRO-1200-L10 POD
2	X1 EXIT	3.8W LED MAINTAINED RECESSED EMERGENCY EXIT SIGN WITH L10 LITHIUM BATTERY. MOUNT BELOW 2700mm AFFL OR ABOVE DOOR. 24m VIEWING DISTANCE.	CLEVERTRONICS	CUBPRO
2	X2 EXIT	3W LED MAINTAINED SURFACE MOUNTED EMERGENCY EXIT SIGN WITH L10 LITHIUM BATTERY. MOUNT OR ROD SUSPEND AT 2700mm AFFL OR ABOVE DOOR. 24m VIEWING DISTANCE.	CLEVERTRONICS	CCFPRO
	X3 EXIT	3W LED IP66 MAINTAINED SURFACE MOUNTED EMERGENCY EXIST SIGN WITH 1.0 LITHIUM BATTERY. MOUNT OR ROD SUSPEND 2700mm AFFL OR ABOVE DOOR. 24m VIEWING DISTANCE.	CLEVERTRONICS	WEATHERPROOF LWELED
	X4 EXIT	3W LED IP66 MAINTAINED SURFACE MOUNTED EMERGENCY EXIST SIGN WITH 1.0 LITHIUM BATTERY. MOUNT OR ROD SUSPEND 2700mm AFFL OR ABOVE DOOR. 40m VIEWING DISTANCE.	CLEVERTRONICS	JUMBO LJWELED-40

LIGHTING CONTROL LEGEND



360° 1-CHANNEL RECESSED UNO MOTION DETECTOR.
PROGRAM TIME OUT TO 30 MINUTES. MULTIPLE MOTION
SENSORS ON THE SAME SWITCHING CIRCUIT SHALL BE
CABLED IN PARALLEL. SM = SURFACE MOUNTED.
iAUTOMATION B.E.G PD4N-1C.

360° 1-CHANNEL SURFACE MOUNTED MOTION DETECTOR FOR HIGH CEILINGS. PROGRAM TIME OUT TO 30 MINUTES. MOUNT NO HIGHER THAN 9 METRES. MULTIPLE MOTION SENSORS ON THE SAME SWITCHING CIRCUIT SHALL BE CABLED IN PARALLEL. iAUTOMATION B.E.G PD4-M-1C-GH-SM.

1-CHANNEL RECESSED UNO CORRIDOR MOTION DETECTOR.

PROGRAM TIME OUT TO 30 MINUTES. MULTIPLE MOTION SENSORS
ON THE SAME SWITCHING CIRCUIT SHALL BE CABLED IN PARALLEL.

SM = SURFACE MOUNT. IAUTOMATION B.E.G PD4N-1C-C.

✓ 1 GANG SWITCH, MOUNT AT 1100mm AFFL UNO.

xG x GANG SWITCH. MOUNT AT 1100mm AFFL UNO.

CLIPSAL PRO SERIES.

CLIPSAL PRO SERIES.

1-GANG IP66 SWITCH (20A UNO). MOUNT AT 1100mm AFFL UNO.

CLIPSAL WHA SERIES.

UNIVERSAL ROTARY CONTROLLED ON/OFF DIMMER. MOUNT AT 1100mm

MATV LEGEND

FREE-TO-AIR TELEVISION OUTLET WITH F-TYPE FEMALE SOCKET.
MOUNT AT 300mm AFFL UNO. NEW LINE CLIPSAL PRO SERIES.

POWER SCHEMATIC LEGEND

THREE PHASE

KIOSK SUBSTATION

CURRENT TRANSFORMER

RESIDUAL CURRENT DEVICES (RCBO) SCHNEIDER ELECTRIC OR NHP

ISOLATOR SCHNEIDER ELECTRIC OR NHP

SINGLE PHASE

MOULDED CASE OR MINIATURE CIRCUIT BREAKER SCHNEIDER ELECTRIC OR NHP

FUSE

SELECTOR SWITCH - AUTO/OFF/MANUAL

OM

CONTRACTOR COIL ("X" REPRESENTS DESIGNATOR)

CX

CONTRACTOR COIL (X* REPRESENTS DESIGNATOR)
SCHENEIDER ELECTRIC OR NHP

RELAY COIL ("X" REPRESENTS DESIGNATOR)
SCHENEIDER ELECTRIC OR NHP

CONTACT (NORMALLY OPEN)

CONTACT (NORMALLY CLOSED)

EMERGENCY LIGHTING KIT
SCHENEIDER ELECTRIC OR NHP

CLIPSAL 56SSR/2

24 HOUR 7 DAY 2 CHANNEL DIGITAL TIME SWITCH
SCHNEIDER ELECTRIC IHP

50kA SURGE DIVERTER (CONNECT TO NEUTRAL AND EARTH)
NOVARIS SDN3-50-275

100kA SURGE DIVERTER (CONNECT TO NEUTRAL AND EARTH)
NOVARIS SDN3-100-275

EARTH CONNECTION

SUPPLY AUTHORITY METER

POWER METER WITH R\$485 MODBUS

SCHNEIDER ELECTRIC PM3250

DIN-RAIL CT kWh METER WITH RS485 MODBUS
SCHNEIDER ELECTRIC IEM3250

SECURITY AND ACCESS CONTROL LEGEND

SECURITY AND ACCESS CONTROL HEAD-END EQUIPMENT.
INNER RANGE INTEGRITI.

PROXIMITY CARD READER. PROVIDE ELECTRONIC LOCK IF REQUIRED. MOUNT AT 1000mm AFFL. INNER RANGE INTEGRITI SIFER SMART CARD READER.

ELECTRIC STRIKE

NBN LEGEND

NBN BUILDING FIBRE DEVICE. PROVIDE LEAD-IN CONDUIT
THROUGH WHICH TO RUN FIBRE FROM THE STREET TO THE BFD.

FDT NBN FIBRE DISTRIBUTION TERMINAL.

NBN PANEL WITH DOUBLE 10A SOCKET OUTLET AND 12 PORT PATCH PANEL.
ALLOCATE SPACE FOR NTD, BBPSU AND ISP ROUTER ON THE PANEL.

POWER LEGEND

DOUBLE 10A SWITCHED IP54 SOCKET OUTLET COMPLETE WITH
HINGE FLAP, MOUNT AT 1200mm AFFL UNO, CLIPSAL WSC227F2.

SINGLE SWITCHED SOCKET OUTLET (10A UNO).
MOUNT AT 300mm AFFL UNO. CLIPSAL PRO SERIES.

DOUBLE SWITCHED SOCKET OUTLET (10A UNO).
MOUNT AT 300mm AFFL UNO. CLIPSAL PRO SERIES.

DOUBLE SWITCHED SOCKET OUTLET (10A UNO) WITH

DUAL USB CHARGER. MOUNT AT 300mm AFFL UNO. CLIPSAL PRO SERIES.

SOFT WIRED DOUBLE 10A SWITCHED SOCKET OUTLET.

SINGLE PHASE PERMANENT CONNECTION (20A UNO).

RATED LOCAL ISOLATOR (20A UNO). MOUNT AT
1200mm AFFL UNO. CLIPSAL 56 SERIES.

3PH THREE PHASE PERMANENT CONNECTION VIA IP66 RATED
LOCAL ISOLATOR (20A UNO). MOUNT AT 1200mm AFFL

SINGLE PHASE PERMANENT CONNECTION VIA IP66

UNO. CLIPSAL 56 SERIES.

E300

ELECTRICAL CABLE TRAY.

MINIMUM WIDTH AS INDICATED.

35mm x 125 WHITE 3 DIVISION SKIRTING DUCT.

SOFT WIRED DOUBLE 10A SWITCHED SOCKET OUTLET. WALL MOUNT PROVIDE INTERCONNECTIONS LEADS AND SOFT WIRED OUTLETS.

CLIPSAL TAL PLUS PL35125

OE ELSAFE - PEAK DESK TABLE BOX 4 - GPO 2 - DATA 1 - VGA/HDMI

OE ELSAFE - FLUSH IN DESK TABLE BOX
8 - GPO
6 - DATA

_ - USB CHARGING

CCTV LEGEND

1080P IK40 IP67 FIXED DAY/NIGHT COLOUR DOME NETWORK CAMERA WITH IR LEDS, MOTORISED 2.8-12mm VARI-FOCAL LENS. ENABLE VIDEO MOTION DETECTION. SET HIGHEST IMAGE QUALITY, RESOLUTION TO 1920x1080 AND VIDEO COMPRESSION TO H.265. CABLE TO THE COMMUNICATIONS RACK AND PATCH TO NVR. DICKERDATA-DAS, IDIS DC-D4236WRX-A.

PC PERSONAL COMPUTER

64 CHANNEL FULL HD NETWORK VIDEO RECORDER WITH 8x10TB HDD,
RECORD AT 10FPS, VERY HIGH VIDEO QUALITY AND 8MP RESOLUTION.
ENABLE TIME-LAPSE RECORDING.
DICKERDATA-DAS, DR8564D.

POE 24 PORT POWER OVER ETHERNET GIGABIT SWITCH.
DICKERDATA-DAS, DH-2026PF.

UNDERGROUND SERVICES

CONDUIT SECTION MARKER

X = SERVICE TYPE (E: ELECTRICAL, C: COMMUNICATIONS)

Y = CONDUIT DIAMETER (mm)

HEAVY DUTY UPVC UNDERGROUND ELECTRICAL CONDUIT

(SIZE AS SHOWN ON DRAWING)

UPVC UNDERGROUND COMMUNICATIONS CONDUIT

(SIZE AS SHOWN ON DRAWING)

TYPE 99 POLYMER CONCRETE COMMUNICATIONS PIT WITH

CLASS B GALVANISED STEEL LID. ACO CABLEMATE.

TYPE 99 POLYMER CONCRETE ELECTRICAL PIT WITH

CLASS B GALVANISED STEEL LID. ACO CABLEMATE.

PHOTOVOLTAIC LEGEND

5kW SOLAR INVERTER.

SMA - SUNNY TRIPOWER

S 500W 2176 x 1098mm SOLAR PANEL TRINA SOLAR VERTEX

COMMUNICATIONS LEGEND

WALL MOUNTED 18RU COMMUNICATIONS EQUIPMENT RACK COMPLETE WITH 6 WAY POWER DISTRIBUTION UNIT, FOBOTS, CAT 6A PATCH PANELS, CABLE MANAGERS AND ALL OTHER REQUIRED ACCESSORIES.

FREESTANDING 42RU (800mm W x 800mm D) COMMUNICATIONS EQUIPMENT RACK COMPLETE WITH 10 WAY POWER DISTRIBUTION UNIT, FOBOTS, CAT 6A PATCH PANELS, CABLE MANAGERS AND ALL OTHER REQUIRED ACCESSORIES. BOLT THE RACK TO THE FLOOR, RACK TECHNOLOGIES

SINGLE CATEGORY 6A RJ45 TELECOMMUNICATIONS OUTLET
(SHUTTER TYPE). MOUNT AT 300mm AFFL UNO.
CLIPSAL PRO SERIES.

DOUBLE CATEGORY 6A RJ45 TELECOMMUNICATIONS OUTLET (SHUTTER TYPE)

MOUNT AT 300mm AFFL UNO.

MINIMUM WIDTH AS INDICATED

C300
COMMUNICATION CABLE TRAY

INTERCOM LEGEND

T INTERCOM HEAD-END EQUIPMENT.

WHITE VIDEO INTERCOM STATION WITH 7" HANDSFREE COLOUR TOUCHSCREEN MONITOR, MOUNT AT 1500mm AFFL, URMET MAX 7".

IS

IKO9 STEEL ENTRY INTERCOM CALL STATION WITH DIGITAL KEYPAD, CAMERA, FULL DUPLEX AUDIO AND DISPLAY MOUNT AT 1000mm AFFL. URMET ELEKTA STEEL.

SWITCHGEAR LEGEND



KIOSK SUBSTATION

MAIN SWITCHBOARD

DISTRIBUTION BOARD

SWITCHBOARD BY OTHER SERVICES
PRIVATE POLE OR PILLAR.

ABBREVIATIONS

1000 NOMINALLY 1000mm AFFL

24/7 ON 24 HOURS A DAY

AB NOMINALLY 150mm ABOVE BENCH UNO

AC AIR CONDITIONING (CONFIRM FINAL LOCATION ON SITE)

AD AUTOMATIC DOOR (10A PERMANENT CONNECTION IN CEILING SPACE).

AD

AUTOMATIC DOOR (TOA PERMANENT CONNECTION IN CEILING INTERFACE TO CARD READER BY SECURITY CONTRACTOR.

AFFL

ABOVE FINISHED FLOOR LEVEL

BWU BOILING WATER UNIT

CL CLEANER'S OUTLET
CM CEILING MOUNTED

COM COFFEE MACHINE

CT COOKTOP (32A SWITCH MOUNTED 150mm ABOVE BENCH)

DW DISHWASHER (COORDINATE FINAL LOCATION OF OUTLET WITH JOINERY)

E EXISTING TO REMAIN

EF EXHAUST FAN (10A PERMANENT CONNECTION IN CEILING SPACE

OR WALL MOUNTED AT HIGH LEVEL)

F REFRIGERATOR (OUTLET AT 1800mm AFFL)

FCU FAN COIL UNIT (CONNECTED VIA 10A SOCKET AND PLUG)

HD HAND DRYER (15A PERMANENT CONNECTION IN CEILING SPACE)

HWU HOT WATER UNIT

IC IN CEILING
IM ICE MACHINE

IS ILLUMINATED SIGNAGE(10A PERMANENT CONNECTION)

M MICROWAVE (COORDINATE FINAL LOCATION OF OUTLET WITH JOINERY)

OV OVEN (32A SWITCH MOUNTED 150mm ABOVE BENCH)

RH RANGE HOOD (OUTLET MOUNTED AT 2000mm AFFL)

RSD ROLLER SHUTTER DOOR

SS 20A STARTER SOCKET IN CEILING SPACE
TS TOASTER AND SANDWICH PRESS

TV TELEVISION OUTLET

(COORDINATE MOUNTING HEIGHTS WITH BUILDER)

U URINAL OUTLET IN CEILING SPACE

UNO UNLESS NOTED OTHERWISE

W/D WASHER AND DRYER OUTLET MOUNTED AT 1100mm AFFL
WAP WIRELESS ACCESS POINT OUTLET IN CEILING SPACE

(MAXIMUM 3m FROM FFL)

WP WEATHER PROTECTED

EL-8000 SINGLE LINE DIAGRAMS

SCHEDULE OF DRAWINGS			
DRAWING No.	DRAWING TITLE		
EL-0000	COVER SHEET, LEGEND, SYMBOLS AND SCHEDULE OF DRAWINGS		
EL-0010	SITE PLAN		
EL-1000	LOWER GROUND - POWER LAYOUT		
EL-1010	UPPER GROUND - POWER LAYOUT		
EL-2000	LOWER GROUND - LIGHTING LAYOUT		
EL-2010	UPPER GROUND - LIGHTING LAYOUT		



MUSWELLBROOK SHIRE COUNCIL

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ARCHITECT



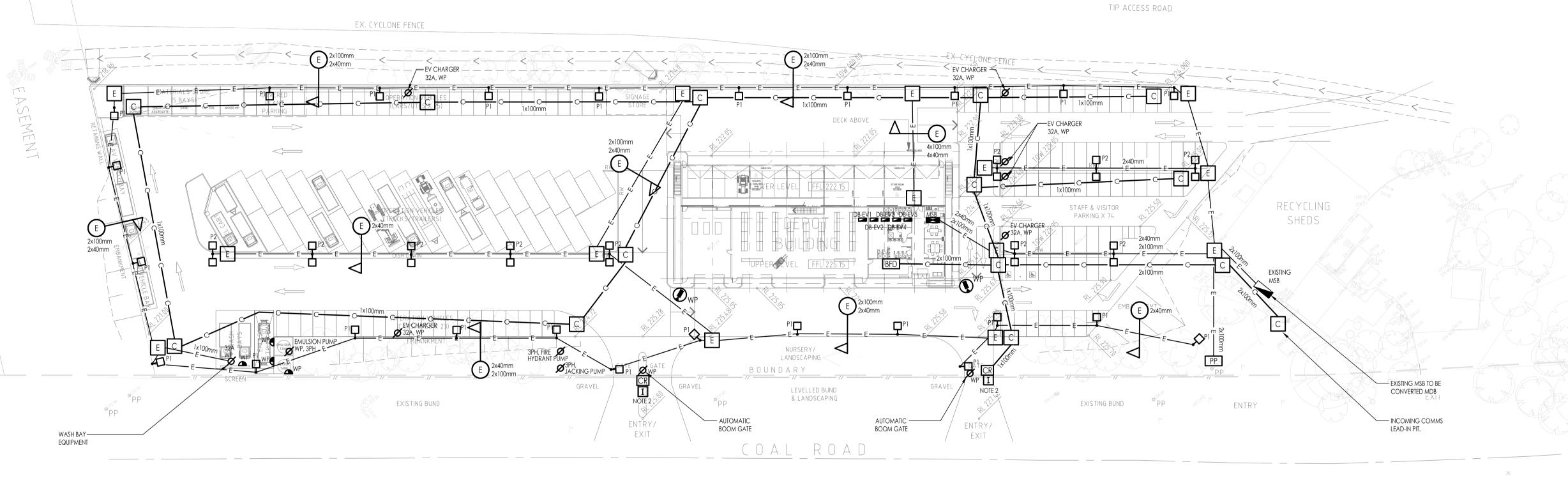


DRAWING No.

NOTES:

- ALL CONDUITS ARE 50mm DIA HD PVC CONDUITS FOR POWER RETICULATION, UNLESS NOTED OTHERWISE.
- 2. PROVIDE STANDARD HEIGHT BOLLARD FOR MOUNTING SECURITY AND INTERCOM EQUIPMENT. PROVIDE SAFETY BEAM SENSORS FOR GATE AND FLASHING LIGHT THAT ACTIVATES ON GATE OPENING.

COUNCIL TIP



318.87

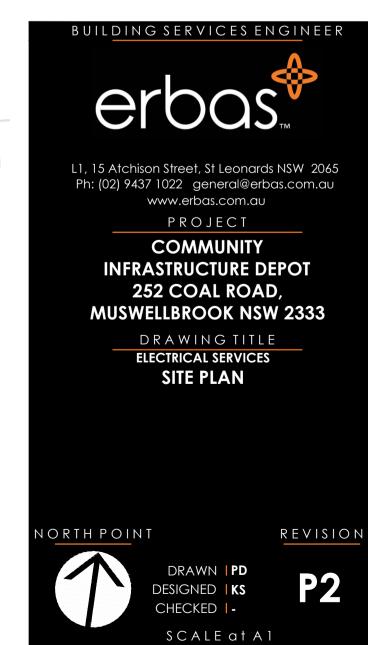


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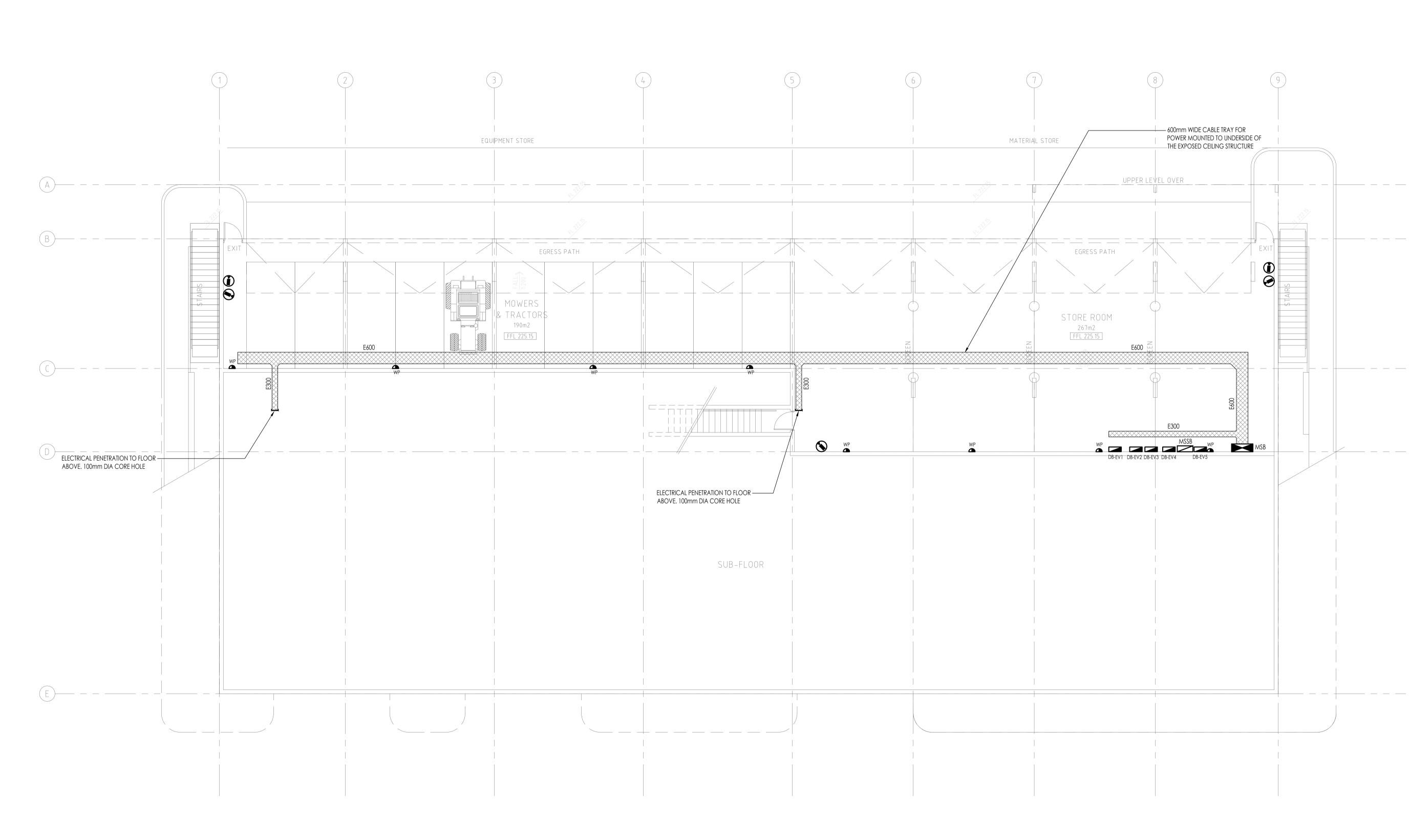




PROJECT No.

SYD23603

DRAWING No.





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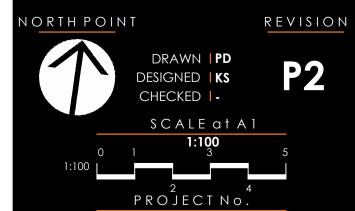


L1, 15 Atchison Street, St Leonards NSW 2065 Ph: (02) 9437 1022 general@erbas.com.au www.erbas.com.au

BUILDING SERVICES ENGINEER

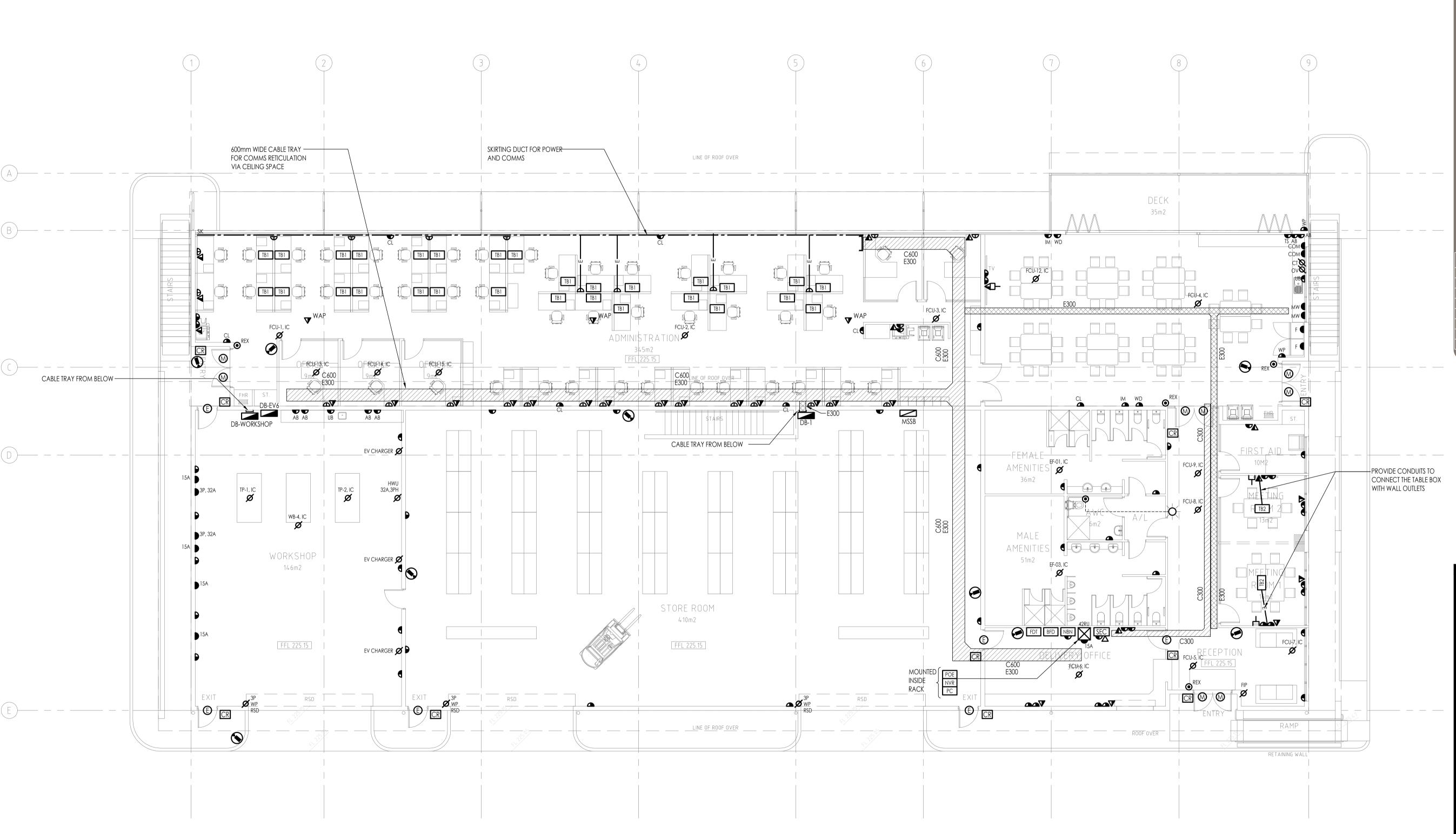
COMMUNITY
INFRASTRUCTURE DEPOT
252 COAL ROAD,
MUSWELLBROOK NSW 2333

DRAWING TITLE
ELECTRICAL SERVICES
LOWER GROUND FLOOR
POWER LAYOUT



SYD23603

DRAWING No.





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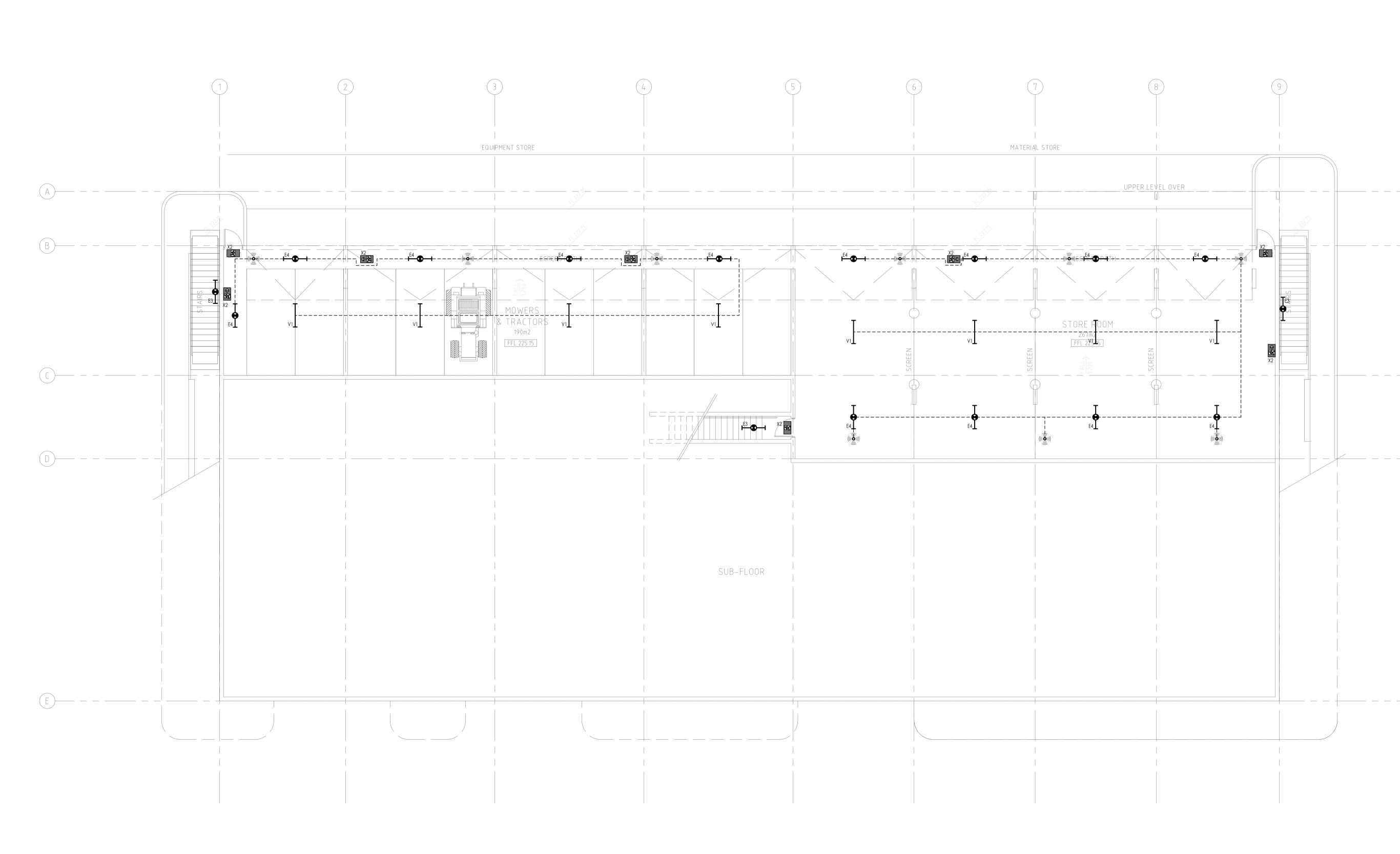
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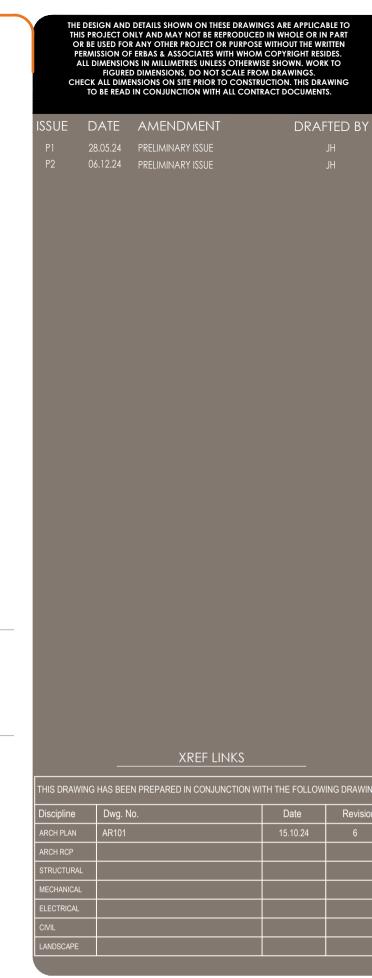
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EL-1010

SCALE at A1





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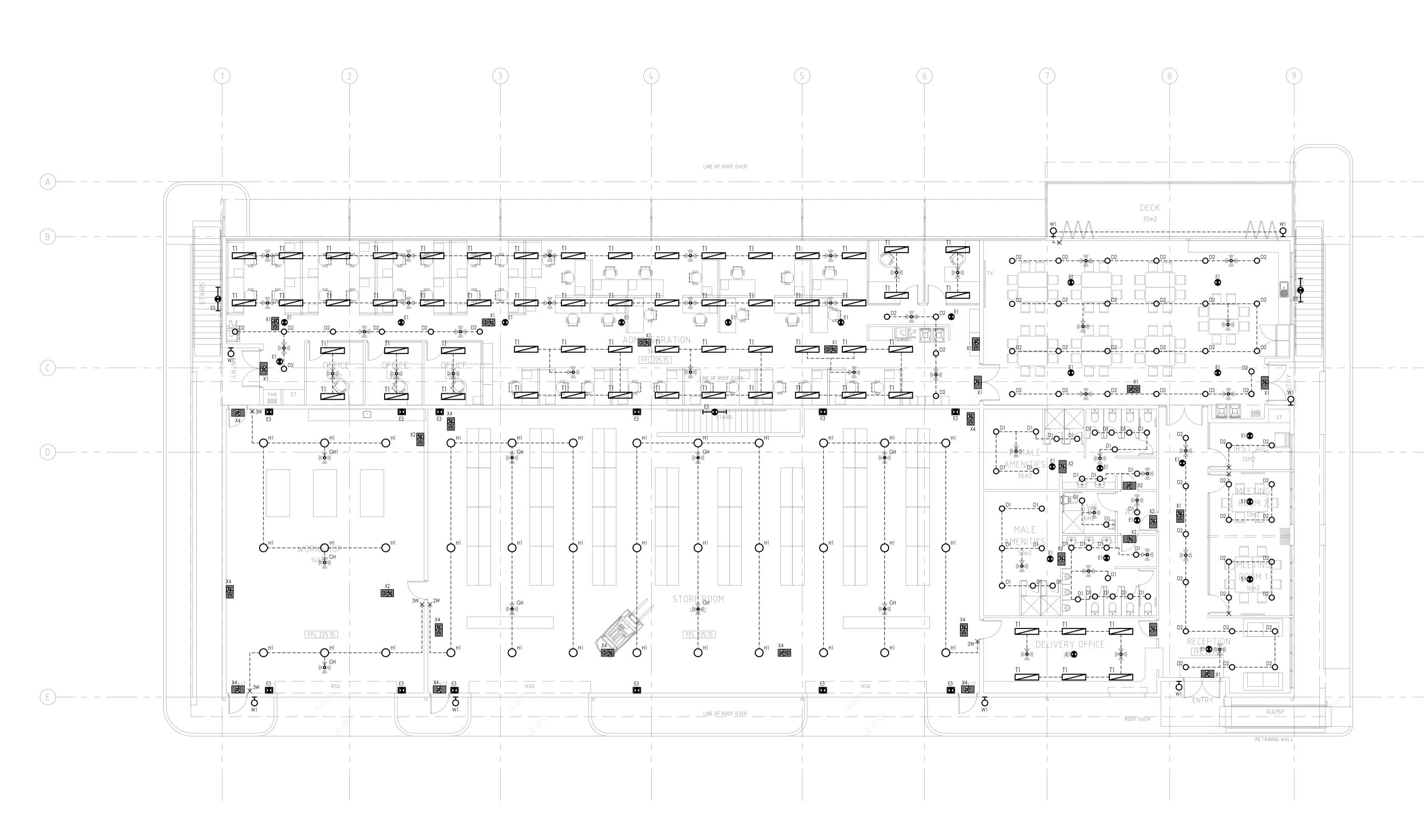




PROJECT No.

SYD23603

DRAWING No.





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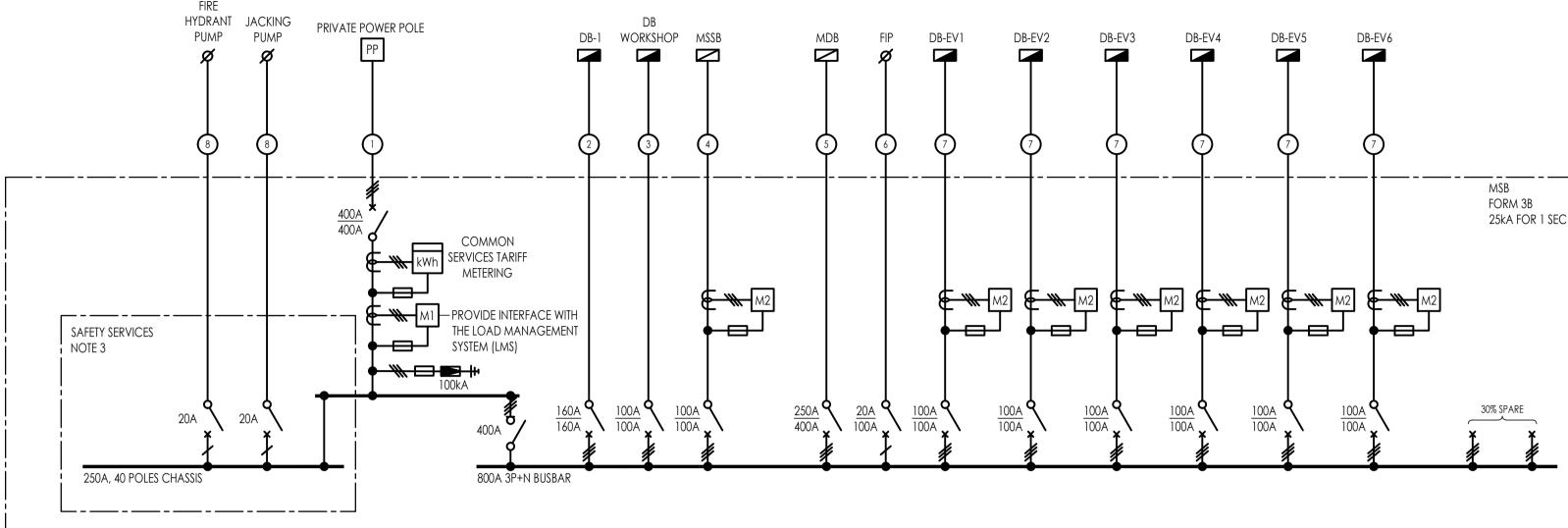
ARCHITECT





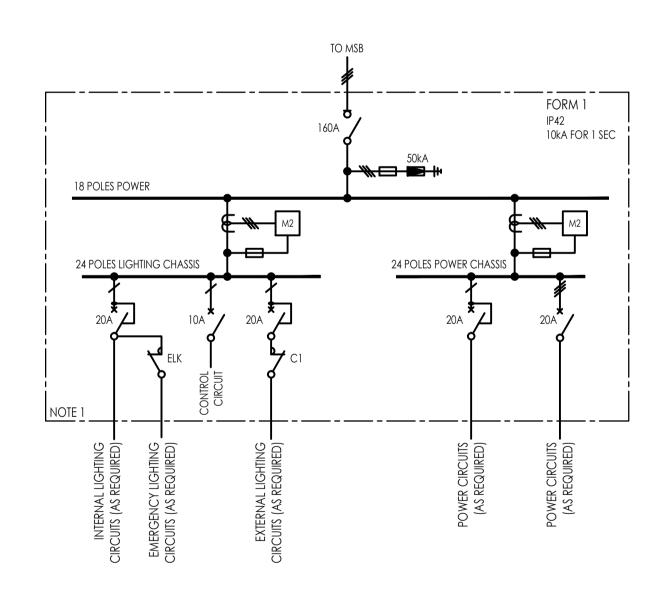


- 1. THE PROPOSED EV CHARGING SYSTEM COMPRISING EACH DV-EV WILL NEED TO INCLUDE A LOAD MANAGEMENT SYSTEM (LMS). THIS SYSTEM WILL MONITOR THE LOAD ON THE BUILDING'S MAIN SWITCHBOARD AND MANAGE THE RESPECTIVE LOADS BY AUTOMATICALLY VARYING THE RATE OF-CHARGE TO EACH EV.
- 2. THE ELECTRIC VEHICLE CHARGING SYSTEM WILL BE ARRANGED THAT A THIRD-PARTY OPERATOR WILL BE ABLE TO ADOPT THE EV INFRASTRUCTURE AND BILLED VIA A REVENUE METER LOCATED IN THE SWITCHROOM. THE OPERATOR WOULD THEN BE ABLE TO GENERATE REVENUE VIA THE INDIVIDUAL EV CHARGER UNITS.
- 3. MAIN SWITCHES CONTROLLING SAFETY SERVICES SHALL BE IDENTIFIED TO INDICATE THE SAFETY EQUIPMENT THAT THEY CONTROL, MARKED "IN THE EVENT OF FIRE, DO NOT SWITCH OFF" AND IDENTIFIED BY CONTRASTING COLOURING.



CABLE #	CABLE SIZE	
\bigcirc	4 x 1C 300mm ² CU FIRE RATED	
2	4 x 1C 95mm² CU XLPE/PVC + E	
3	4 x 1C 50mm² CU XLPE/PVC + E	
4	4 x 1C 50mm ² CU XLPE/PVC + E	
5	4 x 1C 150mm ² CU XLPE/PVC + E	
(6)	2C + E 2.5mm ² CU FIRE RATED	
7	4 x 1C 25mm² CU XLPE/PVC + E	
8	4C + E 16mm ² CU FIRE RATED	

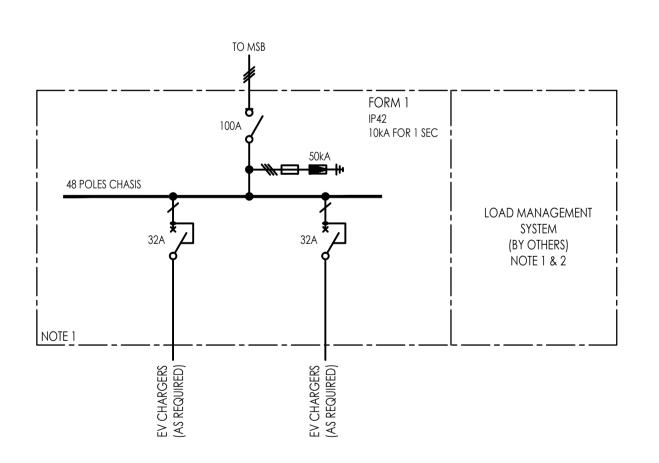
MAIN SWITCHBOARD (MSB) SINGLE LINE DIAGRAM



TYPICAL DB (DB-1 & DB-WORKSHOP)
SINGLE LINE DIAGRAM

NOTE:

1. WIDTH OF THE DISTRIBUTION SHALL BE A MAXIMUM OF 600mm.



TYPICAL EV DISTRIBUTION BOARD (DB-EVX)
SINGLE LINE DIAGRAM



MUSWELLBROOK SHIRE
COUNCIL

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