Project:

Building Nam

Address / Location: PROPOSED ELECTRICAL ROOM

Distribution Board No./Ref.: MDB Incoming Cable Size /type: 1X4C 240mm2 XLPE/SWA/P 1C 120MM2 ECC

Fed From: SUBSTATION Main Breaker type & Rating: 400A TP Isolator

Date:

Doc. No.

Busbar Section / RCD	CCT ref. No	MCB Rating [A]	RCD Rating [A]	Phase & Neutral Size mm2	Earth Size mm2	Circuit Name/ Point Reference	No. of points	Connected Load per point W	Circuit Load [KW] R	Y	B	Diversified Factor	Diversified Load [KW]	Circuit Load [A] R	Y	B	Voltage [V]	Distance [m]	Proposed Cable Cable Size [mm2]	Rated Current	Voltage Drop [mV/A/m]	Derated Current [A]	Voltage Drop [V]	Final Voltage Drop [V]
400A 4P	R1	125		35	16	P1DB	1	50800.00	16.93			1	16.933	85.5			380	10	35	162	1.15	85.52	0.98	379.02
	Y1	125		35			1			16.93		1	16.933		85.5		380	10	35	162	1.15	85.52	0.98	379.02
	B1	125		35			1				16.93	1	16.933			85.5	380	10	35	162	1.15	85.52	0.98	379.02
	R2	100		25	16	Fire Fighting Electric Pump	1	30000	10			1	10	50.5			380	45	25	131	1.65	50.51	3.75	376.25
	Y2	100		25			1			10		1	10		50.5		380	45	25	131	1.65	50.51	3.75	376.25
	B2	100		25			1				10	1	10			50.5	380	45	25	131	1.65	50.51	3.75	376.25
	R3	200		70	35	MSCP	1	112080.00	37.36			1	37.36	188.7			380	15	70	251	0.6	188.69	1.70	378.30
	Y3	200		70			1			37.36		1	37.36		188.7		380	15	70	251	0.6	188.69	1.70	378.30
	B3	200		70			1				37.36	1	37.36			188.7	380	15	70	251	0.6	188.69	1.70	378.30
	R4	32		10	10	FF Jockey PUMP	1	3000	1			1	1	5.1			380	45	10	78	4	5.05	0.91	379.09
	Y4	32		10			1			1		1	1		5.1		380	45	10	78	4	5.05	0.91	379.09
	B4	32		10			1				1	1	1			5.1	380	45	10	78	4	5.05	0.91	379.09
	R5	20		10	10	Booster PUMP	1	3000	1			1	1	5.1			380	45	10	78	4	5.05	0.91	379.09
	Y5	20		10			1			1		1	1		5.1		380	45	10	78	4	5.05	0.91	379.09
	B5	20		10			1				1	1	1			5.1	380	45	10	78	4	5.05	0.91	379.09
	R6	20		2.5	4	FM200	1	500	0.5			1	0.5	2.5			220	30	2.5	39	19	2.53	1.44	218.56
	Y6	20		2.5	4	FIRE ALARM PANEL	1	500		0.5		1	0.5		2.5		220	30	2.5	39	19	2.53	1.44	218.56
	B6	20	0.03	2.5	4	ANCILLARY SERVICES	1	300			0.3	1	0.3			1.5	220	30	2.5	39	19	1.52	0.86	219.14
	R7	63				SPARE																		
	Y7	63																						
	B7	63																						
	R8	32				SPARE																		
	Y8	32																						
	B8	32																						
	R9	20				SPARE																		
	Y9	20				SPARE																		
	B9	20				SPARE																		
						Total Connected Load (KW)=	200.18		66.79	66.79	66.59		200.18	337.34	337.34	336.33								
						Total Diversified Load(KW)=	200.18																	