

**NOTES**

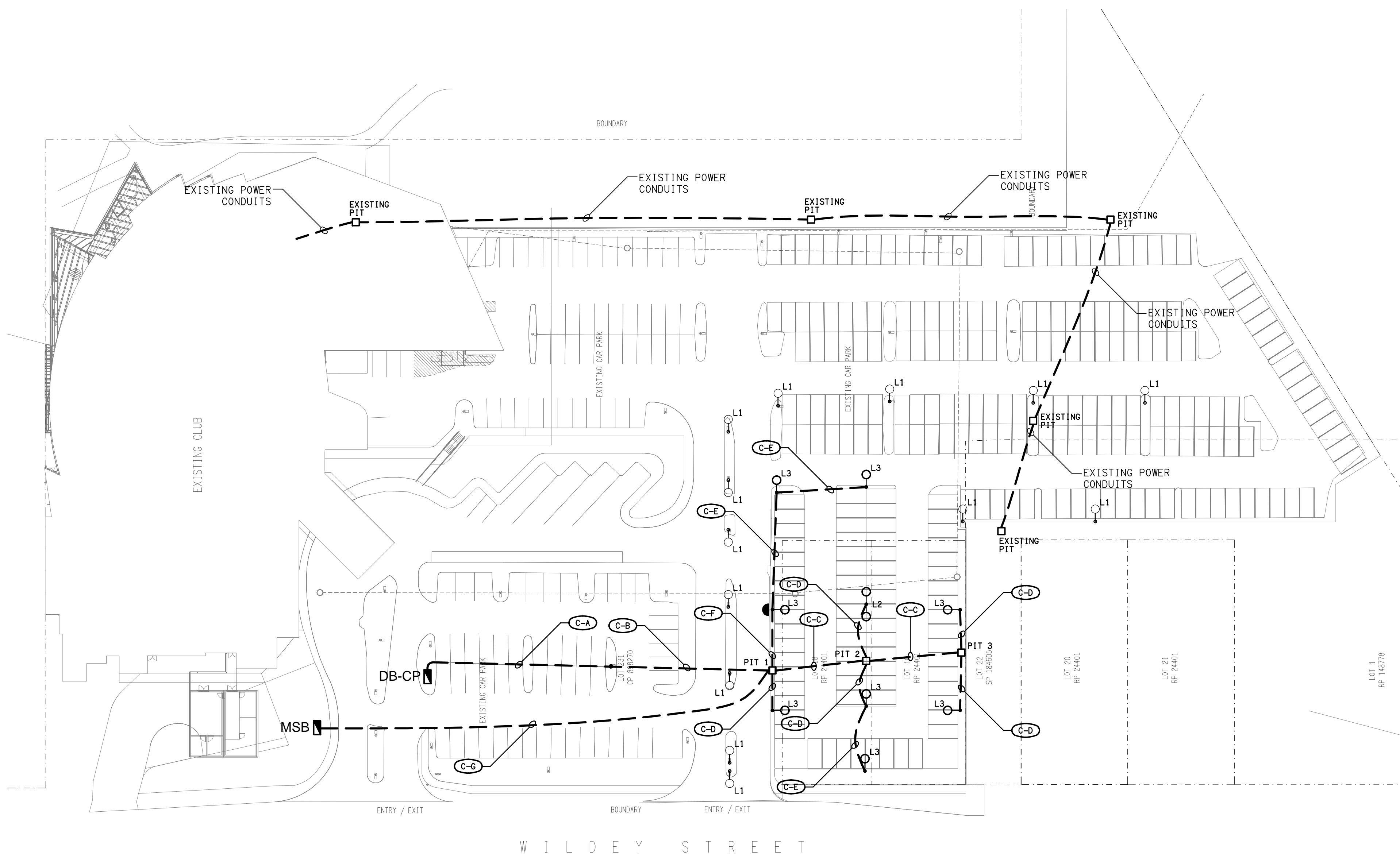
- ENSURE ALL WORKS COMPLY WITH AS3000, AND WITH THE REQUIREMENTS OF ANY AUTHORITIES HAVING JURISDICTION OVER THE SITE.
- UNLESS NOTED OTHERWISE, PROVIDE ALL 240 VOLT POWER AND LIGHTING WIRING AS 6mm<sup>2</sup> TWIN & EARTH STRANDED COPPER CONDUCTORS, PVC INSULATED 0.6/1kV V75 GRADE TO AS3174, PROTECTED BY A 20 AMP CIRCUIT BREAKER. ALL CONDUIT AND FITTINGS TO BE RIGID UPVC TO AS2053, UNLESS NOTED OTHERWISE.
- 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 SUPERINTENDANT.
- ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE CONTRACT 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 SUPERINTENDANT.
- ENSURE THAT ALL CABLES & SWITCH GEAR ARE PROVIDED AND INSTALLED SUCH THAT MINIMUM 10% SPARE CAPACITY IS MAINTAINED ABOVE THE INITIAL LOAD.
- ENSURE THAT ALL METAL SURFACES ARE SUITABLY PROTECTED AGAINST CORROSION, AND THAT ALL PLASTIC MATERIALS ARE UV STABILISED. PAINTED SURFACES ARE NOT CONSIDERED SUITABLY PROTECTED.
- 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.
- 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.
- CONCEAL ALL WIRING IN WALL OR CEILING CAVITIES. PROVIDE CAST-IN CONDUITS TO CONCEAL WIRING TO FITTINGS MOUNTED ON OFF-FORM CONCRETE. PAINT ALL EXPOSED SURFACES TO MATCH THE ARCHITECTURAL FINISH.
- PROVIDE AS-BUILT DRAWINGS FOR THE ELECTRICAL SERVICES, INCLUDING CONDUIT LOCATIONS AND OPERATION / MAINTENANCE MANUALS.
- PROVIDE POLES WHICH INCORPORATE A TAMPER RESISTANT ACCESS PANEL WITHIN THE POLE BASE. ALL POLES ARE TO BE PROVIDED WITH BASEPLATES THAT INCORPORATE A MINIMUM OF FOUR HOLD DOWN BOLTS. PROVIDE POLES AND INSITU CONCRETE FOOTINGS DESIGNED SPECIFICALLY TO SUIT THE LOCAL CONDITIONS AND BE ABLE TO WITHSTAND WIND GUSTS OF 250KM/H. THE DESIGN OF THE POLE AND THE FOOTING IS TO BE UNDERTAKEN BY A REGISTERED STRUCTURAL ENGINEER. PROVIDE A CERTIFICATE FROM THE STRUCTURAL ENGINEER INDICATING THE POLES AND FOOTINGS MEET THE SPECIFIED DESIGN CRITERIA. PROVIDE DETAILED DRAWINGS OF ALL POLES AND FOOTINGS FOR APPROVAL. PROVIDE A FUSED CONNECTION WITHIN EACH POLE LOCATED BEHIND THE POLE BASE ACCESS PANEL. CONNECT THE POLE TO THE ELECTRICAL EARTH VIA A LUG FIXED TO A STUD WELDED TO THE POLE LOCATED WITHIN THE POLE LOCATED BEHIND THE POLE BASE ACCESS PANEL. TRIM THE HOLD DOWN BOLTS SUCH THAT THEY DO NOT PROTRUDE MORE THAN 15mm ABOVE THE NUT. TREAT THE TRIMMED HOLD DOWN BOLT AGAINST CORROSION AND ENSURE IT DOES NOT CONTAIN SHARP EDGES THAT REPRESENT A HAZARD. ENSURE THE BASE PLATE IS BETWEEN 50mm AND 100mm ABOVE THE FINISHED LANDSCAPE LEVEL. PROVIDE A NEAT SMOOTH FINISHED CONCRETE GROUT FILL UNDER THE BASE PLATE ENSURING ANY SPLATTER IS IMMEDIATELY WASHED OFF THE BASE PLATE AND POLE. EXTEND THE CONDUIT INTO THE POLE 50mm ABOVE THE BASE PLATE.
- EXCAVATE TRENCHES IN SECTIONS OF SUITABLE LENGTH, LAY AND BED THE RELEVANT SERVICE LENGTH, AND BACKFILL THE TRENCH SECTION, WITH THE MINIMUM OF DELAY, AND IF POSSIBLE ON THE SAME WORKING DAY, UNLESS OTHERWISE APPROVED. PROVIDE ALL SAW CUTS IN EXISTING CONCRETE OR BITUMEN SURFACES IN A STRAIGHT LINE TO A MINIMUM DEPTH OF 75mm BEFORE EXCAVATION IS COMMENCED. LIFT AND STORE PAVING SLABS FOR LATER REINSTATEMENT. ENSURE ALL TRENCHES ARE CLEARED OF SHARP PROJECTIONS, WHERE SPECIFIED OR REQUIRED BY THE RELEVANT AUTHORITIES, PROVIDE UNDER ROAD BORING, BY AN APPROVED SPECIALIST IN LIEU OF TRENCHES. MAKE THE BORED DIMENSION TO ENSURE A TIGHT FIT. IF VOIDS ARE ENCOUNTERED, FILL BY PRESSURE GROUTING.
- PROVIDE POLYPROPYLENE DRAW CORDS IN ALL CONDUITS NOT IN USE. PROVIDE A MINIMUM SURROUNDING OF 50mm CLEAN SAND AROUND CABLES AND CONDUITS INSTALLED UNDERGROUND. UNDER ROADWAYS AND AREAS SUBJECT TO TRAFFIC MOVEMENT, INSTALL CABLES IN A DUCT OR CONDUIT EXTENDING TO NOT LESS THAN 1M ON EITHER SIDE OF THE SEALED SURFACE OR TRAFFICABLE AREA AND ENCASE IN CONCRETE WITH A STRENGTH OF 20MPA HAVING A MINIMUM COVER THICKNESS OF 100mm. SEAL THE BURIED ENTRIES TO DUCTS AND CONDUITS WITH A PLIABLE NON SETTING WATERPROOF COMPOUND. SEAL SPARE DUCTS OR CONDUITS IMMEDIATELY AFTER INSTALLATION, AND SEAL THE OTHER AFTER THE CABLE INSTALLATION.
- BACKFILL TRENCHES AS SOON AS POSSIBLE AFTER APPROVAL OF LAID AND BEDDED SERVICE TO THE FOLLOWING:
  - GARDEN AREAS: BACKFILL THE TOP 150MM OF THE TRENCH WITH TOPSOIL.
  - LAWN AREAS: RE LOAM THE TOP 150MM AND RETURN TRENCHES PASSING THROUGH EXISTING LAWNED AREAS.
 REMOVE ALL EXCESS SOIL AND FILL FROM THE SITE UNLESS OTHERWISE DIRECTED. REINSTATE EXISTING SURFACES AND ASSETS DISTURBED OR REMOVED AS A RESULT OF THE EXCAVATIONS OF TRENCHING. REINSTATE CONCRETE SURFACES TO THE ORIGINAL LEVEL USING APPROVED REINFORCING STEEL, KEYED TO THE EXISTING AND LAID TO PREVENT THE REINSTALLED CONCRETE FROM SUBSIDING AND CRACKING.
- IN EXISTING BITUMEN SURFACES CAMBER THE REINSTATED SURFACE SO THAT THE EDGES ARE FLUSH AND THE CENTRE IS 10mm ABOVE THE EXISTING PAVEMENT. FILL THE TOP 150mm BELOW THE BITUMEN SURFACE WITH MECHANICALLY COMPACTED FINELY CRUSHED GRAVEL. PRIME COAT THE EXISTING BITUMEN EDGES OF THE TRENCH WITH BITUMEN PRIOR TO LAYING 75mm MINIMUM OF HOT PRE MIX BITUMEN TO THE FINISHED CAMBERED SURFACE. IF IT CAN BE SHOWN THAT HOT PRE MIX IS NOT AVAILABLE, COLD PRE MIX WILL BE ACCEPTED. PROVIDE A WRITTEN CERTIFICATION THAT THE BACK FILLING HAS BEEN COMPLETED AS SPECIFIED AND COMPACTION COMPLETED SUCH THAT THE TRENCH WILL NOT SUBSIDE.
- PROVIDE DRAW IN PITS AS REQUIRED TO COMPLETE THE ELECTRICAL SERVICES INSTALLATION AND TO ALLOW ALL UNDERGROUND CABLING TO BE REMOVED AND REINSTALLED AFTER THE INSTALLATION IS COMPLETE. IRRESPECTIVE OF THE NUMBER OF PITS SHOWN ON THE DRAWINGS, PROVIDE ALL PITS NECESSARY TO COMPLETE THE ELECTRICAL INSTALLATION. ALL SIZES SHOWN REFER TO THE INSIDE DIMENSIONS AND ARE GIVEN AS AN ABSOLUTE MINIMUM.
  - ALL PITS ARE TO BE PROVIDED WITH KEYHOLES TO POSITIVELY LOCATE THE KEYS, AND ARE FITTED WITH PLASTIC PLUGS TO PREVENT ENTRY OF DIRT. ENSURE ALL PIT LIDS ARE CAPABLE OF BEING SECURED AND ARE NOT ACCESSIBLE WITHOUT THE USE OF A SPECIALIST TOOL. SEAL ALL PITS SUCH THAT THEY ARE VERMIN PROOF.
  - ENSURE ALL PITS ARE PROVIDED WITH A REINFORCED CAST INSITU CONCRETE SURROUND COLLAR A MINIMUM OF 250mm WIDE x 200mm DEEP. THE CONCRETE COLLAR IS TO FALL AWAY FROM THE PIT LIP BY 10mm OVER THE 200mm WIDTH. THE TOP OF THE COLLAR IS TO BE FLUSH SUCH THAT THE PIT CAN BE MOWED OVER AS PART OF NORMAL LAWN MOWING WITHOUT CHIPPING OR DAMAGE TO THE PIT. ALL PITS ARE TO BE A MINIMUM DIMENSION OF 200 x 400 x 700mm DEEP UNLESS NOTED OTHERWISE AND BEDDED ON A MINIMUM OF 300mm OF GRAVEL AGGREGATE.
  - PROVIDE EACH PIT WITH A 30MM DIAMETER WEEP HOLE IN THE BASE OF THE PIT TO ALLOW THE DISBURSEMENT OF ANY ACCUMULATED WATER. PROVIDE FIXED DRAINAGE TO THE PIT SYSTEM BY ONE OF THE FOLLOWING METHODS:
    - DRAIN BACK TO THE EXISTING SYSTEM, IF PIPE WORK IS AN EXTENSION OF AN EXISTING SYSTEM.
    - DRAIN FROM THE LOWEST POINT OF A PIT TO NEAREST STORMWATER DRAIN.
    - DRAIN TO A SOAKAGE PIT OF ADEQUATE SIZE IF ABOVE IS NOT POSSIBLE.
  - LAY ALL CONDUITS WITH A DRAINAGE FALL OF AT LEAST 1:100 TO DRAIN THE PIT SYSTEM TO THE LOWEST PIT OR PITS.
  - IRRESPECTIVE OF THE ORIENTATION SHOWN ON THE DRAWINGS ORIENTATE THE PITS SUCH THAT THEY ARE TRUE AND SQUARE WITH THE SURROUNDING HARDSCAPE AND ARCHITECTURAL FINISHES.
  - PROVIDE ALL CONDUITS AND PIPES ENTERING THE PITS WITH BELL MOUTHS WHERE THEY ENTER THE PITS. SEAL THE BELL MOUTHS TO THE PIT WALL. SEAL AROUND ALL CONDUITS AND PIPES ENTERING THE PITS SUCH THAT MOISTURE DOES NOT ENTER THE PITS AROUND THE OUTSIDE OF THE CONDUITS OR PIPES.
  - CLEAN OUT ALL PITS PRIOR TO PRACTICAL COMPLETION. OPEN ALL OF THE PITS AT PRACTICAL COMPLETION FOR INSPECTION BY THE PROJECT MANAGER. SEAL ALL PIT LIDS ONCE THE INSPECTION IS COMPLETE.

**LEGEND**

- L1: EXISTING CARPARK LIGHT TO REMAIN AS IS.
- L2: NEW 9M HIGH BLACK SQUARE POLE TO MATCH THE EXISTING POLES C/W TWIN HEAD CARPARK LIGHTS. FITTINGS: SUNNY AUSTRALIA LIGHTING SAL SHP305 90CW BK A45
- L3: NEW 9M HIGH BLACK SQUARE POLE TO MATCH THE EXISTING POLES C/W SINGLE HEAD CARPARK LIGHT. FITTING: SUNNY AUSTRALIA LIGHTING SAL SHP305 90CW BK A45
- DB-CP: PROVIDE THE EXISTING CARPARK DISTRIBUTION BOARD WITH A NEW SINGLE PHASE 20 AMP RCBO 6MM CIRCUIT TO SUPPLY ALL OF THE NEW L2 AND L3 LIGHTS AND SECOND SINGLE PHASE 20 AMP RCBO 6MM CIRCUIT TO SUPPLY THE DOUBLE GPO. PROVIDE PE CONTROL TO TURN THE LIGHTS ON 30 MINUTES PRIOR TO DUSK AND OFF AT DAWN.
- DOUBLE GPO MOUNTED WITHIN A HIGH LEVEL WEATHERPROOF ENCLOSURE PROVIDED BY THE CCTV CONTRACTOR.
- EXISTING PITS TO REMAIN AS IS.
- PIT 1: 435 x 205 CLEAR INTERNAL x 700 DEEP PLASTIC PIT C/W A REINFORCED CONCRETE SURROUND AND A CLASS C INFILL LID. SUBMIT DETAILS OF THE PIT, LID AND AN INSTALLATION SECTION FOR APPROVAL.
- PIT 2: 435 x 205 CLEAR INTERNAL x 700 DEEP PLASTIC PIT C/W A REINFORCED CONCRETE SURROUND AND A CLASS C INFILL LID. SUBMIT DETAILS OF THE PIT, LID AND AN INSTALLATION SECTION FOR APPROVAL.
- PIT 3: 435 x 205 CLEAR INTERNAL x 700 DEEP PLASTIC PIT C/W A REINFORCED CONCRETE SURROUND AND A CLASS C INFILL LID. SUBMIT DETAILS OF THE PIT, LID AND AN INSTALLATION SECTION FOR APPROVAL.

**LEGEND**

- C-A: PROVIDE NEW CABLE ACCESS FROM DB-CP UNDER THE EXISTING ROOF STRUCTURE THEN DOWN THE COLUMN TO CONDUIT CB.
- C-B: PROVIDE 2 x 80 DIA UNDERGROUND CONDUITS C/W SPARE DRAW WIRES FROM THE EXISTING POLE TO PIT 1.
- C-C: PROVIDE 2 x 100 DIA POWER UNDERGROUND CONDUITS AND A 2 x 50 DIA UNDERGROUND COMMUNICATION CONDUIT FOR CCTV CABLING ALL C/W SPARE DRAW WIRES BETWEEN THE NEW PITS.
- C-D: PROVIDE A 32 DIA UNDERGROUND POWER CONDUIT AND A 32 DIA UNDERGROUND COMMUNICATION CONDUIT FOR CCTV CABLING ALL C/W SPARE DRAW WIRE FROM THE PIT TO THE LIGHT POLE.
- C-E: PROVIDE A 32 DIA UNDERGROUND POWER CONDUIT AND A 32 DIA UNDERGROUND COMMUNICATION CONDUIT FOR CCTV CABLING ALL C/W SPARE DRAW WIRE BETWEEN THE POLES.
- C-F: PROVIDE A 32 DIA UNDERGROUND POWER CONDUIT AND A 50 DIA UNDERGROUND COMMUNICATION CONDUIT FOR CCTV CABLING ALL C/W SPARE DRAW WIRE FROM THE PIT TO THE LIGHT POLE.
- C-G: PROVIDE A 100 DIA UNDERGROUND POWER CONDUIT AND A 32 DIA UNDERGROUND COMMUNICATION CONDUIT C/W SPARE DRAW WIRES FROM THE EXISTING MSB TO PIT 1.



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**BROTHERS LEAGUES CLUB - IPSWICH  
CARPARK EXTENSION**

CORNER ROBERTSON ROAD & WILDEY STREET, RACEVIEW

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