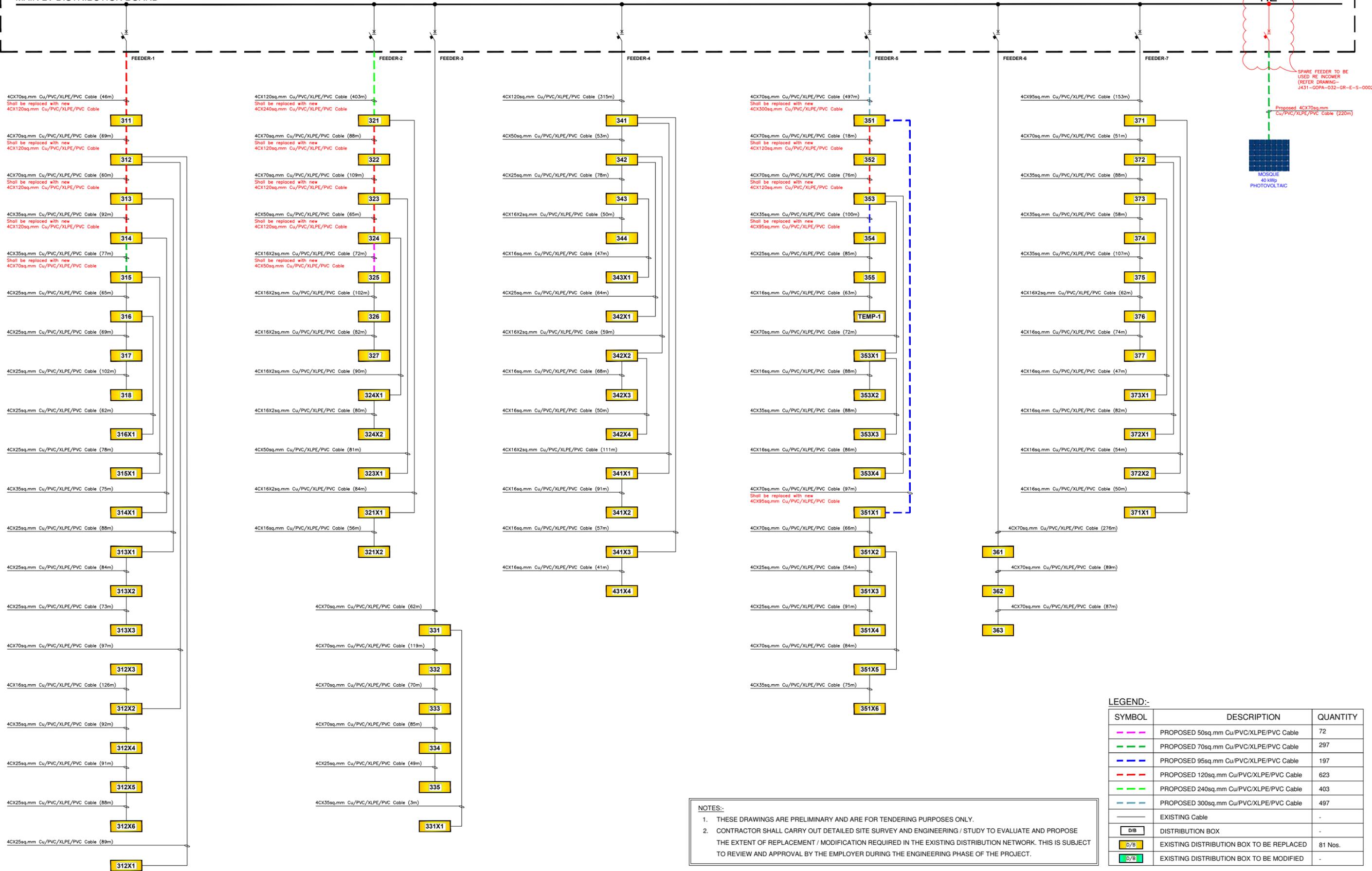


**SUBSTATION - 3 (KULHUDHUFFUSHI)
MAIN LV DISTRIBUTION BOARD**



LEGEND:-

SYMBOL	DESCRIPTION	QUANTITY
	PROPOSED 50sq.mm Cu/PVC/XLPE/PVC Cable	72
	PROPOSED 70sq.mm Cu/PVC/XLPE/PVC Cable	297
	PROPOSED 95sq.mm Cu/PVC/XLPE/PVC Cable	197
	PROPOSED 120sq.mm Cu/PVC/XLPE/PVC Cable	623
	PROPOSED 240sq.mm Cu/PVC/XLPE/PVC Cable	403
	PROPOSED 300sq.mm Cu/PVC/XLPE/PVC Cable	497
	EXISTING Cable	-
	DISTRIBUTION BOX	-
	EXISTING DISTRIBUTION BOX TO BE REPLACED	81 Nos.
	EXISTING DISTRIBUTION BOX TO BE MODIFIED	-

NOTES:-

- THESE DRAWINGS ARE PRELIMINARY AND ARE FOR TENDERING PURPOSES ONLY.
- CONTRACTOR SHALL CARRY OUT DETAILED SITE SURVEY AND ENGINEERING / STUDY TO EVALUATE AND PROPOSE THE EXTENT OF REPLACEMENT / MODIFICATION REQUIRED IN THE EXISTING DISTRIBUTION NETWORK. THIS IS SUBJECT TO REVIEW AND APPROVAL BY THE EMPLOYER DURING THE ENGINEERING PHASE OF THE PROJECT.

PURPOSE OF SUBMISSION	REV	AUTHORISED BY	DATE	DRAWING TITLE	DESIGN : ESM	SCALE : N.T.S
FIRST REVISION	A	GKH	19/04/16	NETWORK DIAGRAM FOR B12 KULHUDHUFFUSHI SUBSTATION 3	DRAWN : MUM	DRW NO. : J431-GOPA-032-GR-E-D-0003-RevA
				PROJECT	LICENCE NO:	ISLAND NAME : KULHUDHUFFUSHI
				PREPARING OUTER ISLANDS SUSTAINABLE DEVELOPMENT	CLIENT: GOVERNMENT OF THE REPUBLIC OF MALDIVES	PAGE : 1/5
					DATE: : 19APR16	

KULHUDHUFFUSHI-SS3-EXISTING

From	To	No. of Runs	Cable Size (sq.mm)	Length (M)	Cable Current Capacity (A)	Cable Current Capacity After Deration (0.6) (A)	Power (kW)	Current (A)	Cable Loading (%)	Voltage (%) at DB Main Bus	Total Voltage Drop (%) in Cable Section	% Voltage Drop upto Distribution Boards	% Voltage Drop Acceptable (Less Than 5%)	Remarks
Feeder-1	DB-311	1	4C x 70	46	265	159	105.00	186.30	117.10	98.85	1.15	1.15	YES	
DB-311	DB-312	1	4C x 70	69	265	159	98.58	177.20	111.40	97.22	1.63	2.78	YES	
DB-312	DB-312x1	1	4C x 25	89	150	90	4.96	9.19	10.20	96.95	0.27	3.05	YES	
DB-312	DB-312x2	1	4C x 70	97	265	159	25.08	46.28	29.10	96.63	0.60	3.37	YES	
DB-312x2	DB-312x3	1	4C x 16	126	115	69	4.97	9.25	13.40	96.04	0.59	3.96	YES	
DB-312x2	DB-312x4	1	4C x 35	92	180	108	14.98	27.83	25.80	96.00	0.62	4.00	YES	
DB-312x4	DB-312x5	1	4C x 25	91	150	90	9.92	18.58	20.60	95.45	0.55	4.55	YES	
DB-312x5	DB-312x6	1	4C x 25	88	150	90	4.93	9.30	10.30	95.18	0.27	4.82	YES	
DB-312	DB-313	1	4C x 70	60	265	159	61.47	112.50	70.80	96.32	0.90	3.68	YES	
DB-313	DB-313x1	1	4C x 25	88	150	90	14.99	27.91	31.00	95.51	0.81	4.49	YES	
DB-313x1	DB-313x2	1	4C x 25	84	150	90	9.90	18.63	20.70	95.00	0.51	5.00	NO	
DB-313x2	DB-313x3	1	4C x 25	73	150	90	4.92	9.32	10.40	94.78	0.22	5.22	NO	
DB-313	DB-314	1	4C x 35	92	180	108	40.81	75.39	69.80	94.63	1.69	5.37	NO	
DB-314	DB-314x1	1	4C x 35	75	180	108	4.91	9.34	8.70	94.46	0.17	5.54	NO	
DB-314	DB-315	1	4C x 35	77	180	108	30.01	56.72	52.50	93.57	1.06	6.43	NO	
DB-315	DB-315x1	1	4C x 25	78	150	90	4.89	9.42	10.50	93.33	0.24	6.67	NO	
DB-315	DB-316	1	4C x 25	65	150	90	19.77	37.90	42.10	92.76	0.81	7.24	NO	
DB-316	DB-316x1	1	4C x 25	62	150	90	4.87	9.47	10.50	92.57	0.19	7.43	NO	
DB-316	DB-317	1	4C x 25	69	150	90	9.79	18.98	21.10	92.33	0.43	7.67	NO	
DB-317	DB-318	1	4C x 25	102	150	90	4.87	9.50	10.60	92.01	0.32	7.99	NO	
Feeder-2	DB-321	1	4C x 120	403	360	216	63.36	112.50	52.10	96.19	3.81	3.81	YES	
DB-321	DB-321x1	2	4C x 16	84	230	138	9.91	18.54	13.40	95.79	0.39	4.21	YES	
DB-321x1	DB-321x2	1	4C x 16	56	115	69	4.93	9.28	13.40	95.53	0.26	4.47	YES	
DB-321	DB-322	1	4C x 70	88	265	159	45.67	84.73	53.30	95.19	0.99	4.81	YES	
DB-322	DB-323	1	4C x 70	109	265	159	40.14	75.44	47.40	94.10	1.09	5.90	NO	
DB-323	DB-323x1	1	4C x 50	81	215	129	4.89	9.38	7.30	93.96	0.14	6.04	NO	
DB-323	DB-324	1	4C x 50	65	215	129	29.76	56.70	44.00	93.42	0.68	6.58	NO	
DB-324	DB-324x1	2	4C x 16	90	115	69	9.81	18.89	27.40	92.99	0.43	7.01	NO	
DB-324x1	DB-324x2	2	4C x 16	80	115	69	4.88	9.45	13.70	92.80	0.19	7.20	NO	
DB-324	DB-325	2	4C x 16	72	230	138	14.78	28.40	20.60	92.90	0.52	7.10	NO	
DB-325	DB-326	2	4C x 16	102	230	138	9.80	18.96	13.70	92.42	0.49	7.58	NO	
DB-326	DB-327	2	4C x 16	82	230	138	4.87	9.49	6.90	92.22	0.20	7.78	NO	
Feeder-3	DB-331	1	4C x 70	62	265	159	30.30	54.47	34.30	99.55	0.45	0.45	YES	
DB-331	DB-331x1	1	4C x 35	3	180	108	4.99	9.05	8.40	99.55	0.01	0.45	YES	
DB-331	DB-332	1	4C x 70	119	265	159	20.14	36.38	22.90	98.98	0.57	1.02	YES	
DB-332	DB-333	1	4C x 70	70	265	159	15.00	27.30	17.20	98.72	0.25	1.28	YES	
DB-333	DB-334	1	4C x 70	85	265	159	9.98	18.21	11.50	98.52	0.21	1.48	YES	
DB-334	DB-335	1	4C x 25	49	150	90	4.98	9.11	10.10	98.37	0.15	1.63	YES	

	PURPOSE OF SUBMISSION	REV	AUTHORISED BY	DATE	DRAWING TITLE NETWORK DIAGRAM FOR B12 KULHUDHUFFUSHI SUBSTATION 3	DESIGN : ESM	SCALE : N.T.S	
	FIRST REVISION	A	GKH	19/04/16		DRAWN : MUM	DRW NO. : J431-GOPA-032-GR-E-D-0003-RevA	
					PROJECT PREPARING OUTER ISLANDS SUSTAINABLE DEVELOPMENT	CLIENT: GOVERNMENT OF THE REPUBLIC OF MALDIVES	LICENCE NO:	ISLAND NAME : KULHUDHUFFUSHI
							DATE: : 19APR16	PAGE : 2/5

KULHUDHUFFUSHI-SS3-EXISTING

From	To	No. of Runs	Cable Size (sq.mm)	Length (M)	Cable Current Capacity (A)	Cable Current Capacity After Deration (0.6) (A)	Power (kW)	Current (A)	Cable Loading (%)	Voltage (%) at DB Main Bus	Total Voltage Drop (%) in Cable Section	% Voltage Drop upto Distribution Boards	% Voltage Drop Acceptable (Less Than 5%)	Remarks
Feeder-4	DB-341	1	4C x 120	315	360	216	67.41	120.30	55.70	96.82	3.18	3.18	YES	
DB-341	DB-341x1	2	4C x 16	111	230	138	9.92	18.44	13.40	96.63	0.19	3.37	YES	
DB-341x1	DB-341x2	1	4C x 16	91	115	69	4.96	9.24	13.40	96.21	0.42	3.79	YES	
DB-341	DB-341x3	1	4C x 16	57	115	69	9.95	18.47	26.80	96.29	0.53	3.71	YES	
DB-341x3	DB-341x4	1	4C x 16	41	115	69	4.94	9.24	13.40	96.10	0.19	3.90	YES	
DB-341	DB-342	1	4C x 50	53	215	129	40.05	74.22	57.50	96.09	0.72	3.91	YES	
DB-342	DB-342x1	1	4C x 25	64	150	90	4.93	9.26	10.30	95.90	0.19	4.10	YES	
DB-342	DB-342x2	2	4C x 16	59	230	138	14.87	27.84	20.20	95.68	0.41	4.32	YES	
DB-342x2	DB-342x3	1	4C x 16	68	115	69	4.93	9.29	13.50	95.36	0.32	4.64	YES	
DB-342x2	DB-342x4	1	4C x 16	50	115	69	4.93	9.28	13.50	95.45	0.23	4.55	YES	
DB-342	DB-343	1	4C x 25	78	150	90	14.91	27.88	31.00	95.38	0.71	4.62	YES	
DB-343	DB-343x1	1	4C x 16	47	115	69	4.92	9.30	13.50	95.16	0.22	4.84	YES	
DB-343	DB-344	2	4C x 16	50	230	138	4.92	9.29	6.70	95.26	0.12	4.74	YES	
Feeder-5	DB-351	1	4C x 70	497	265	159	89.88	156.20	98.30	89.58	10.42	10.42	NO	
DB-351	DB-351x1	1	4C x 70	97	265	159	29.26	58.60	36.90	88.82	0.75	11.18	NO	
DB-351x1	DB-351x2	1	4C x 70	66	265	159	24.15	48.89	30.70	88.39	0.43	11.61	NO	
DB-351x2	DB-351x3	1	4C x 25	54	150	90	9.62	19.59	21.80	88.05	0.35	11.95	NO	
DB-351x3	DB-351x4	1	4C x 25	91	150	90	4.79	9.81	10.90	87.75	0.29	12.25	NO	
DB-351x2	DB-351x5	1	4C x 70	84	265	159	9.60	19.56	12.30	88.18	0.22	11.82	NO	
DB-351x5	DB-351x6	1	4C x 35	75	180	108	4.79	9.79	9.10	88.00	0.18	12.00	NO	
DB-351	DB-352	1	4C x 70	18	265	159	43.99	88.04	55.40	89.37	0.21	10.63	NO	
DB-352	DB-353	1	4C x 70	76	265	159	39.05	78.33	49.30	88.58	0.79	11.42	NO	
DB-353	DB-353x1	1	4C x 70	72	265	159	14.44	29.34	18.50	88.30	0.28	11.70	NO	
DB-353x1	DB-353x2	1	4C x 16	88	115	69	4.81	9.80	14.20	87.86	0.43	12.14	NO	
DB-353x1	DB-353x3	1	4C x 35	88	180	108	4.79	9.78	9.10	88.09	0.21	11.91	NO	
DB-353	DB-353x4	1	4C x 16	86	115	69	4.81	9.78	14.20	88.15	0.42	11.85	NO	
DB-353	DB-354	1	4C x 35	100	180	108	14.57	29.49	27.30	87.86	0.72	12.14	NO	
DB-354	DB-355	1	4C x 25	85	150	90	9.63	19.70	21.90	87.31	0.55	12.69	NO	
Feeder-6	DB-361	1	4C x 70	276	265	159	15.17	27.25	17.10	99.00	1.00	1.00	YES	
DB-361	DB-362	1	4C x 70	89	265	159	9.99	18.18	11.40	98.79	0.21	1.21	YES	
DB-362	DB-363	1	4C x 70	87	265	159	4.98	9.09	5.70	98.68	0.10	1.32	YES	
Feeder-7	DB-371	1	4C x 95	153	315	189	56.68	101.20	53.50	98.44	1.56	1.56	YES	
DB-371	DB-371x1	1	4C x 16	50	115	69	4.98	9.12	13.20	98.21	0.23	1.79	YES	
DB-371	DB-372	1	4C x 70	51	265	159	45.62	82.95	52.20	97.87	0.56	2.13	YES	
DB-372	DB-372x1	1	4C x 16	82	115	69	4.98	9.16	13.30	97.50	0.38	2.50	YES	
DB-372	DB-372x2	1	4C x 16	54	115	69	4.97	9.15	13.30	97.63	0.25	2.37	YES	
DB-372	DB-373	1	4C x 35	88	180	108	30.37	55.50	51.40	96.69	1.19	3.31	YES	
DB-373	DB-373x1	1	4C x 16	47	115	69	4.95	9.22	13.40	96.47	0.22	3.53	YES	
DB-373	DB-374	1	4C x 35	58	180	108	19.96	37.07	34.30	96.17	0.52	3.83	YES	
DB-374	DB-375	1	4C x 35	107	180	108	14.89	27.84	25.80	95.81	0.36	4.19	YES	
DB-375	DB-376	2	4C x 16	62	230	138	9.89	18.58	13.50	95.51	0.29	4.49	YES	
DB-376	DB-377	1	4C x 16	74	115	69	4.93	9.30	13.50	95.17	0.35	4.83	YES	
DB-355	Temp1	1	4C x 16	63	115	69	4.78	9.87	14.30	87.00	0.31	13.00	NO	

	PURPOSE OF SUBMISSION	REV	AUTHORISED BY	DATE	DRAWING TITLE NETWORK DIAGRAM FOR B12 KULHUDHUFFUSHI SUBSTATION 3	DESIGN : ESM	SCALE : N.T.S	
	FIRST REVISION	A	GKH	19/04/16		DRAWN : MUM	DRW NO. : J431-GOPA-032-GR-E-D-0003-RevA	
					PROJECT PREPARING OUTER ISLANDS SUSTAINABLE DEVELOPMENT	CLIENT: GOVERNMENT OF THE REPUBLIC OF MALDIVES	LICENCE NO:	ISLAND NAME : KULHUDHUFFUSHI
							DATE: : 19APR16	PAGE : 3/5

KULHUDHUFFUSHI-SS3-PROPOSED

From	To	No. of Runs	Cable Size (sq.mm)	Length (M)	Cable Current Capacity (A)	Cable Current Capacity After Deration (0.6) (A)	Power (kW)	Current (A)	Cable Loading (%)	Voltage (%) at DB Main Bus	Total Voltage Drop (%) in Cable Section	% Voltage Drop upto Distribution Boards	% Voltage Drop Acceptable (Less Than 5%)	Remarks
Feeder-1	DB-311	1	4C x 120	46	360	216	103.00	184.00	85.20	99.29	0.71	0.71	YES	Existing 4C x 70 sq.mm LV Cable Replaced with New 4C x 120 sq.mm LVCable
DB-311	DB-312	1	4C x 120	69	360	216	97.02	175.00	81.00	98.28	1.01	1.72	YES	Existing 4C x 70 sq.mm LV Cable Replaced with New 4C x 120 sq.mm LVCable
DB-312	DB-312x1	1	4C x 25	89	150	90	4.98	9.13	10.10	98.01	0.27	1.99	YES	
DB-312	DB-312x2	1	4C x 70	97	265	159	25.18	45.97	28.90	97.68	0.59	2.32	YES	
DB-312x2	DB-312x3	1	4C x 16	126	115	69	4.99	9.18	13.30	97.10	0.58	2.90	YES	
DB-312x2	DB-312x4	1	4C x 35	92	180	108	15.04	27.64	25.60	97.07	0.62	2.93	YES	
DB-312x4	DB-312x5	1	4C x 25	91	150	90	9.96	18.45	20.50	96.52	0.55	3.48	YES	
DB-312x5	DB-312x6	1	4C x 25	88	150	90	4.95	9.23	10.30	96.25	0.27	3.75	YES	
DB-312	DB-313	1	4C x 120	60	360	216	60.71	110.70	51.30	97.72	0.56	2.28	YES	Existing 4C x 70 sq.mm LV Cable Replaced with New 4C x 120 sq.mm LVCable
DB-313	DB-313x1	1	4C x 25	88	150	90	15.07	27.66	30.70	96.92	0.80	3.08	YES	
DB-313x1	DB-313x2	1	4C x 25	84	150	90	9.95	18.46	20.50	96.41	0.51	3.59	YES	
DB-313x2	DB-313x3	1	4C x 25	73	150	90	4.94	9.24	10.30	96.19	0.22	3.81	YES	
DB-313	DB-314	1	4C x 120	92	360	216	40.27	73.94	34.20	97.15	0.57	2.85	YES	Existing 4C x 35 sq.mm LV Cable Replaced with New 4C x 120 sq.mm LVCable
DB-314	DB-314x1	1	4C x 35	75	180	108	4.95	9.19	8.50	96.98	0.17	3.02	YES	
DB-314	DB-315	1	4C x 70	77	265	159	30.09	55.57	34.90	96.58	0.57	3.42	YES	Existing 4C x 35 sq.mm LV Cable Replaced with New 4C x 70 sq.mm LVCable
DB-315	DB-315x1	1	4C x 25	78	150	90	4.95	9.23	10.30	96.34	0.24	3.66	YES	
DB-315	DB-316	1	4C x 25	65	150	90	19.98	37.13	41.30	95.79	0.79	4.21	YES	
DB-316	DB-316x1	1	4C x 25	62	150	90	4.93	9.27	10.30	95.60	0.19	4.40	YES	
DB-316	DB-317	1	4C x 25	69	150	90	9.90	18.59	20.70	95.37	0.42	4.63	YES	
DB-317	DB-318	1	4C x 25	102	150	90	4.93	9.31	10.30	95.05	0.31	4.95	YES	
Feeder-2	DB-321	1	4C x 240	403	540	324	61.63	110.80	34.20	97.73	2.27	2.27	YES	Existing 4C x 120 sq.mm LV Cable Replaced with New 4C x 240 sq.mm LVCable
DB-321	DB-321x1	2	4C x 16	84	230	138	9.97	18.35	13.30	97.35	0.39	2.65	YES	
DB-321x1	DB-321x2	1	4C x 16	56	115	69	4.96	9.18	13.30	97.09	0.26	2.91	YES	
DB-321	DB-322	1	4C x 120	88	360	216	45.33	83.27	38.50	97.12	0.61	2.88	YES	Existing 4C x 70 sq.mm LV Cable Replaced with New 4C x 120 sq.mm LVCable
DB-322	DB-323	1	4C x 120	109	360	216	40.05	74.09	34.30	96.44	0.68	3.56	YES	Existing 4C x 70 sq.mm LV Cable Replaced with New 4C x 120 sq.mm LVCable
DB-323	DB-323x1	1	4C x 50	81	215	129	4.94	9.23	7.20	96.31	0.14	3.69	YES	
DB-323	DB-324	1	4C x 120	65	360	216	29.84	55.63	25.80	96.14	0.30	3.86	YES	Existing 4C x 50 sq.mm LV Cable Replaced with New 4C x 120 sq.mm LVCable
DB-324	DB-324x1	2	4C x 16	90	115	69	9.91	18.54	26.90	95.72	0.42	4.28	YES	
DB-324x1	DB-324x2	2	4C x 16	80	115	69	4.93	9.28	13.40	95.53	0.19	4.47	YES	
DB-324	DB-325	1	4C x 50	72	215	129	14.90	27.85	21.60	95.77	0.37	4.23	YES	Existing 4C x 16 sq.mm LV Cable Replaced with New 4C x 50 sq.mm LVCable
DB-325	DB-326	2	4C x 16	102	230	138	9.90	18.59	13.50	95.29	0.48	4.71	YES	
DB-326	DB-327	2	4C x 16	82	230	138	4.92	9.30	6.70	95.10	0.19	4.90	YES	
Feeder-3	DB-331	1	4C x 70	62	265	159	30.30	54.47	34.30	99.55	0.45	0.45	YES	
DB-331	DB-331x1	1	4C x 35	3	180	108	4.99	9.05	8.40	99.55	0.01	0.45	YES	
DB-331	DB-332	1	4C x 70	119	265	159	20.14	36.38	22.90	98.98	0.57	1.02	YES	
DB-332	DB-333	1	4C x 70	70	265	159	15.00	27.30	17.20	98.72	0.25	1.28	YES	
DB-333	DB-334	1	4C x 70	85	265	159	9.98	18.21	11.50	98.52	0.21	1.48	YES	
DB-334	DB-335	1	4C x 25	49	150	90	4.98	9.11	10.10	98.37	0.15	1.63	YES	

	PURPOSE OF SUBMISSION	REV	AUTHORISED BY	DATE	DRAWING TITLE NETWORK DIAGRAM FOR B12 KULHUDHUFFUSHI SUBSTATION 3	DESIGN : ESM	SCALE : N.T.S
	FIRST REVISION	A	GKH	19/04/16		DRAWN : MUM	DRW NO. : J431-GOPA-032-GR-E-D-0003-RevA
					PROJECT PREPARING OUTER ISLANDS SUSTAINABLE DEVELOPMENT	CLIENT: GOVERNMENT OF THE REPUBLIC OF MALDIVES	LICENCE NO: ISLAND NAME : KULHUDHUFFUSHI
							DATE: : 19APR16 PAGE : 4/5

KULHUDHUFFUSHI-SS3-PROPOSED

From	To	No. of Runs	Cable Size (sq.mm)	Length (M)	Cable Current Capacity (A)	Cable Current Capacity After Deration (0.6) (A)	Power (kW)	Current (A)	Cable Loading (%)	Voltage (%) at DB Main Bus	Total Voltage Drop (%) in Cable Section	% Voltage Drop upto Distribution Boards	% Voltage Drop Acceptable (Less Than 5%)	Remarks
Feeder-4	DB-341	1	4C x 120	315	360	216	67.41	120.30	55.70	96.82	3.18	3.18	YES	
DB-341	DB-341x1	2	4C x 16	111	230	138	9.92	18.44	13.40	96.63	0.19	3.37	YES	
DB-341x1	DB-341x2	1	4C x 16	91	115	69	4.96	9.24	13.40	96.21	0.42	3.79	YES	
DB-341	DB-341x3	1	4C x 16	57	115	69	9.95	18.47	26.80	96.29	0.53	3.71	YES	
DB-341x3	DB-341x4	1	4C x 16	41	115	69	4.94	9.24	13.40	96.10	0.19	3.90	YES	
DB-341	DB-342	1	4C x 50	53	215	129	40.05	74.22	57.50	96.09	0.72	3.91	YES	
DB-342	DB-342x1	1	4C x 25	64	150	90	4.93	9.26	10.30	95.90	0.19	4.10	YES	
DB-342	DB-342x2	2	4C x 16	59	230	138	14.87	27.84	20.20	95.68	0.41	4.32	YES	
DB-342x2	DB-342x3	1	4C x 16	68	115	69	4.93	9.29	13.50	95.36	0.32	4.64	YES	
DB-342x2	DB-342x4	1	4C x 16	50	115	69	4.93	9.28	13.50	95.45	0.23	4.55	YES	
DB-342	DB-343	1	4C x 25	78	150	90	14.91	27.88	31.00	95.38	0.71	4.62	YES	
DB-343	DB-343x1	1	4C x 16	47	115	69	4.92	9.30	13.50	95.16	0.22	4.84	YES	
DB-343	DB-344	2	4C x 16	50	230	138	4.92	9.29	6.70	95.26	0.12	4.74	YES	
Feeder-5	DB-351	1	4C x 300	497	590	354	82.21	148.20	41.90	96.69	3.31	3.31	YES	Existing 4C x 70 sq.mm LV Cable Replaced with New 4C x 300 sq.mm LV Cable
DB-351	DB-351x1	1	4C x 95	97	315	189	29.94	55.65	29.40	96.15	0.54	3.85	YES	Existing 4C x 70 sq.mm LV Cable Replaced with New 4C x 95 sq.mm LV Cable
DB-351x1	DB-351x2	1	4C x 70	66	265	159	24.81	46.41	29.20	95.74	0.41	4.26	YES	
DB-351x2	DB-351x3	1	4C x 25	54	150	90	9.89	18.59	20.70	95.41	0.33	4.59	YES	
DB-351x3	DB-351x4	1	4C x 25	91	150	90	4.93	9.30	10.30	95.14	0.28	4.86	YES	
DB-351x2	DB-351x5	1	4C x 70	84	265	159	9.86	18.56	11.70	95.54	0.21	4.46	YES	
DB-351x5	DB-351x6	1	4C x 35	75	180	108	4.92	9.29	8.60	95.37	0.17	4.63	YES	
DB-351	DB-352	1	4C x 120	18	360	216	44.84	83.40	38.60	96.57	0.13	3.43	YES	Existing 4C x 70 sq.mm LV Cable Replaced with New 4C x 120 sq.mm LV Cable
DB-352	DB-353	1	4C x 120	76	360	216	39.83	74.18	34.30	96.10	0.47	3.90	YES	Existing 4C x 70 sq.mm LV Cable Replaced with New 4C x 120 sq.mm LV Cable
DB-353	DB-353x1	1	4C x 70	72	265	159	14.84	27.81	17.50	95.83	0.27	4.17	YES	
DB-353x1	DB-353x2	1	4C x 16	88	115	69	4.94	9.28	13.50	95.42	0.41	4.58	YES	
DB-353x1	DB-353x3	1	4C x 35	88	180	108	4.93	9.27	8.60	95.63	0.20	4.37	YES	
DB-353	DB-353x4	1	4C x 16	86	115	69	4.95	9.27	13.40	95.69	0.40	4.31	YES	
DB-353	DB-354	1	4C x 95	100	315	189	14.88	27.86	14.70	95.82	0.28	4.18	YES	Existing 4C x 35 sq.mm LV Cable Replaced with New 4C x 95 sq.mm LV Cable
DB-354	DB-355	1	4C x 25	85	150	90	9.91	18.60	20.70	95.30	0.52	4.70	YES	
Feeder-6	DB-361	1	4C x 70	276	265	159	15.17	27.25	17.10	99.00	1.00	1.00	YES	
DB-361	DB-362	1	4C x 70	89	265	159	9.99	18.18	11.40	98.79	0.21	1.21	YES	
DB-362	DB-363	1	4C x 70	87	265	159	4.98	9.09	5.70	98.68	0.10	1.32	YES	
Feeder-7	DB-371	1	4C x 95	153	315	189	56.68	101.20	53.50	98.44	1.56	1.56	YES	
DB-371	DB-371x1	1	4C x 16	50	115	69	4.98	9.12	13.20	98.21	0.23	1.79	YES	
DB-371	DB-372	1	4C x 70	51	265	159	45.62	82.95	52.20	97.87	0.56	2.13	YES	
DB-372	DB-372x1	1	4C x 16	82	115	69	4.98	9.16	13.30	97.50	0.38	2.50	YES	
DB-372	DB-372x2	1	4C x 16	54	115	69	4.97	9.15	13.30	97.63	0.25	2.37	YES	
DB-372	DB-373	1	4C x 35	88	180	108	30.37	55.50	51.40	96.69	1.19	3.31	YES	
DB-373	DB-373x1	1	4C x 16	47	115	69	4.95	9.22	13.40	96.47	0.22	3.53	YES	
DB-373	DB-374	1	4C x 35	58	180	108	19.96	37.07	34.30	96.17	0.52	3.83	YES	
DB-374	DB-375	1	4C x 35	107	180	108	14.89	27.84	25.80	95.81	0.36	4.19	YES	
DB-375	DB-376	2	4C x 16	62	230	138	9.89	18.58	13.50	95.51	0.29	4.49	YES	
DB-376	DB-377	1	4C x 16	74	115	69	4.93	9.30	13.50	95.17	0.35	4.83	YES	
DB-355	Temp1	1	4C x 16	63	115	69	4.93	9.31	13.50	95.01	0.30	4.99	YES	

KULHUDHUFFUSHI-SS3-PROPOSED PV FEEDER

From	To	No. of Runs	Cable Size (sq.mm)	Length (M)	Cable Current Capacity (A)	Cable Current Capacity After Deration (0.6) (A)	Power (kW)	Current (A)	Cable Loading (%)	Voltage (%) at DB Main Bus	Total Voltage Drop (%) in Cable Section	% Voltage Drop upto Distribution Boards	% Voltage Drop Acceptable (Less Than 5%)	Losses (%)	Remarks
MOSQUE-PV	KULHUDHUFFUSHI-SUBSTATION -3	1	4C x 70	220	265	159	32	45.54	28.6	101.41	1.41	1.41	YES	1.00%	Proposed 4C x 70 sq.mm LV Cable

PURPOSE OF SUBMISSION	REV	AUTHORISED BY	DATE	DRAWING TITLE	DESIGN	SCALE
FIRST REVISION	A	GKH	19/04/16	NETWORK DIAGRAM FOR B12 KULHUDHUFFUSHI SUBSTATION 3	: ESM	: N.T.S
				PROJECT	CLIENT:	LICENCE NO:
				PREPARING OUTER ISLANDS SUSTAINABLE DEVELOPMENT	GOVERNMENT OF THE REPUBLIC OF MALDIVES	ISLAND NAME : KULHUDHUFFUSHI
					DATE: : 19APR16	PAGE : 5/5