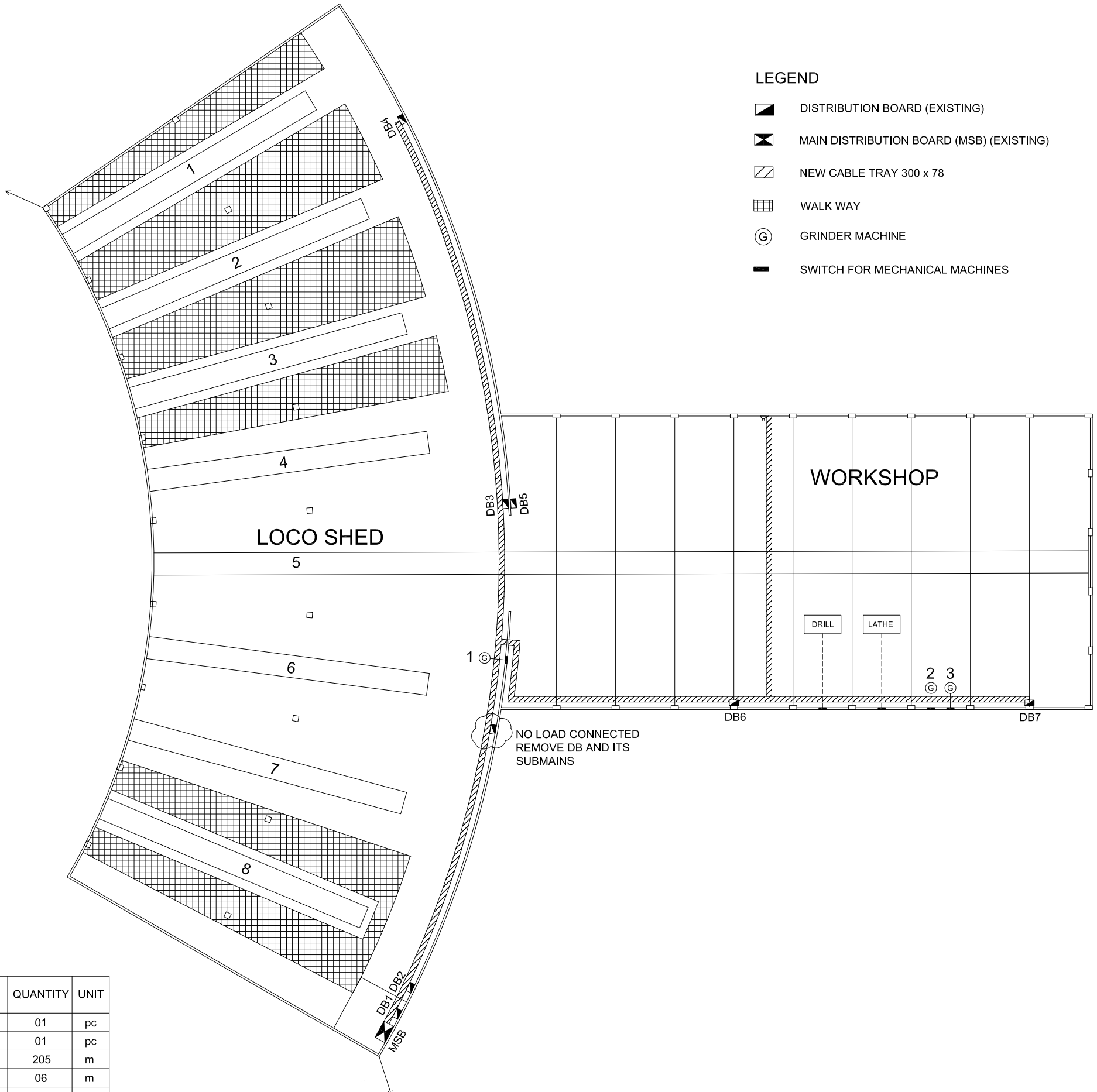


DB 8 (ADJACENT TO COMPRESSOR HOUSE) - 72m



LEGEND

- DISTRIBUTION BOARD (EXISTING)
- MAIN DISTRIBUTION BOARD (MSB) (EXISTING)
- NEW CABLE TRAY 300 x 78
- WALK WAY
- GRINDER MACHINE
- SWITCH FOR MECHANICAL MACHINES

SUPPLY	DESTINATION	ESTIMATED CABLE LENGTH (m)
MSB	DB 1	6
MSB	DB 2	20
MSB	DB 3	44
MSB	DB 5	45
MSB	DB 4	67
DB7	DB 6	30
MSB	DB 7	77
MSB	DB 8	230
MSB	DRILL PRESS	62
MSB	LATHE MACHINE	64
MSB	3-PHASE GRINDER No.1	40

ITEM	DESCRIPTION	QUANTITY	UNIT
1	MAIN SWITCHBOARD	01	pc
2	DISTRIBUTION BOARD - DB1	01	pc
3	CABLE TRAY 300 X 78	205	m
4	4x25mm2 + 1x16mm2 E	06	m
5	4x16mm2 + 1x16mm2 E	638	m
6	2x10mm2 + 1x16mm2 E	30	m
7	FOUR-FOOT LED	110	pc
8	TWO-FOOT LED	40	pc
9	LED STREET LIGHT	09	pc
10	HIGH BAY LED LIGHT	14	pc
11	EXIT EMERGENCY LED LIGHT	05	pc

<table border="1"> <thead> <tr><th>Rev.</th><th>Revision Description</th><th>Date</th></tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Rev.	Revision Description	Date																															<p>CLIENT</p>	<p>ELECTRICAL CONTRACTOR</p> <p>FIP Electrical Unit 1, 38 Tennyson Road, Morfitt NSW 2137 Tel: (02) 8785 9277 Fax: (02) 8785 9377 PO Box 191 Hunters Hill NSW 2110 Email: fip@fipelectrical.com.au ABN 62 066 985 578</p>	<p>Project</p> <p>PARKES TURNTABLE</p>	<p>Title</p> <p>ELECTRICAL UPGRADE</p> <table border="1"> <tr> <th>Drawn By</th> <th>Date</th> <th>Purpose</th> <th>Approved By</th> <th>Date</th> </tr> <tr> <td>Richard</td> <td>26.9.17</td> <td></td> <td></td> <td></td> </tr> </table> <p>DRAWING SCALE: N/A</p> <table border="1"> <tr> <th>Project No.</th> <th>Site</th> <th>Drawing No.</th> <th>Revision</th> </tr> <tr> <td>FIP_29824</td> <td>PKS</td> <td>FIP_29824_1</td> <td>00,03</td> </tr> </table>	Drawn By	Date	Purpose	Approved By	Date	Richard	26.9.17				Project No.	Site	Drawing No.	Revision	FIP_29824	PKS	FIP_29824_1	00,03
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APPLIED STANDARDS, CODES

ALL MATERIALS AND ALL SERVICES INSTALLED SHALL COMPLY WITH THE RELEVANT AND LATEST CODES, STANDARDS, RULES AND REGULATIONS OF ALL STATUTORY AUTHORITIES INCLUDING, BUT NOT LIMITED TO:

- NATIONAL CONSTRUCTION CODE.
- AS/NZS 3000: WIRING RULES.
- AS/NZS 3008.1 : CABLES FOR ALTERNATING VOLTAGES UP TO AND INCLUDING 0.6/1 kV.
- AS/NZS 2293 PART 1&2: EMERGENCY EVACUATION AND EXIT LIGHTING.
- AS 3439: SWITCHBOARD.
- AS 3017: ELECTRICAL INSTALLATIONS - TESTING GUIDELINES.
- MANAGING THE RISKS OF PLANT IN WORKPLACE - NSW CODE OF PRACTICE.
- LOCAL SUPPLY AUTHORITY REGULATIONS.
- ESB-E001

SCOPE OF WORK

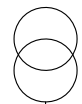
THE SCOPE OF WORK DETAILS WORK TO BE PERFORMED WITHIN LOCO SHED AND WORKSHOP AREAS ONLY. TENDERERS ARE TO ATTEND A MANDATORY SITE MEETING.

- ALL EXISTING DISTRIBUTION BOARDS ARE TO BE CONSIDERED AS CONTAINING ASBESTOS MATERIALS. ALL ASBESTOS MATERIALS ARE TO BE REMOVED FROM SITE BY COMPETENT TRADESMEN.
- REMOVE ASBESTOS PANEL FROM MSB AND REPLACE WITH NEW PANEL.
- REMOVE DISUSED DB AND ITS ASSOCIATED SUBMAIN CABLE.
- ALL AERIAL CONDUCTORS INSTALLED WITHIN ROOF SPACE TO BE REMOVED.
- SUPPLY AND INSTALL NEW CIRCUIT BREAKERS AS SPECIFIED.
- RELAMP EXISTING LIGHTING ENSURING ALL LIGHTS ARE OPERATIONAL.
- SUPPLY AND INSTALL NEW SUBMANS AND SUB CIRCUITS AS SPECIFIED ON DRAWINGS.
- SUPPLY AND INSTALL NEW SUPPORT SYSTEM AS SPECIFIED ON DRAWINGS.
- SUPPLY AND INSTALL NEW IP66 LED EXIT LIGHTING ABOVE EXIT DOORS WITH RUNNING MAN SYMBOL.
- LIGHTS INSTALLED IN A UNSUPPORTED MANNER TO BE MADE RIGID.
- REPLACE ALL BROKEN LIGHT COVERS. ALL LIGHT FITTINGS COVERS SHALL BE CLEANED UP.
- ENSURE ALL CONDUITS ARE FIXED AT CORRECT SPACING - HORIZONTAL AND VERTICAL.
- PVC INSTALLED IN DIRECT SUNLIGHT MUST NOT BE ORANGE.
- IN THE WORKSHOP AREA EXTEND THE 3-PHASE OUTLET CABLE TO DB 7. SUPPLY AND INSTALL CABLE AND CIRCUIT BREAKER TO MAKE OUTLET OPERATIONAL.
- IN THE WORKSHOP AREA EXTEND THE GRINDER SUPPLY CABLE TO DB 7. SUPPLY AND INSTALL CABLE AND CIRCUIT BREAKER TO MAKE GRINDERS OPERATIONAL.
- IN THE WORKSHOP AREA SUPPLY AND INSTALL NEW SUB CIRCUIT CABLES TO THE LATHE AND DRILL PRESS FROM MSB.
- PROVIDE SCHEDULE AND SINGLE LINE DIAGRAM FOR ALL DBs.
- WHERE AERIAL CABLES HAVE BEEN REMOVED BETWEEN LIGHT FITTINGS AND OUTLETS, REPLACE CABLES WITH TPS CABLING.
- INSTALL EMERGENCY STOP BUTTONS FOR ALL MECHANICAL MACHINES.
- RE-LABEL ALL DBs, CB FUNCTION IN DBs, LIGHT FITTINGS, OUTLETS AND MECHANICAL MACHINES WITH TRAFFOLYTE LABELS STATING ORIGIN OF SUPPLY.
- CIRCUIT BREAKERS SHALL BE CHECKED TO ENSURE THEY ARE SAFELY AND PROPERLY OPERATIONAL.
- TURNTABLE CB SHALL BE TESTED AND BE CONFIRMED THAT IT DOES DE-ENERGISE THE OVERHEAD POWER LINE FROM THE SHED TO THE TURNTABLE.
- SUPPLY AND INSTALL CIRCUIT BREAKERS EITHER LOCKABLE SWITCHES OR A MEANS OF LOCKING THE SWITCHES TO ENSURE THEY CANNOT BE TURNED ON AND THUS ISOLATED.
- THE CIRCUIT BREAKER AREA SHALL BE CLEARED OUT OF DEBRIS.

SPECIFICATION

- ALL NEW SWITCHBOARDS SHALL BE FITTED WITH A LOCKABLE, FAULT-BREAK MAIN ISOLATING SWITCH MOUNTED AT THE CENTRE-TOP AND CLEARLY LABELED.
- NEW SWITCHBOARDS SHALL HAVE 30% SPARE CAPACITY AND SHALL INCLUDE ISOBAR CHASSIS.
- PROVIDE AND CONNECT ALL NEW CABLING NECESSARY TO COMPLETE THE INSTALLATION.
- ALL CABLES SHALL BE MULTI STRANDED COPPER, INCREASE SIZE WHERE NECESSARY FOR REASONS OF VOLTAGE DROP OR DE-RATING TO AS/NZS 3008.1 AND AS/NZS 3000.
- ALL CONDUITS RUN EITHER VERTICAL OR HORIZONTAL. ALL CONDUIT SHALL BE FIXED TO BUILDING STRUCTURE WITH REGULAR INTERVALS NOT EXCEEDING 1200mm.
- CABLE TRAY SHALL BE MANUFACTURED FROM MINIMUM 1.6mm THICKNESS.
- CABLE TRAY SHALL BE PROVIDED TO SUPPORT ALL VERTICAL RUNNING CABLE.
- CABLE TRAY SHALL BE FIXED TO BUILDING STRUCTURE, CLEAR OF SUSPENDED CEILINGS, PIPEWORK, DUCTS AND OTHER SERVICES, AT REGULAR INTERVALS, NOT EXCEEDING 1000MM.
- ALL SUBMANS CABLES SHALL BE RUN ON CABLE TRAY.
- ALL CABLE SHALL BE AT LEAST 500mm CLEARANCE FROM THE CEILING.
- ALL LIGHTING CABLE SHALL BE INSTALLED AND CONNECTED BY THE LOOP IN, LOOP OUT METHOD.
- ALL LABEL SHALL BE TRAFFOLYTE.
- EXIT EMERGENCY LIGHTS SHALL BE TWO-HOUR BATTERY CAPACITY WITH RUNNING-MAN SYMBOL.
- EXTERNAL LIGHT FITTINGS SHALL BE WEATHERPROOF.

POLE MOUNTED OIL-FILLED DISTRIBUTION TRANSFORMER 200kVA 11kV/415V

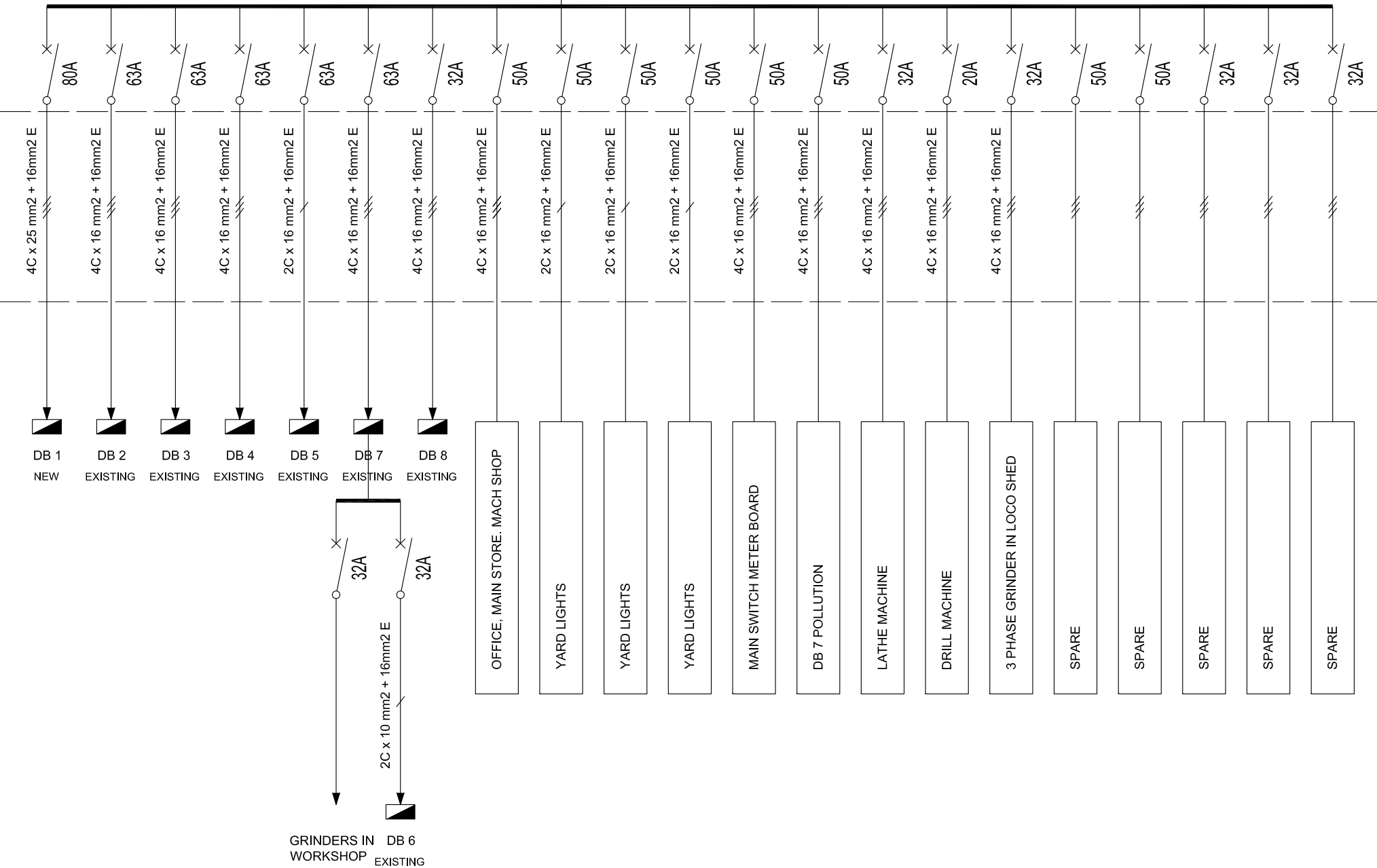


EXISTING 4C x 35 mm² + 16mm² E

METER No. 40034820

200A

EXISTING MSB (REMOVE ASBESTOS PANEL FROM MSB)



NOTE: EXISTING SWITCHBOARDS HAVE PRIOR APPROVALS. THE QUANTITY TABLE IS FOR REFERENCE PURPOSE.

Rev.	Revision Description	Date	CLIENT	ELECTRICAL CONTRACTOR	Project	Title
					PARKES TURNTABLE	ELECTRICAL UPGRADE
00.01	PARKES TURNTABLE - ELECTRICAL DESIGN (PH) (in comments updated)	26.06.17		FIP Electrical Unit 1, 38 Tennyson Road, Morfitt NSW 2137 Tel: (02) 8765 9277 Fax: (02) 8765 9377		Drawn By: Richard Date: 26.6.17 Purpose: Approved By: Date:
00.02	PARKES TURNTABLE - ELECTRICAL DESIGN (BID updated)	21.06.17		PO Box 191 Hunters Hill NSW 2110 Email: fip@fipelectrical.com.au ABN 62 066 085 576		Approved By: Date: DRAWING SCALE: N/A
00.03	PARKES TURNTABLE - ELECTRICAL DESIGN	26.06.17				Project No. Site Drawing No. Revision FIP_29824 PKS FIP_29824_2 00.03