BAHAGIAN F2
SENARAI KUANTITI

PERKHIDMATAN MEMERIKSA,MENGUJI DAN MENYELENGGARA SISTEM PENCEGAHAN KEBAKARAN SERTA PEMBAHARUAN SIJIL PEMADAM API DI BANGUNAN MILIK MAJLIS BANDARAYA ISKANDAR PUTERI BAGI TEMPOH 24 BULAN

Catatan

Catatan : 1) Pemborong adalah dinasihatkan supaya melawat dan meninjau tapak bina sebelum memasuki tawaran sebut harga.		
Sebarang butiran yang tidak diperhargakan adalah dianggap telah dimasukkan kedalam butiran laindan haruslah dilaksanakan.		
2) Harga adalah termasukkerja-kerja pengawalan lalulintas semasa pembinaan dijalankan.		
3) Sebarang item yang tidak dinyatakan dalam ringkasan sebutharga ini tetapi dikehendaki dalam spefikasi dan skop kerja,		
hendaklah dimasukkan ke dalam salah satu butiran dalam ringkasan sebut harga.		
4) Pemborong harus menghargakan sesuatu sebut harga sepenuhnya mengikut lukisan terperinci atau lampiran yang disediakan		
dengan merujuk kepada spesifikasi/huraian kerja dalan ringkasan sebut harga.		

RINGKASAN SENARAI KUANTITI

BIL.	BAHAGIAN	MUKA SURAT	JUMLAH (RM)
1	**KERJA-KERJA AWALAN (PRELIMINARIES)**	F2/2	
2	**HOSE REEL SYSTEM**	F2/3	
3	**PORTABLE FIRE EXTINGUISHER**	F2/5	
4	**WANG PERUNTUKAN SEMENTARA (ALAT GANTI)**	F2/6	
JUMLAH KESELURUHAN			

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
A	KERJA-KERJA AWALAN (PRELIMINARIES)				
A.1	SEJUMLAH WANG BAGI KERJA-KERJA PERMULAAN TERMASUK PEMATUHAN KEPADA SYARAT-SYARAT SEBUTHARGA DAN PERKARA-PERKARA BERIKUT:-				
A.1.1	MENYEDIAKAN POLISI TANGGUNGAN AWAM DAN POLISI INSURANS KERJA (ALL RISKS) ; DAN	PUKAL	-		
A.1.2	MENYEDIAKAN POLISI INSURANS PEKERJA (WORKMEN'S COMPENSATION).	PUKAL	-		
A.1.3	MENYEDIAKAN GAMBAR FOTO PERLAKSANAAN KERJA, 2 SALINAN (SEBELUM, SEMASA, SIAP) PROJEK DALAM BENTUK 'HARD COPY' DAN 1 SALINAN 'SOFT COPY' DALAM PENDRIVE'	BULAN	24		
A.1.4	MENYEDIAKAN DAN MELETAKKAN PAPAN TANDA AMARAN KESELAMATAN DENGAN BILANGAN YANG SECUKUPNYA SEPERTI (AWAS, KERJA-KERJA MBIP SEDANG DILAKSANAKAN, KON-KON KESELAMATAN DLL) DI TAPAK BINA SEMASA KERJA SEDANG DIJALANKAN	BULAN	24		
A.1.5	MENYEDIAKAN LAPORAN PEMERIKSAAN, PENYELENGGARAAN DAN KEROSAKAN (JIKA ADA) SETIAP BULAN KEPADA MAJLIS DAN DISAHKAN OLEH PEKERJA KOMPETEN DAN WPP ATAU PENOLONG JURUTERA MBIP.	BULAN	24		
JUMLAH KESELURUHAN (BIL A)					

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
B	HOSE REEL SYSTEM				
B.1	HOSE REEL (MONTHLY)				
B.1.1	TO SERVICE HOSE REEL AS PER *MBIP SPECIFICATION FOR HOSE REEL	BULAN	24		
B.1.2	* SPECIFICATION FOR HOSE REEL (MONTHLY)				
B.1.2.1	INSPECT THAT THE HOSE REEL IS OBSTRUCTION FREE;				
B.1.2.2	INSPECT ANY MISSING, DAMAGED OR DETERIORATED PARTS ON THE HOSE REEL DRUM AND HOSE REEL:				
B.1.2.3	INSPECT THE EASE OF OPERATION AND SWING OF EACH HOSE REEL DRUM. ADJUST AS NECESSARY;				
B.1.2.4	INSPECT FOR ANY LEAKS OR DRIPS AT THE DRUM GOOSE NECK AND GATE VALVE;				
B.1.2.5	ENSURE THAT THE DIFFUSER NOZZLE CAN BE OPERATED FREELY AND THE HOSE IS NOT TWISTED OR CURLED; AND				
B.1.2.6	TEST HOSE REEL FOR LEAKAGE.				
B.1.3	LOKASI:-				
B.1.3.1	DEWANRAYA TAMAN BUKIT INDAH (5 NOS)				
B.1.3.2	DEWANRAYA TAMAN UNIVERSITI (4 NOS)				
B.1.3.3	DEWANRAYA TAMAN NUSANTARA (7 NOS)				
B.1.3.4	DEWANRAYA TAMAN PULAI INDAH (5 NOS)				
B.1.3.5	DEWANRAYA GELANG PATAH (4 NOS)				
B.1.3.6	DEWANRAYA TAMAN PULAI UTAMA (8 NOS)				
B.1.3.7	MEDAN NIAGA BAKTI TAMAN MUTIARA RINI (4 NOS)				
B.1.3.8	PASAR AWAM TAMAN PERLING (4 NOS)				
B.1.3.9	PUSAT REKREASI DAN KOMUNITI TAMAN UNGKU TUN AMINAH (4 NOS)				
B.1.3.10	TERMINAL BAS DAN TEKSI GELANG PATAH (4 NOS)				
B.2	HOSE REEL PUMPS - DUTY AND STANDBY (MONTHLY)				
B.2.1	TO SERVICE HOSE REEL PUMP AS PER *MBIP SPECIFICATION FOR HOSE REEL PUMP	BULAN	24		
B.2.2	* SPECIFICATION FOR HOSE REEL PUMP (MONTLY)				
B.2.2.1	INSPECT CONDITION OF PUMPS. (CLEANLINESS/ APPEARANCE/ NOISE). CLEAN AS NECESSARY;				
B.2.2.2	TEST RUN EACH PUMP ON AUTOMATIC AND MANUAL MODE AND INSPECT THE CORRECT CUT-IN OR CUT-OUT AUTO MODE OPERATION OF THE PRESSURE SWITCH. CHECK PRESSURES;				
B.2.2.3	INSPECT ALL PUMP BEARINGS FOR EXCESSIVE NOISE, VIBRATION AND WEAR. LUBRICATE WITH OIL OR GREASE AS NECESSARY;				
B.2.2.4	INSPECT CARBON BRUSHES AND SLIP RINGS OF ALL MOTORS. CLEAN AS NECESSARY;				
B.2.2.5	INSPECT SAFETY DEVICES FITTED TO ALL MOTORS;				
B.2.2.6	INSPECT ALL SEALS INCLUDING MECHANICAL SEALS FOR LEAKAGES;				
B.2.2.7	ADJUST PUMP GLANDS AS NECESSARY;				
B.2.2.8	INSPECT EACH PUMP OR MOTOR ALIGNMENT, MOUNTINGS AND CORRECT ROTATION. ADJUST AS NECESSARY;				
B.2.2.9	INSPECT ALL RUBBER COUPLINGS BETWEEN PUMPS AND DRIVE MOTOR;				

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
B.2.2.10	INSPECT ALL BELT DRIVES, ALL BOLTS AND NUTS, ADJUST, RE-TENSION AND TIGHTEN AS NECESSARY;				
B.2.2.11	INSPECT AND TEST PRESSURE SWITCHES AND GAUGES; AND				
B.2.2.12	CHECK AND REFILL DIESEL PUMP FUEL.				
B.2.3	LOKASI:-				
B.2.3.1	DEWANRAYA TAMAN BUKIT INDAH (2 SET)				
B.2.3.2	DEWANRAYA TAMAN UNIVERSITI (2 SET)				
B.2.3.3	DEWANRAYA TAMAN NUSANTARA (2 SET)				
B.2.3.4	DEWANRAYA TAMAN PULAI INDAH (2 SET)				
B.2.3.5	DEWANRAYA GELANG PATAH (2 SET)				
B.2.3.6	DEWANRAYA TAMAN PULAI UTAMA (2 SET)				
B.2.3.7	MEDAN NIAGA BAKTI TAMAN MUTIARA RINI (2 SET)				
B.2.3.8	PASAR AWAM TAMAN PERLING (2 SET)				
B.2.3.9	PUSAT REKREASI DAN KOMUNITI TAMAN UNGKU TUN AMINAH (2 SET)				
B.2.3.10	TERMINAL BAS DAN TEKSI GELANG PATAH (2 SET)				
B.3	HOSE REEL TANK (MONTHLY)				
B.3.1	TO SERVICE HOSE REEL TANK AS PER *MBIP SPECIFICATION FOR HOSE REEL TANK.	BULAN	24		
B.3.2	* SPECIFICATION FOR HOSE REEL TANK (MONTLY)				
B.3.2.1	INSPECT AND REPORT FOR INTEGRITY OF STRUCTURE;				
B.3.2.2	RECTIFY AS NECESSARY;				
B.3.2.3	INSPECT FOR LEAKS. INSPECT FOR RUST;				
B.3.2.4	INSPECT OPERATION OF BALL VALVE;				
B.3.2.5	INSPECT WATER TANK LEVEL INDICATOR, INSPECT ELECTRODE AND CLEAN;				
B.3.2.6	INSPECT FOR SEDIMENT OR SLUDGE. FLUSH AND CLEAN; AND				
B.3.2.7	INSPECT INTERNAL AND EXTERNAL CAT LADDER.				
B.3.3	LOKASI:-				
B.3.3.1	DEWANRAYA TAMAN BUKIT INDAH				
B.3.3.2	DEWANRAYA TAMAN UNIVERSITI				
B.3.3.3	DEWANRAYA TAMAN NUSANTARA				
B.3.3.4	DEWANRAYA TAMAN PULAI INDAH				
B.3.3.5	DEWANRAYA GELANG PATAH				
B.3.3.6	DEWANRAYA TAMAN PULAI UTAMA				
B.3.3.7	MEDAN NIAGA BAKTI TAMAN MUTIARA RINI				
B.3.3.8	PASAR AWAM TAMAN PERLING				
B.3.3.9	PUSAT REKREASI DAN KOMUNITI TAMAN UNGKU TUN AMINAH				
B.3.3.10	TERMINAL BAS DAN TEKSI GELANG PATAH				
JUMLAH KESELURUHAN (BIL B)					

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
C	PORTABLE FIRE EXTINGUISHER				
C.1	SET OF DRY POWDER (9 KG) (YEARLY) - 257 NOS				
C.1.1	TO OBTAIN JABATAN BOMBA DAN PENYELAMAT MALAYSIA (JBPM) CERTIFICATION UPON EXPIRY DATE AS PER *MBIP SPECIFICATION FOR PORTABLE FIRE EXTINGUISHER	KALI	2		
C.1.2	* SPECIFICATION FOR PORTABLE FIRE EXTINGUISHER				
C.1.2.1	INSPECT ANY MISSING, DAMAGED OR DETERIORATED PARTS ON THE CYLINDER, PRESSURE GAUGE, HOSE CONNECTOR, DISCHARGE VALVE, HANDLE, CYLINDER SAFETY PIN, SEAL AND CYLINDER HOLDER. REPAIR OR REPLACE AS NECESSARY;				
C.1.2.2	INSPECT FIRE EXTINGUISHER CABINET. REPAIR OR REPLACE AS NECESSARY; AND				
C.1.2.3	INSPECT THE CONDITION OF THE CONTENT. REFILL OR REPLACE AS NECESSARY.				
C.2	SET OF CO2 (5 KG) (YEARLY) - 18 NOS				
C.2.1	TO OBTAIN JABATAN BOMBA DAN PENYELAMAT MALAYSIA (JBPM) CERTIFICATION UPON EXPIRY DATE AS PER *MBIP SPECIFICATION FOR PORTABLE FIRE EXTINGUISHER	KALI	2		
C.2.2	* SPECIFICATION FOR PORTABLE FIRE EXTINGUISHER				
C.2.2.1	INSPECT ANY MISSING, DAMAGED OR DETERIORATED PARTS ON THE CYLINDER, PRESSURE GAUGE, HOSE CONNECTOR, DISCHARGE VALVE, HANDLE, CYLINDER SAFETY PIN, SEAL AND CYLINDER HOLDER. REPAIR OR REPLACE AS NECESSARY;				
C.2.2.2	INSPECT FIRE EXTINGUISHER CABINET. REPAIR OR REPLACE AS NECESSARY; AND				
C.2.2.3	INSPECT THE CONDITION OF THE CONTENT. REFILL OR REPLACE AS NECESSARY.				
JUMLAH KESELURUHAN (BIL C)					

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
D	WANG PERUNTUKAN SEMENTARA (ALAT GANTI)				
D.1	SEJUMLAH WANG PERUNTUKAN SEMENTARA RM150,000.00 UNTUK KERJA-KERJA ALAT GANTI YANG AKAN DIBELANJAKAN SEBAHAGIAN DARIPADANYA ATAU SEPENUHNYA. * KONTRAKTOR HENDAKLAH MENGEMUKAKAN SEBUTHARGA ALAT GANTI DAN MENDAPAT KELULULSAN PEGAWAI PENGUASA SEBELUM PELAKSANAAN KERJA DIJALANKAN.	PUKAL	-		150,000.00
D.1.1	PORTABLE FIRE EXTINGUISHER				
D.1.1.1	9.0 KG. DRY POWDER PORTABLE FIRE EXTINGUISHERS C/W MOUNTING BRACKETS AND BOMBA CERTIFICATE				
D.1.1.2	9.0 KG. DRY POWDER PORTABLE FIRE EXTINGUISHERS C/W MOUNTING BRACKETS, LOCKABLE CABINET AND BOMBA CERTIFICATE				
D.1.1.3	5.0 KG. CARBON DIOXIDE FIRE EXTINGUISHERS C/W MOUNTING BRACKETS AND BOMBA CERTIFICATE				
D.1.1.4	5.0 KG. CARBON DIOXIDE FIRE EXTINGUISHERS C/W MOUNTING BRACKETS, LOCKABLE CABINET AND BOMBA CERTIFICATE				
D.1.1.5	2.0 KG. CARBON DIOXIDE FIRE EXTINGUISHERS C/W MOUNTING BRACKETS AND BOMBA CERTIFICATE				
D.1.1.6	2.0 KG. CARBON DIOXIDE FIRE EXTINGUISHERS C/W MOUNTING BRACKET, LOCKABLE CABINET AND BOMBA CERTIFICATE				
D.1.2	HOSE REEL SYSTEM				
D.1.2.1	HEAVY DUTY ELECTRIC MOTOR PUMP SET C/W STARTER, COUPLINGS, BASE PLATE, NEOPRENE PADS, ETC.				
D.1.2.2	[3.0 - 4.0 HP]				
D.1.2.3	[5.0 - 6.0 HP]				
D.1.2.4	HEAVY DUTY STANDBY DIESEL ENGINE MOTOR PUMP SET C/W DIESEL TANK, BASE PLATE, NEOPRENE PADS, INSULATED EXHAUST PIPE, ETC.				
D.1.2.5	[3.0 - 4.0 HP]				
D.1.2.6	[5.0 - 6.0 HP]				
D.1.2.7	SWING UNIVERSAL TYPE HYDRAULIC HOSE REELS EACH C/W 30M LONG 25MM DIAMETER HOSE, 25MM DIAMETER STOP VALVE AND SHUT-OFF NOZZLE, ETC.				
D.1.2.8	LOCKABLE NOZZLE BOX				
D.1.2.9	GALVANISED STEEL/ IRON CLASS C - UNDERGROUND AND ABOVE GROUND PIPE WORKS C/W VALVES, FITTINGS, SUPPORTS AND HANGERS, PRESSURE GAUGES, PRESSURE SWITCHES, AUTOMATIC AIR RELEASE VALVES ETC.				
D.1.2.10	PUMP SWITCHBOARD (CONTROL PANEL) C/W SINGLE LINE SCHEMATIC CIRCUIT DIAGRAM, OVER VOLTAGE PROTECTOR, EARTHLING, VOLTMETER, AMMETER CABLINGS, CONDUITS, ELECTRICAL WORKS (POWER AND CONTROL) INCLUDE CONTROL WIRING BETWEEN SWITCHBOARD AND VARIOUS EQUIPMENT, AUTOMATIC CONTROLS, ALARMS, ETC.				
D.1.2.11	HOT-DIPPED GALVANISED PRESSED STEEL WATER TANK (2,400 GALLONS) C/W I-BEAM, WATER LEVEL INDICATOR (STAINLESS STEEL WIRE ROPE), STAINLESS STEEL 304 ELECTRODES C/W HOLDER AND SPACER, BALL VALVE, COVER, LADDER, OVERFLOW PIPE, SCOUR PIPE, ETC.				
D.1.2.12	LIGHTNING SURGE PROTECTOR				

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
D.1.2.13	ALARM FOR HOSE REEL SYSTEM (OUTSIDE PUMP ROOM)				
D.1.2.14	BALANCING, CALIBRATION, TESTING AND COMMISSIONING OF ALL SYSTEM EQUIPMENT AND COMPONENTS				
D.1.3	AUTOMATIC FIRE DETECTION & ALARM SYSTEM (CONVENTIONAL)				
D.1.3.1	MANUAL CALL POINTS (BREAK-GLASS)				
D.1.3.2	ALARM BELLS/SOUNDER				
D.1.3.3	HEAT DETECTOR				
D.1.3.4	SMOKE DETECTOR				
D.1.3.5	MAIN FIRE ALARM PANEL C/W MIMIC DIAGRAM, RELAYS, WIRING, INDICATIONS, OVERVOLTAGE PROTECTOR, EARTHING, HEAVY DUTY NICKEL CADMIUM RECHARGEABLE TYPE C/W BATTERY CHARGERS ETC.				
D.1.3.6	REPEATER FIRE ALARM PANEL (GUARD HOUSE) C/W MIMIC DIAGRAM, LED LIGHT, RELAYS, CONTROL WIRING, INDICATIONS, OVERVOLTAGE PROTECTOR, ETC.				
D.1.3.7	ALL ELECTRICAL WIRING C/W CONDUIT, UNDERGROUND CABLE, SUPPORTS AND HANGERS BETWEEN FIRE ALARM PANEL TO VARIOUS POINTS OF DETECTORS, ALARMS, BREAK GLASS, ETC				
D.1.3.8	EARTHING, LIGHTNING AND SURGE PROTECTION				
D.1.3.9	MAINTANCE FREE HEAVY DUTY NICKEL CADMIUM RECHARGEABLE C/W BATTERY CHARGES				
D.1.3.10	LIGHTNING SURGE PROTECTOR SIGNAL AND POWER				
D.1.3.11	SISTEM PENGAWASAN KEBAKARAN AUTOMATIK (SPKA)				
D.1.4	PIPE AND FITTINGS				
D.1.4.1	PIPES UNDERGROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (PRE INSULATED BITUMINOUS FACTORY WRAPPED EXTERNALLY) (1 INCH)				
D.1.4.2	PIPES UNDERGROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (PRE INSULATED BITUMINOUS FACTORY WRAPPED EXTERNALLY) (1 ¼ INCH)				
D.1.4.3	PIPES UNDERGROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (PRE INSULATED BITUMINOUS FACTORY WRAPPED EXTERNALLY) (1½ INCH)				
D.1.4.4	PIPES UNDERGROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (PRE INSULATED BITUMINOUS FACTORY WRAPPED EXTERNALLY) (2 INCH)				
D.1.4.5	PIPES UNDERGROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (PRE INSULATED BITUMINOUS FACTORY WRAPPED EXTERNALLY) (2½ INCH)				
D.1.4.6	PIPES UNDERGROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (PRE INSULATED BITUMINOUS FACTORY WRAPPED EXTERNALLY) (3 INCH)				
D.1.4.7	PIPES UNDERGROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (PRE INSULATED BITUMINOUS FACTORY WRAPPED EXTERNALLY) (4 INCH)				
D.1.4.8	PIPES UNDERGROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (PRE INSULATED BITUMINOUS FACTORY WRAPPED EXTERNALLY) (6 INCH)				

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
D.1.4.9	PIPES ABOVE GROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (½ INCH)				
D.1.4.10	PIPES ABOVE GROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (3/4 INCH)				
D.1.4.11	PIPES ABOVE GROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (1INCH)				
D.1.4.12	PIPES ABOVE GROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (1 ¼ INCH)				
D.1.4.13	PIPES ABOVE GROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (1 ½ INCH)				
D.1.4.14	PIPES ABOVE GROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (2 INCH)				
D.1.4.15	PIPES ABOVE GROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (2 ½ INCH)				
D.1.4.16	PIPES ABOVE GROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (3INCH)				
D.1.4.17	PIPES ABOVE GROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (4 INCH)				
D.1.4.18	PIPES ABOVE GROUND GALVANISED IRON/STEEL CLASS 'C' PIPES (6 INCH)				
D.1.4.19	PIPES SCHEDULE 40 SEAMLESS GALVANISED IRON/STEEL (½ INCH)				
D.1.4.20	PIPES SCHEDULE 40 SEAMLESS GALVANISED IRON/STEEL (¾ INCH)				
D.1.4.21	PIPES SCHEDULE 40 SEAMLESS GALVANISED IRON/STEEL (1 INCH)				
D.1.4.22	PIPES SCHEDULE 40 SEAMLESS GALVANISED IRON/STEEL (1 ¼ INCH)				
D.1.4.23	PIPES SCHEDULE 40 SEAMLESS GALVANISED IRON/STEEL (1 ½ INCH)				
D.1.4.24	PIPES SCHEDULE 40 SEAMLESS GALVANISED IRON/STEEL (2 INCH)				
D.1.4.25	PIPES SCHEDULE 40 SEAMLESS GALVANISED IRON/STEEL (2 ½ INCH)				
D.1.4.26	GALVANIZED IRON (GI) FITTINGS G.I. ELBOWS (½ INCH)				
D.1.4.27	GALVANIZED IRON (GI) FITTINGS G.I. ELBOWS				
D.1.4.28	GALVANIZED IRON (GI) FITTINGS G.I. ELBOWS (1 INCH)				

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
D.1.4.29	GALVANIZED IRON (GI) FITTINGS G.I. ELBOWS (1 ¼)				
D.1.4.30	GALVANIZED IRON (GI) FITTINGS G.I. ELBOWS (1 ½)				
D.1.4.31	GALVANIZED IRON (GI) FITTINGS G.I. ELBOWS (2 INCH)				
D.1.4.32	GALVANIZED IRON (GI) FITTINGS G.I. ELBOWS (2 ½ INCH)				
D.1.4.33	GALVANIZED IRON (GI) FITTINGS G.I. ELBOWS (3 INCH)				
D.1.4.34	GALVANIZED IRON (GI) FITTINGS G.I. ELBOWS (4 INCH)				
D.1.4.35	GALVANIZED IRON (GI) FITTINGS G.I. ELBOWS (6 INCH)				
D.1.4.36	GALVANIZED IRON (GI) FITTINGS G.I. TEES (½ INCH)				
D.1.4.37	GALVANIZED IRON (GI) FITTINGS G.I. TEES (¾ INCH)				
D.1.4.38	GALVANIZED IRON (GI) FITTINGS G.I. TEES (1 INCH)				
D.1.4.39	GALVANIZED IRON (GI) FITTINGS G.I. TEES (1 ¼ INCH)				
D.1.4.40	GALVANIZED IRON (GI) FITTINGS G.I. TEES (1 ¼ INCH)				
D.1.4.41	GALVANIZED IRON (GI) FITTINGS G.I. TEES (2 INCH)				
D.1.4.42	GALVANIZED IRON (GI) FITTINGS G.I. TEES (2 ½ INCH)				
D.1.4.43	GALVANIZED IRON (GI) FITTINGS G.I. TEES (3 INCH)				
D.1.4.44	GALVANIZED IRON (GI) FITTINGS G.I. TEES (4 INCH)				
D.1.4.45	GALVANIZED IRON (GI) FITTINGS G.I. TEES (6 INCH)				
D.1.4.46	GALVANIZED IRON (GI) FITTINGS G.I. CROSS TEES (½ INCH)				
D.1.4.47	GALVANIZED IRON (GI) FITTINGS G.I. CROSS TEES (¾ INCH)				
D.1.4.48	GALVANIZED IRON (GI) FITTINGS G.I. CROSS TEES (1 INCH)				
D.1.4.49	GALVANIZED IRON (GI) FITTINGS G.I. CROSS TEES (1 ¼ INCH)				

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
D.1.4.50	GALVANIZED IRON (GI) FITTINGS G.I. CROSS TEES (1 ½ INCH)				
D.1.4.51	GALVANIZED IRON (GI) FITTINGS G.I. CROSS TEES (2INCH)				
D.1.4.52	GALVANIZED IRON (GI) FITTINGS G.I. CROSS TEES (2 ½ INCH)				
D.1.4.53	GALVANIZED IRON (GI) FITTINGS G.I. CROSS TEES (3 INCH)				
D.1.4.54	GALVANIZED IRON (GI) FITTINGS G.I. CROSS TEES (4 INCH)				
D.1.4.55	GALVANIZED IRON (GI) FITTINGS G.I. CROSS TEES (6 INCH)				
D.1.4.56	GALVANIZED IRON (GI) FITTINGS G.I. REDUCING TEES (2X1 INCH)				
D.1.4.57	GALVANIZED IRON (GI) FITTINGS G.I. REDUCING TEES (2 ½ X 1 INCH)				
D.1.4.58	GALVANIZED IRON (GI) FITTINGS G.I. REDUCING TEES (2 ½ X 2 INCH)				
D.1.4.59	GALVANIZED IRON (GI) FITTINGS G.I. REDUCING TEES (4X1 INCH)				
D.1.4.60	GALVANIZED IRON (GI) FITTINGS G.I. REDUCING TEES (4 X 2 INCH)				
D.1.4.61	GALVANIZED IRON (GI) FITTINGS G.I. REDUCING TEES (4 X 2 ½ INCH)				
D.1.4.62	GALVANIZED IRON (GI) FITTINGS G.I. REDUCING BUSH (2X1 INCH)				
D.1.4.63	GALVANIZED IRON (GI) FITTINGS G.I. REDUCING BUSH (2 ½ X 1 INCH)				
D.1.4.64	GALVANIZED IRON (GI) FITTINGS G.I. REDUCING BUSH (2 ½ X 2 INCH)				
D.1.4.65	GALVANIZED IRON (GI) FITTINGS G.I. REDUCING BUSH (4 X 1 INCH)				
D.1.4.66	GALVANIZED IRON (GI) FITTINGS G.I. REDUCING BUSH (4 X 2 INCH)				
D.1.4.67	GALVANIZED IRON (GI) FITTINGS G.I. REDUCING BUSH (4 X 2 ½ INCH)				
D.1.4.68	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL TEES (½ INCH)				

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
D.1.4.69	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL TEES (¾ INCH)				
D.1.4.70	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL TEES (1 INCH)				
D.1.4.71	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL TEES (1 ¼ INCH)				
D.1.4.72	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL TEES (1 ½ INCH)				
D.1.4.73	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL TEES (2 INCH)				
D.1.4.74	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL TEES (2 ½ INCH)				
D.1.4.75	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL CROSS TEES (¾ INCH)				
D.1.4.76	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL CROSS TEES (1 INCH)				
D.1.4.77	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL CROSS TEES (1 ¼ INCH)				
D.1.4.78	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL CROSS TEES (1 ½ INCH)				
D.1.4.79	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL CROSS TEES (2 INCH)				
D.1.4.80	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL CROSS TEES (2 ½ INCH)				
D.1.4.81	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL REDUCING TEES (2X 1 INCH)				
D.1.4.82	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL REDUCING TEES (2 ½ X 1 INCH)				
D.1.4.83	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL REDUCING TEES (2 ½ X 2 INCH)				
D.1.4.84	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL REDUCING BUSH (2 X 1 INCH)				
D.1.4.85	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL REDUCING BUSH (2 ½ X 1 INCH)				
D.1.4.86	GALVANIZED IRON (GI) FITTINGS SCHEDULE 40 SEAMLESS GALVANIZED STEEL REDUCING BUSH (2 ½ X 2 INCH)				
D.1.4.87	GALVANIZED IRON (GI) FITTINGS STRAINER (2 INCH)				
D.1.4.88	GALVANIZED IRON (GI) FITTINGS STRAINER (2 ½ INCH)				

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
D.1.4.89	GALVANIZED IRON (GI) FITTINGS STRAINER (3 INCH)				
D.1.4.90	GALVANIZED IRON (GI) FITTINGS STRAINER (4 INCH)				
D.1.4.91	GALVANIZED IRON (GI) FITTINGS STRAINER (5 INCH)				
D.1.4.92	GALVANIZED IRON (GI) FITTINGS STRAINER (6 INCH)				
D.1.4.93	GALVANIZED IRON (GI) FITTINGS FLEXIBLE COUPLING (1 /2 INCH)				
D.1.4.94	GALVANIZED IRON (GI) FITTINGS FLEXIBLE COUPLING (1 INCH)				
D.1.4.95	GALVANIZED IRON (GI) FITTINGS FLEXIBLE COUPLING (1 ½ INCH)				
D.1.4.96	GALVANIZED IRON (GI) FITTINGS FLEXIBLE COUPLING (2 INCH)				
D.1.4.97	GALVANIZED IRON (GI) FITTINGS FLEXIBLE COUPLING (2 ½ INCH)				
D.1.4.98	GALVANIZED IRON (GI) FITTINGS FLEXIBLE COUPLING (3 INCH)				
D.1.4.99	GALVANIZED IRON (GI) FITTINGS FLEXIBLE COUPLING (4 INCH)				
D.1.4.100	GALVANIZED IRON (GI) FITTINGS FLEXIBLE COUPLING (5 INCH)				
D.1.4.101	GALVANIZED IRON (GI) FITTINGS FLEXIBLE COUPLING (6 INCH)				
D.1.4.102	GALVANIZED IRON (GI) FITTINGS PRESSURE GAUGE (4" DIAL FACE INCH)				
D.1.4.103	GALVANIZED IRON (GI) FITTINGS PRESSURE GAUGE (6" DIAL FACE INCH)				
D.1.4.104	GALVANIZED IRON (GI) FITTINGS AUTOMATIC AIR RELEASE VALVE				
D.1.4.105	GALVANIZED IRON (GI) FITTINGS AUTOMATIC AIR RELEASE VALVE (2 INCH)				
D.1.4.106	GALVANIZED IRON (GI) FITTINGS PRESSURE DIFFERENTIAL SWITCH				
D.1.4.107	VALVES NON RISING SPINDLE GATE VALVES (½ INCH)				
D.1.4.108	VALVES NON RISING SPINDLE GATE VALVES (1 INCH)				

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
D.1.4.109	VALVES NON RISING SPINDLE GATE VALVES (1 ½ INCH)				
D.1.4.110	VALVES NON RISING SPINDLE GATE VALVES (2 INCH)				
D.1.4.111	VALVES NON RISING SPINDLE GATE VALVES (2 1/2 INCH)				
D.1.4.112	VALVES NON RISING SPINDLE GATE VALVES (3 INCH)				
D.1.4.113	VALVES NON RISING SPINDLE GATE VALVES (3 INCH)				
D.1.4.114	VALVES NON RISING SPINDLE GATE VALVES (4 INCH)				
D.1.4.115	VALVES STOP VALVES (1 INCH)				
D.1.4.116	VALVES STOP VALVES (2 INCH)				
D.1.4.117	VALVES LANDING VALVES				
D.1.4.118	VALVES GATE VALVE (1 INCH)				
D.1.4.119	VALVES GATE VALVE (1 ½ INCH)				
D.1.4.120	VALVES GATE VALVE (2 INCH)				
D.1.4.121	VALVES GATE VALVE (2 ½ INCH)				
D.1.4.122	VALVES GATE VALVE (3 INCH)				
D.1.4.123	VALVES GATE VALVE (4 INCH)				
D.1.4.124	VALVES GATE VALVE (5 INCH)				
D.1.4.125	VALVES GATE VALVE (6 INCH)				
D.1.4.126	VALVES CHECK VALVES (½ INCH)				
D.1.4.127	VALVES CHECK VALVES (1 INCH)				
D.1.4.128	VALVES CHECK VALVES (1 ½ INCH)				

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
D.1.4.129	VALVES CHECK VALVES (2 INCH)				
D.1.4.130	VALVES CHECK VALVES (2 ½ INCH)				
D.1.4.131	VALVES CHECK VALVES (3 INCH)				
D.1.4.132	VALVES CHECK VALVES (4 INCH)				
D.1.4.133	VALVES CHECK VALVES (5 INCH)				
D.1.4.134	VALVES CHECK VALVES (6 INCH)				
D.1.5	OTHERS				
D.1.5.1	LOCKABLE HOSE REEL CABINET				
D.1.5.2	HOSE REEL DRUM C/W STOP VALVE, SHUT-OFF NOZZLE AND HOSE, ETC. SWING TYPE				
D.1.5.3	HOSE REEL DRUM C/W STOP VALVE, SHUT-OFF NOZZLE AND HOSE, ETC. FIXED TYPE				
D.1.5.4	CRADLE EACH C/W CANVAS HOSE COUPLING JET AND SPRAY NOZZLE, ETC. SWING TYPE				
D.1.5.5	HOT-DIPPED GALVANISED PRESSED STEEL PLATES WATER TANK PER PANEL 5MM				
D.1.5.6	HOT-DIPPED GALVANISED PRESSED STEEL PLATES WATER TANK PER PANEL 6MM				
D.1.5.7	COMPLETE STAINLESS STEEL NON FLOAT ELECTRODES C/W HOLDER AND WIRING				
D.1.5.8	HOSE REEL PUMP TEST PORT C/W PRESSURE SWITCH, PRESSURE GAUGES AND WIRING				
D.1.5.9	ALARM / SOUNDER OUTSIDE PUMP ROOM				
D.1.5.10	CANVAS HOSE C/W JET AND SPRAY NOZZLE				
D.1.5.11	SWING TYPE CRADLE				
D.1.5.12	GREASE				
D.1.6	ELECTRIC WORKS				
D.1.6.1	PVC CABLES (ELECTRIC CABLE ONLY) 1½ MM²				
D.1.6.2	PVC CABLES (ELECTRIC CABLE ONLY) 2½ MM²				
D.1.6.3	PVC CABLES (ELECTRIC CABLE ONLY) 4 MM²				
D.1.6.4	PVC CABLES (ELECTRIC CABLE IN CONDUIT) 1.5MM²				
D.1.6.5	PVC CABLES (ELECTRIC CABLE IN CONDUIT) 2.5MM²				

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
D.1.6.6	PVC CABLES (ELECTRIC CABLE IN CONDUIT) 4.0MM²				
D.1.6.7	G.I. CONDUIT 19 MM				
D.1.6.8	G.I. CONDUIT 25 MM				
D.1.6.9	G.I. TRUNKING 1" X 2"				
D.1.6.10	G.I. TRUNKING 2" X 2"				
D.1.6.11	G.I. TRUNKING 2" X 3"				
D.1.6.12	PVC/SWA/PVC CABLE (ARMOURED CABLE) 4C X 1½ MM²				
D.1.6.13	PVC/SWA/PVC CABLE (ARMOURED CABLE) 3C X 2½ MM²				
D.1.6.14	PVC/SWA/PVC CABLE (ARMOURED CABLE) 4C X 2½ MM²				
D.1.6.15	PVC/SWA/PVC CABLE (ARMOURED CABLE) 3C X 4 MM²				
D.1.6.16	PVC/SWA/PVC CABLE (ARMOURED CABLE) 4C X 4 MM²				
D.1.6.17	MCB 6A SPN				
D.1.6.18	MCB 13A SPN				
D.1.6.19	MCB 13A 3P				
D.1.6.20	MCB 16A 3P				
D.1.6.21	MCB 20A 3P				
D.1.6.22	MCB 30A 3P				
D.1.6.23	MCCB 16A 3P				
D.1.6.24	MCCB 20A 3P				
D.1.6.25	MCCB 30A 3P				
D.1.6.26	CONTROL TIMER 240VAC				
D.1.6.27	CONTROL TIMER 24VAC				
D.1.6.28	CONTACTOR AC3 16A 4P				
D.1.6.29	CONTACTOR AC3 20A 3P				
D.1.6.30	CONTACTOR AC3 30A 3P				
D.1.6.31	CONTACTOR AC3 40A 3P				

BIL.	KETERANGAN	UNIT	KUANTITI	KADAR (RM)	AMAUN (RM)
D.1.6.32	CONTACTOR AC3 60A 3P				
D.1.6.33	OVERLOAD 4 ~ 16 A 3P				
D.1.6.34	OVERLOAD 16 ~ 25 A 3P				
D.1.6.35	OVERLOAD 25 ~ 35 A 3P				
D.1.6.36	BATTERY 10 AH				
D.1.6.37	BATTERY 12 AH				
D.1.6.38	BATTERY 20AH				
D.1.6.39	BATTERY CHARGER				
JUMLAH KESELURUHAN (BIL D)					