

ANNEXURE A

SCHEDULE OF CABLES

MEDIUM VOLTAGE SITE RETICULATION															
Power cable							Earth cable			Control cable 1			Control cable 2		
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
TBC	MUNICIPAL INCOMER 1	11000	50	Cu XLPE SWA Type A	3	2x150	-	-	-	-	-	-	-	-	-
INC-01	HIGHBURY INCOMER 1	11000	50	Cu XLPE SWA Type A	3	150	-	-	-	-	-	-	-	-	-
FDR-01	TRANSFORMER 1	11000	30	Cu XLPE SWA Type A	3	50	-	-	-	-	-	-	-	-	-
FDR-02	TRANSFORMER 2	11000	30	Cu XLPE SWA Type A	3	50	-	-	-	-	-	-	-	-	-
FDR-03	TRANSFORMER 3	11000	30	Cu XLPE SWA Type A	3	50	-	-	-	-	-	-	-	-	-
FDR-04	315kVA MIINISUB	11000	450	Cu XLPE SWA Type A	3	50	-	-	-	-	-	-	-	-	-
GEN-01	GENSET 1	11000	30	Cu XLPE SWA Type A	3	50	-	-	-	-	-	-	-	-	-
GEN-02	GENSET 2 (Future)	11000		-	-	-	-	-	-	-	-	-	-	-	-
MAIN RETICULATION FROM CLEAR WATER PUMP STATION															
Power cable							Earth cable			Control cable 1			Control cable 2		
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
INC-01	INCOMER 1	400	10	Busbar	-	-	-	-	-	-	-	-	-	-	-
INC-02	INCOMER 2	400	10	Busbar	-	-	-	-	-	-	-	-	-	-	-
INC-03	INCOMER 3	400	10	Busbar	-	-	-	-	-	-	-	-	-	-	-
FDR-01	FEEDER MCC 1 - DOSING BUILDING	400	320	Cu PVC/SWA/PVC 600/1000V	4	70	BCEW	1	35	-	-	-	-	-	-
FDR-02	FEEDER MCC 2 - FILTER PLANT ROOM	400	240	Cu PVC/SWA/PVC 600/1000V	4	2x185	BCEW	1	2x95	-	-	-	-	-	-
FDR-03	FEEDER MCC 3 - CHLORINE BUILDING	400	250	Cu PVC/SWA/PVC 600/1000V	4	50	BCEW	1	25	-	-	-	-	-	-
FDR-04	FEEDER MCC 4 - BACKWASH RECYCLING BUILDING	400	175	Cu PVC/SWA/PVC 600/1000V	4	95	BCEW	1	50	-	-	-	-	-	-
FDR-05	FEEDER MCC 7 - SUPERNATANT PUMP STATION	400	210	Cu PVC/SWA/PVC 600/1000V	4	120	BCEW	1	70	-	-	-	-	-	-
FDR-06	FEEDER MCC 6 - SLUDGE DEWATERING	400	145	Cu PVC/SWA/PVC 600/1000V	4	120	BCEW	1	70	-	-	-	-	-	-
FDR-07	FEEDER Workshop and Storage Building	400	70	Cu PVC/SWA/PVC 600/1000V	4	25	BCEW	1	16	-	-	-	-	-	-
FDR-08	FEEDER Admin Building	400		-	-	-	-	-	-	-	-	-	-	-	-
FDR-09	FEEDER MCC 8 - FILTER PLANT ROOM (Future)	400		-	-	-	-	-	-	-	-	-	-	-	-
FDR-10	FEEDER MCC 9 - BACKWASH RECYCLING BUILDING (Future)	400		-	-	-	-	-	-	-	-	-	-	-	-
FDR-11	FEEDER MCC 10 - SUPERNATANT PUMP STATION (Future)	400		-	-	-	-	-	-	-	-	-	-	-	-
FDR-12	FEEDER MCC 11 - SLUDGE DEWATERING (Future)	400		-	-	-	-	-	-	-	-	-	-	-	-
UK-09	Utility Kiosk No.9	400	100	Cu PVC/SWA/PVC 600/1000V	4	16	BCEW	1	16	-	-	-	-	-	-
UK-01	Utility Kiosk No.1	400	130	Cu PVC/SWA/PVC 600/1000V	4	16	BCEW	1	16	-	-	-	-	-	-
UK-02	Utility Kiosk No.2	400	70	Cu PVC/SWA/PVC 600/1000V	4	16	BCEW	1	16	-	-	-	-	-	-
UK-11	Utility Kiosk No.11	400	70	Cu PVC/SWA/PVC 600/1000V	4	16	BCEW	1	16	-	-	-	-	-	-

UK-10	Utility Kiosk No.10	400	175	Cu PVC/SWA/PVC 600/1000V	4	120	BCEW	1	70	-	-	-	-	-	-
TBC	Administration building	400	135	Cu PVC/SWA/PVC 600/1000V	4	120	BCEW	1	70	-	-	-	-	-	-
UK-8	Utility Kiosk No.8	400	50	Cu PVC/SWA/PVC 600/1000V	4	16	BCEW	1	16	-	-	-	-	-	-
UK-07	Utility Kiosk No.7	400	90	Cu PVC/SWA/PVC 600/1000V	4	16	BCEW	1	16	-	-	-	-	-	-
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
TBC	Guard House	400	90	Cu PVC/SWA/PVC 600/1000V	3	10	-	-	-	-	-	-	-	-	-
TBC	Staff Accommodation 1	230	100	Cu PVC/SWA/PVC 600/1000V	3	10	-	-	-	-	-	-	-	-	-
TBC	Staff Accommodation 2	230	60	Cu PVC/SWA/PVC 600/1000V	3	10	-	-	-	-	-	-	-	-	-
TBC	Staff Accommodation 3	230	70	Cu PVC/SWA/PVC 600/1000V	3	10	-	-	-	-	-	-	-	-	-
TBC	Staff Accommodation 4	230	95	Cu PVC/SWA/PVC 600/1000V	3	10	-	-	-	-	-	-	-	-	-
TBC	Staff Accommodation 5	230	65	Cu PVC/SWA/PVC 600/1000V	3	10	-	-	-	-	-	-	-	-	-
TBC	Staff Accommodation 6	230	40	Cu PVC/SWA/PVC 600/1000V	3	10	-	-	-	-	-	-	-	-	-
MCC 1- DOSING BUILDING															
Power cable						Earth cable			Control cable 1			Control cable 2			
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
02-XVF-BV04	Inlet Chamber Valve (Butterfly Valve Position Switch)	400	50	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
02-FT-01	Flow Meter (Magflow) 600	230	50	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
03-AT-01	SCD Transmitter	24	100	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5			
01-LT-01	Level Transmitter (Ultrasonic)	24	90	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
01-LT-02	Level Transmitter (Ultrasonic)	24	150	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
11-DP-01/02	Coagulant Dosing Pumps	400	20	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	4 pair	1.5
11-FS-01	Flow Switch	24	15	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
11-FS-02	Flow Switch	24	15	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
11-TK-01	Level Transmitter (Ultrasonic)	24	20	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
11-TK-02	Level Transmitter (Ultrasonic)	24	20	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
11-TK-03	Level Transmitter (Ultrasonic)	24	20	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
11-TK-04	Level Transmitter (Ultrasonic)	24	20	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
11-TK-01	Level Switch (Float Switch)	24	15	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
11-TK-02	Level Switch (Float Switch)	24	15	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
11-TK-03	Level Switch (Float Switch)	24	15	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
11-TK-04	Level Switch (Float Switch)	24	15	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
UK-05	Utility Kiosk No.5	400	25	Cu PVC/SWA/PVC 600/1000V	4	16	BCEW	1	16	-	-	-	-	-	-
UK-06	Utility Kiosk No.6	400	130	Cu PVC/SWA/PVC 600/1000V	4	16	BCEW	1	16	-	-	-	-	-	-
Future	Inlet Chamber Valve (Butterfly Valve Position Switch)	400		-	-	-	-	-	-	-	-	-	-	-	-
Future	Flow Meter (Magflow)	230		-	-	-	-	-	-	-	-	-	-	-	-

Future	Coagulant Dosing Pumps	400		-	-	-	-	-	-	-	-	-	-	-	-
Future	Level Transmitter (Ultrasonic)	24		-	-	-	-	-	-	-	-	-	-	-	-
Future	Level Transmitter (Ultrasonic)	24		-	-	-	-	-	-	-	-	-	-	-	-
Future	Level Transmitter (Ultrasonic)	24		-	-	-	-	-	-	-	-	-	-	-	-
Future	Flow Switch	24		-	-	-	-	-	-	-	-	-	-	-	-
Future	Flow Switch	24		-	-	-	-	-	-	-	-	-	-	-	-
Future	SCD Transmitter	24		-	-	-	-	-	-	-	-	-	-	-	-
MCC 2 - FILTER PLANT ROOM															
Power cable							Earth cable			Control cable 1			Control cable 2		
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
05-FBP-01	Filter Backwash Motor 1 (Duty)	400	16	Cu PVC/SWA/PVC 600/1000V	3	4	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	2 pair	1.5
05-FBP-02	Filter Backwash Motor 2 (Duty)	400	18	Cu PVC/SWA/PVC 600/1000V	3	4	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	2 pair	1.5
05-FBP-03	Filter Backwash Motor 3 (Standby)	400	20	Cu PVC/SWA/PVC 600/1000V	3	4	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	2 pair	1.5
05-BP-01	Blower Motor 1	400	15	Cu PVC/SWA/PVC 600/1000V	4	25	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
	Blower Motor 1 - Forced Air Cooling Fan	400	15	Cu PVC/SWA/PVC 600/1000V	4	2.5				-	-	-	-	-	-
05-BP-02	Blower Motor 2	400	15	Cu PVC/SWA/PVC 600/1000V	4	25	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
	Blower Motor 2 - Forced Air Cooling Fan	400	15	Cu PVC/SWA/PVC 600/1000V	4	2.5				-	-	-	-	-	-
03-BS-01	Clarifloculator Bridge Motor 1	400	120	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	2X1.5	DEKARON	2 pair	1.5
03-NT-01	Torque Switch	24	120	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	3	1.5	-	-	-
03-BS-02	Clarifloculator Bridge Motor 2	400	85	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	2X1.5	DEKARON	2 pair	1.5
03-NT-02	Torque Switch	24	85	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	3	1.5	-	-	-
03-BS-03	Clarifloculator Bridge Motor 3	400	120	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	2X1.5	DEKARON	2 pair	1.5
03-NT-03	Torque Switch	24	120	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	3	1.5	-	-	-
03-BS-04	Clarifloculator Bridge Motor 4	400	85	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	2X1.5	DEKARON	2 pair	1.5
03-NT-04	Torque Switch	24	85	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	3	1.5	-	-	-
03-XVS-VS01	Solenoid Actuator	24	120	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
03-XVS-VS02	Solenoid Actuator	24	85	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
03-XVS-VS03	Solenoid Actuator	24	120	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
03-XVS-VS04	Solenoid Actuator	24	85	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
05-FS-01	Flow Switch	24	16	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
05-FS-02	Flow Switch	24	18	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
05-FS-03	Flow Switch	24	20	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
06-LT-01	Level Transmitter (Ultrasonic)	24	110	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
06-LT-02	Level Transmitter (Ultrasonic)	24	110	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
FDR-01	MCC 2A - FILTER BUILDING 1	400	80	Cu PVC/SWA/PVC 600/1000V	4	25	BCEW	1	16	-	-	-	-	-	-

FDR-02	MCC 2B - FILTER BUILDING 2	400	80	Cu PVC/SWA/PVC 600/1000V	4	25	BCEW	1	16	-	-	-	-	-	-
UK-04	Utility Kiosk No.4	400	55	Cu PVC/SWA/PVC 600/1000V	4	16	BCEW	1	16	-	-	-	-	-	-
MCC 2A- FILTER BUILDING 1															
Power cable						Earth cable			Control cable 1			Control cable 2			
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
04-XV-BV01	Filter Bed 1 - inlet valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV02	Filter Bed 1 - filter outlet valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV03	Filter Bed 1 - Backwash Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV04	Filter Bed 1 - Blower Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
04-XV-GS01	Filter Bed 1 - Backwash Channel	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV05	Filter Bed 2 - inlet valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV06	Filter Bed 2 - filter outlet valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV07	Filter Bed 2 - Backwash Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV08	Filter Bed 2 - Blower Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-GS02	Filter Bed 2 - Backwash Channel	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV09	Filter Bed 3 - inlet valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV10	Filter Bed 3 - filter outlet valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV11	Filter Bed 3 - Backwash Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV12	Filter Bed 3 - Blower Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-GS03	Filter Bed 3 - Backwash Channel	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV13	Filter Bed 4 - inlet valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV14	Filter Bed 4 - filter outlet valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV15	Filter Bed 4 - Backwash Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV16	Filter Bed 4 - Blower Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-GS04	Filter Bed 4 - Backwash Channel	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-FT-01	Flow Meter (Magflow) 560	230	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
04-LT-01	Level Transmitter (Ultrasonic)	24	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-LT-02	Level Transmitter (Ultrasonic)	24	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-LT-03	Level Transmitter (Ultrasonic)	24	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-LT-04	Level Transmitter (Ultrasonic)	24	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-LS-01	Level Switch (Float Switch)	24	30	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
04-LS-02	Level Switch (Float Switch)	24	30	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
04-LS-03	Level Switch (Float Switch)	24	30	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-

04-LS-04	Level Switch (Float Switch)	24	30	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
04-LT-05	Level Transmitter (Ultrasonic)	24	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
							-	-	-						
MCC 2B- FILTER BUILDING 2															
Power cable						Earth cable			Control cable 1			Control cable 2			
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
04-XV-BV17	Filter Bed 1 - inlet valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV18	Filter Bed 1 - CW alve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV19	Filter Bed 1 - Backwash Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV20	Filter Bed 1 - Blower Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-GS05	Filter Bed 1 - Backwash Channel	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV21	Filter Bed 2 - inlet valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV22	Filter Bed 2 - CW alve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
04-XV-BV23	Filter Bed 2 - Backwash Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV24	Filter Bed 2 - Blower Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-GS06	Filter Bed 2 - Backwash Channel	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV25	Filter Bed 3 - inlet valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV26	Filter Bed 3 - CW alve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV27	Filter Bed 3 - Backwash Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV28	Filter Bed 3 - Blower Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-GS07	Filter Bed 3 - Backwash Channel	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV29	Filter Bed 4 - inlet valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV30	Filter Bed 4 - CW alve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV31	Filter Bed 4 - Backwash Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-BV32	Filter Bed 4 - Blower Valve	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-XV-GS08	Filter Bed 4 - Backwash Channel	400	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-FT-02	Flow Meter (Magflow) 560	230	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
04-LT-05	Level Transmitter (Ultrasonic)	24	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-LT-06	Level Transmitter (Ultrasonic)	24	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-LT-07	Level Transmitter (Ultrasonic)	24	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-LT-08	Level Transmitter (Ultrasonic)	24	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
04-LS-05	Level Switch (Float Switch)	24	30	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
04-LS-06	Level Switch (Float Switch)	24	30	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
04-LS-07	Level Switch (Float Switch)	24	30	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-

04-LS-08	Level Switch (Float Switch)	24	30	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	-	-	-
04-LT-05	Level Transmitter (Ultrasonic)	24	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
MCC 3 - CLORINE BUILDING															
Power cable						Earth cable			Control cable 1			Control cable 2			
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
12-PF-01	Extractor fan on emergency Dry Scrubber	400	25	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5			
12-CL-01	Chlorinator 1	400	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
12-CL-02	Chlorinator 2	400	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
TBC	Heating Tape	230	20	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	-	-	-	-	-	-
TBC	Heating Tape	230	20	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	-	-	-	-	-	-
TBC	Wall-mounted panel heater	230	20	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	-	-	-	-	-	-
UK-03	Utility Kiosk No.3	400	70	Cu PVC/SWA/PVC 600/1000V	4	16	BCEW	1	16	-	-	-	-	-	-
12-WT-01	Weight Transmitter 1	230	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
12-WT-02	Weight Transmitter 2	230	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
12-WT-03	Weight Transmitter 3	230	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
12-WT-04	Weight Transmitter 4	230	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
12-WT-05	Weight Transmitter 5	230	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
12-WT-06	Weight Transmitter 6	230	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
12-AT-01	SCD Transmitter (Chlorine detector)	230	25	Cu PVC/SWA/PVC 600/1000V	4	2.5				Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
12-FT-01	Flow Meter (Magflow) 140	230	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
12-FT-02	Flow Meter (Magflow) 140	230	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
TBC	Gas Leak detector	230								Cu PVC/SWA/PVC 600/1000V	12	1.5			
MCC 4 - BACKWASH RECYCLING BUILDING															
Power cable						Earth cable			Control cable 1			Control cable 2			
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
08-RBP-01	Back wash recyc Motor 1 (Duty)	400	12	Cu PVC/SWA/PVC 600/1000V	3	4	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	2 pair	1.5
08-RBP-02	Back wash recyc Motor 2 (Duty)	400	14	Cu PVC/SWA/PVC 600/1000V	3	4	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	2 pair	1.5
08-RBP-03	Back wash recyc Motor 3 (Standby)	400	16	Cu PVC/SWA/PVC 600/1000V	3	4	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	2 pair	1.5
08-AP-01	Backwash Storage Tank Mixer 1	400	30	Cu PVC/SWA/PVC 600/1000V	4	6	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	-	-	-
08-AP-02	Backwash Storage Tank Mixer 2	400	40	Cu PVC/SWA/PVC 600/1000V	4	6	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	-	-	-
08-PT-07	Pressure Transmitter	24	20	-	-	-	-	-	-	-	-	-	DEKARON	2 pair	1.5

08-FS-01	Flow Switch	24	12	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
08-FS-02	Flow Switch	24	14	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
08-FS-03	Flow Switch	24	16	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
08-LT-01	Level Transmitter (Ultrasonic)	24	40	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
08-FT-01	Flow Meter (Magflow) 150	230	20	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
							-	-	-						
MCC 5 - CLEAR WATER PUMP STATION															
Power cable						Earth cable			Control cable 1			Control cable 2			
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
07-PT-12	Pressure Transmitter	24	50	-	-	-	-	-	-	-	-	-	DEKARON	2 pair	1.5
07-P-01	Rosedale Pump 1 (Duty)	400	40	Cu XLPE/SWA/PVC 600/1000V	1	2x240	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	12 pair	1.5
07-PT-01	Pressure Transmitter	24	40	-	-	-	-	-	-	-	-	-	DEKARON	2 pair	1.5
FS-01	Flow Switch	24	40	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
07-P-02	Rosedale Pump 2 (Duty)	400	45	Cu XLPE/SWA/PVC 600/1000V	1	2x240	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	12 pair	1.5
07-PT-03	Pressure Transmitter	24	45	-	-	-	-	-	-	-	-	-	DEKARON	2 pair	1.5
FS-02	Flow Switch	24	45	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
07-P-03	Rosedale Pump 3 (Standby)	400	50	Cu XLPE/SWA/PVC 600/1000V	1	2x240	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	12 pair	1.5
07-PT-05	Pressure Transmitter	24	50	-	-	-	-	-	-	-	-	-	DEKARON	2 pair	1.5
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
FS-03	Flow Switch	24	50	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
07-PT-11	Pressure Transmitter	24	50	-	-	-	-	-	-	-	-	-	DEKARON	2 pair	1.5
07-FT-01	Flow Meter (Magflow) 900	230	80	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
07-ZS-BV11	Isolation Chamber Valve (Butterfly Valve Position Switch)	24	80	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
07-FT-02	Flow Meter (Magflow) 100	230	50	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
01-LT-01	Level Transmitter (Ultrasonic)	24	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
07-P-04	Nqadu Water Pump 1 (Duty)	400	35	Cu XLPE/SWA/PVC 600/1000V	1	2x120	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	12 pair	1.5
07-PT-07	Pressure Transmitter	24	35	-	-	-	-	-	-	-	-	-	DEKARON	2 pair	1.5
FS-04	Flow Switch	24	35	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
07-P-05	Nqadu Water Pump 2 (Standby)	400	35	Cu XLPE/SWA/PVC 600/1000V	1	2x120	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	12 pair	1.5
07-PT-09	Pressure Transmitter	24	35	-	-	-	-	-	-	-	-	-	DEKARON	2 pair	1.5
FS-05	Flow Switch	24	35	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
07-PT-13	Pressure Transmitter	24	50	-	-	-	-	-	-	-	-	-	DEKARON	2 pair	1.5
07-FT-03	Flow Meter (Magflow) 200	230	50	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
07-PT-14	Pressure Transmitter	24	50	-	-	-	-	-	-	-	-	-	DEKARON	2 pair	1.5

07-ZS-HA07	Nqadu Isolation Chamber Valve (RSV Position Switch)	-	50	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
01-LT-02	Level Transmitter (Ultrasonic)	24	30	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
07-CR01	Crane Hoist	400	60	Cu PVC/SWA/PVC 600/1000V	4	10	-	-	-	-	-	-	-	-	-
MCC 7 - SUPERNATANT PUMP STATION															
Power cable						Earth cable			Control cable 1			Control cable 2			
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
08-AP-01	Sludge Storage Tank Mixer 1	400	230	Cu PVC/SWA/PVC 600/1000V	4	16	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	-	-	-
08-AP-02	Sludge Storage Tank Mixer 2	400	230	Cu PVC/SWA/PVC 600/1000V	4	16	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	-	-	-
08-AP-03	Sludge Storage Tank Mixer 3	400	230	Cu PVC/SWA/PVC 600/1000V	4	16	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	-	-	-
08-AP-04	Sludge Storage Tank Mixer 4	400	230	Cu PVC/SWA/PVC 600/1000V	4	16	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	-	-	-
10-SRP-01	Supernatant Return Pump 1 (Duty)	400	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	2 pair	1.5
10-SRP-02	Supernatant Return Pump 2 (Standby)	400	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	19	1.5	DEKARON	2 pair	1.5
09-LT-01	Level Transmitter (Ultrasonic)	24	230	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
10-LT-01	Level Transmitter (Ultrasonic)	24	180	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	12	1.5	DEKARON	2 pair	1.5
10-FS-01	Flow Switch	24	15	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
10-FS-02	Flow Switch	24	15	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
10-FI-01	Flow Meter (Magflow) 100	230	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
							-	-	-						
MCC - TEMPORARY RAW WATER PUMP STATION															
Power cable						Earth cable			Control cable 1			Control cable 2			
Tag	Description	Voltage	Length	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size	Type	Cores	Size
INC-01	Incomer 1	400	80	Cu PVC/SWA/PVC 600/1000V	4	240	-	-	-	-	-	-	-	-	-
01-TEP-01	Temporary Raw Water pump 1 (Duty)	400	40	Cu PVC/SWA/PVC 600/1000V	4	240	-	-	-	-	-	-	-	-	-
01-TEP-02	Temporary Raw Water pump 2 (Duty)	400	40	Cu PVC/SWA/PVC 600/1000V	4	240	-	-	-	-	-	-	-	-	-
01-PT-02	Pressure Transmitter	24	15	-	-	-	-	-	-	-	-	-	DEKARON	2 pair	1.5
01-PT-04	Pressure Transmitter	24	15	-	-	-	-	-	-	-	-	-	DEKARON	2 pair	1.5
01-FS-01	Flow Switch	24	15	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
01-FS-02	Flow Switch	24	15	-	-	-	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
01-LS-01	Level Transmitter (Ultrasonic)	24	50	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5
TBC	Flow Meter (Magflow) 500	230	15	Cu PVC/SWA/PVC 600/1000V	4	2.5	-	-	-	Cu PVC/SWA/PVC 600/1000V	5	1.5	DEKARON	2 pair	1.5

ANNEXURE B

IO LIST

MEDIUM VOLTAGE SITE RETICULATION					
Tag	Description	IO List			
Tag	Description	DI	DO	AI	AO
TBC	MUNICIPAL INCOMER 1	4	0	0	0
INC-01	HIGHBURY INCOMER 1	4	0	0	0
FDR-01	TRANSFORMER 1	4	0	0	0
FDR-02	TRANSFORMER 2	4	0	0	0
FDR-03	TRANSFORMER 3	4	0	0	0
FDR-04	315kVA MINISUB	4	0	0	0
GEN-01	GENSET 1	4	0	3	0
Total		32	0	6	0
MAIN RETICULATION FROM CLEAR WATER PUMP STATION					
Tag	Description	IO List			
		DI	DO	AI	AO
INC-01	INCOMER 1	4	0	0	0
INC-02	INCOMER 2	4	0	0	0
INC-03	INCOMER 3	4	0	0	0
FDR-01	FEEDER MCC 1 - DOSING BUILDING	4	0	0	0
FDR-02	FEEDER MCC 2 - FILTER PLANT ROOM	4	0	0	0
FDR-03	FEEDER MCC 3 - CHLORINE BUILDING	4	0	0	0
FDR-04	FEEDER MCC 4 - BACKWASH RECYCLING BUILDING	4	0	0	0
FDR-05	FEEDER MCC 7 - SUPERNATANT PUMP STATION	4	0	0	0
FDR-06	FEEDER MCC 6 - SLUDGE DEWATERING	4	0	0	0
FDR-07	FEEDER Workshop and Storage Building	4	0	0	0
FDR-08	FEEDER Admin Building	4	0	0	0
FDR-09	FEEDER MCC 8 - FILTER PLANT ROOM (Future)	4	0	0	0
FDR-10	FEEDER MCC 9 - BACKWASH RECYCLING BUILDING (Future)	4	0	0	0
FDR-11	FEEDER MCC 10 - SUPERNATANT PUMP STATION (Future)	4	0	0	0
FDR-12	FEEDER MCC 11 - SLUDGE DEWATERING (Future)	4	0	0	0
Total		60	0	0	0
MCC 1- DOSING BUILDING					
Tag	Description	IO List			
		DI	DO	AI	AO
02-XVF-BV04	Inlet Chamber Valve (Butterfly Valve Position Switch)	5	2	1	1
02-FT-01	Flow Meter (Magflow) 600	2	0	1	0
03-AT-01	SCD Transmitter	1	0	0	0
01-LT-01	Level Transmitter (Ultrasonic)	0	0	1	0
01-LT-02	Level Transmitter (Ultrasonic)	0	0	1	0
11-DP-01/02	Coagulant Dosing Pumps	6	3	2	2
11-FS-01	Flow Switch	1	0	1	0
11-FS-02	Flow Switch	1	0	1	0
11-TK-01	Level Transmitter (Ultrasonic)	0	0	1	0
11-TK-02	Level Transmitter (Ultrasonic)	0	0	1	0
11-TK-03	Level Transmitter (Ultrasonic)	0	0	1	0
11-TK-04	Level Transmitter (Ultrasonic)	0	0	1	0
11-TK-01	Level Switch (Float Switch)	1	0	0	0
11-TK-02	Level Switch (Float Switch)	1	0	0	0
11-TK-03	Level Switch (Float Switch)	1	0	0	0
11-TK-04	Level Switch (Float Switch)	1	0	0	0
UK-05	Utility Kiosk No.5	0	0	0	0
UK-06	Utility Kiosk No.6	0	0	0	0
Future	Inlet Chamber Valve (Butterfly Valve Position Switch)	5	0	1	1
Tag	Description	DI	DO	AI	AO

Future	Flow Meter (Magflow)	2	0	1	0
Future	Coagulant Dosing Pumps	6	3	2	2
Future	Level Transmitter (Ultrasonic)	0	0	1	0
Future	Level Transmitter (Ultrasonic)	0	0	1	0
Future	Level Transmitter (Ultrasonic)	0	0	1	0
Future	Flow Switch	1	0	1	0
Future	Flow Switch	1	0	1	0
Future	SCD Transmitter	1	0	0	0
Total		36	8	21	6
MCC 2 - FILTER PLANT ROOM					
Tag	Description	IO List			
		DI	DO	AI	AO
05-FBP-01	Filter Backwash Motor 1 (Duty)	12	1	0	0
05-FBP-02	Filter Backwash Motor 2 (Duty)	12	1	0	0
05-FBP-03	Filter Backwash Motor 3 (Standby)	12	1	0	0
05-BP-01	Blower Motor 1	13	1	0	0
	Blower Motor 1 - Forced Air Cooling Fan	0	0	0	0
05-BP-02	Blower Motor 2	13	1	0	0
	Blower Motor 2 - Forced Air Cooling Fan	0	0	0	0
03-BS-01	Clarifloculator Bridge Motor 1	12	1	0	0
03-NT-01	Torque Switch	1	0	0	0
03-BS-02	Clarifloculator Bridge Motor 2	12	1	0	0
03-NT-02	Torque Switch	1	0	0	0
03-BS-03	Clarifloculator Bridge Motor 3	12	1	0	0
03-NT-03	Torque Switch	1	0	0	0
03-BS-04	Clarifloculator Bridge Motor 4	12	1	0	0
03-NT-04	Torque Switch	1	0	0	0
03-XVS-VS01	Solenoid Actuator	2	2	0	0
03-XVS-VS02	Solenoid Actuator	2	2	0	0
03-XVS-VS03	Solenoid Actuator	2	2	0	0
03-XVS-VS04	Solenoid Actuator	2	2	0	0
05-FS-01	Flow Switch	1	0	1	0
05-FS-02	Flow Switch	1	0	1	0
05-FS-03	Flow Switch	1	0	1	0
06-LT-01	Level Transmitter (Ultrasonic)	0	0	1	0
06-LT-02	Level Transmitter (Ultrasonic)	0	0	1	0
FDR-01	MCC 2A - FILTER BUILDING 1	2	0	0	0
FDR-02	MCC 2B - FILTER BUILDING 2	2	0	0	0
UK-04	Utility Kiosk No.4	2	0	0	0
Total		131	17	5	0
MCC 2A- FILTER BUILDING 1					
Tag	Description	IO List			
		DI	DO	AI	AO
04-XV-BV01	Filter Bed 1 - inlet valve	5	2	1	1
04-XV-BV02	Filter Bed 1 - filter outlet valve	5	2	1	1
04-XV-BV03	Filter Bed 1 - Backwash Valve	5	2	1	1
04-XV-BV04	Filter Bed 1 - Blower Valve	5	2	1	1
04-XV-GS01	Filter Bed 1 - Backwash Channel	5	2	1	1
04-XV-BV05	Filter Bed 2 - inlet valve	5	2	1	1
04-XV-BV06	Filter Bed 2 - filter outlet valve	5	2	1	1
04-XV-BV07	Filter Bed 2 - Backwash Valve	5	2	1	1
04-XV-BV08	Filter Bed 2 - Blower Valve	5	2	1	1
Tag	Description	DI	DO	AI	AO

04-XV-GS02	Filter Bed 2 - Backwash Channel	5	2	1	1
04-XV-BV09	Filter Bed 3 - inlet valve	5	2	1	1
04-XV-BV10	Filter Bed 3 - filter outlet valve	5	2	1	1
04-XV-BV11	Filter Bed 3 - Backwash Valve	5	2	1	1
04-XV-BV12	Filter Bed 3 - Blower Valve	5	2	1	1
04-XV-GS03	Filter Bed 3 - Backwash Channel	5	2	1	1
04-XV-BV13	Filter Bed 4 - inlet valve	5	2	1	1
04-XV-BV14	Filter Bed 4 - filter outlet valve	5	2	1	1
04-XV-BV15	Filter Bed 4 - Backwash Valve	5	2	1	1
04-XV-BV16	Filter Bed 4 - Blower Valve	5	2	1	1
04-XV-GS04	Filter Bed 4 - Backwash Channel	5	2	1	1
04-FT-01	Flow Meter (Magflow) 500	2	0	1	0
04-LT-01	Level Transmitter (Ultrasonic)	0	0	1	0
04-LT-02	Level Transmitter (Ultrasonic)	0	0	1	0
04-LT-03	Level Transmitter (Ultrasonic)	0	0	1	0
04-LT-04	Level Transmitter (Ultrasonic)	0	0	1	0
04-LS-01	Level Switch (Float Switch)	1	0	0	0
04-LS-02	Level Switch (Float Switch)	1	0	0	0
04-LS-03	Level Switch (Float Switch)	1	0	0	0
04-LS-04	Level Switch (Float Switch)	1	0	0	0
04-LT-05	Level Transmitter (Ultrasonic)	0	0	1	0
Total		106	40	26	20
MCC 2B- FILTER BUILDING 2					
Tag	Description	IO List			
		DI	DO	AI	AO
04-XV-BV17	Filter Bed 1 - inlet valve	5	2	1	1
04-XV-BV18	Filter Bed 1 - CW valve	5	2	1	1
04-XV-BV19	Filter Bed 1 - Backwash valve	5	2	1	1
04-XV-BV20	Filter Bed 1 - Blower valve	5	2	1	1
04-XV-GS05	Filter Bed 1 - Backwash Channel	5	2	1	1
04-XV-BV21	Filter Bed 2 - inlet valve	5	2	1	1
04-XV-BV22	Filter Bed 2 - CW valve	5	2	1	1
04-XV-BV23	Filter Bed 2 - Backwash Valve	5	2	1	1
04-XV-BV24	Filter Bed 2 - Blower Valve	5	2	1	1
04-XV-GS06	Filter Bed 2 - Backwash Channel	5	2	1	1
04-XV-BV25	Filter Bed 3 - inlet valve	5	2	1	1
04-XV-BV26	Filter Bed 3 - CW valve	5	2	1	1
04-XV-BV27	Filter Bed 3 - Backwash Valve	5	2	1	1
04-XV-BV28	Filter Bed 3 - Blower Valve	5	2	1	1
04-XV-GS07	Filter Bed 3 - Backwash Channel	5	2	1	1
04-XV-BV29	Filter Bed 4 - inlet valve	5	2	1	1
04-XV-BV30	Filter Bed 4 - CW valve	5	2	1	1
04-XV-BV31	Filter Bed 4 - Backwash Valve	5	2	1	1
04-XV-BV32	Filter Bed 4 - Blower Valve	5	2	1	1
04-XV-GS08	Filter Bed 4 - Backwash Channel	5	2	1	1
04-FT-02	Flow Meter (Magflow) 500	2	0	1	0
04-LT-05	Level Transmitter (Ultrasonic)	0	0	1	0
04-LT-06	Level Transmitter (Ultrasonic)	0	0	1	0
04-LT-07	Level Transmitter (Ultrasonic)	0	0	1	0
04-LT-08	Level Transmitter (Ultrasonic)	0	0	1	0
04-LS-05	Level Switch (Float Switch)	1	0	0	0
04-LS-06	Level Switch (Float Switch)	1	0	0	0
Tag	Description	DI	DO	AI	AO

04-LS-07	Level Switch (Float Switch)	1	0	0	0
04-LS-08	Level Switch (Float Switch)	1	0	0	0
04-LT-05	Level Transmitter (Ultrasonic)	0	0	1	0
Total		106	40	26	20
MCC 3 - CLORINE BUILDING					
Tag	Description	IO List			
		DI	DO	AI	AO
12-PF-01	Extractor fan on emergency Dry Scrubber	3	0	0	0
12-CL-01	Chlorinator 1	2	0	1	1
12-CL-02	Chlorinator 2	2	0	1	1
TBC	Heating Tape	2	0	0	0
TBC	Heating Tape	2	0	0	0
TBC	Wall-mounted panel heater	2	0	0	0
UK-03	Utility Kiosk No.3	0	0	0	0
12-WT-01	Weight Transmitter 1	2	0	1	0
12-WT-02	Weight Transmitter 2	2	0	1	0
12-WT-03	Weight Transmitter 3	2	0	1	0
12-WT-04	Weight Transmitter 4	2	0	1	0
12-WT-05	Weight Transmitter 5	2	0	1	0
12-WT-06	Weight Transmitter 6	2	0	1	0
12-AT-01	SCD Transmitter (Chlorine detector)	2	0	1	0
12-FT-01	Flow Meter (Magflow) 100	2	0	1	0
12-FT-02	Flow Meter (Magflow) 100	2	0	1	0
TBC	Gas Leak detector	3	0	0	1
Total		34	0	11	3
MCC 4 - BACKWASH RECYCLING BUILDING					
Tag	Description	IO List			
		DI	DO	AI	AO
08-RBP-01	Back wash recycle Motor 1 (Duty)	14	1	1	1
08-RBP-02	Back wash recycle Motor 2 (Duty)	14	1	1	1
08-RBP-03	Back wash recycle Motor 3 (Standby)	14	1	1	1
08-AP-01	Backwash Storage Tank Mixer 1	12	1	0	0
08-AP-02	Backwash Storage Tank Mixer 2	12	1	0	0
08-PT-07	Pressure Transmitter	0	0	1	0
08-FS-01	Flow Switch	1	0	1	0
08-FS-02	Flow Switch	1	0	1	0
08-FS-03	Flow Switch	1	0	1	0
08-LT-01	Level Transmitter (Ultrasonic)	0	0	1	0
08-FT-01	Flow Meter (Magflow) 150	2	0	1	0
Total		73	5	9	3
MCC 5 - CLEAR WATER PUMP STATION					
Tag	Description	IO List			
		DI	DO	AI	AO
07-PT-12	Pressure Transmitter	0	0	1	0
07-P-01	Rosedale Pump 1 (Duty)	12	1	11	0
07-PT-01	Pressure Transmitter	0	0	1	0
FS-01	Flow Switch	1	0	1	0
07-P-02	Rosedale Pump 2 (Duty)	12	1	11	0
07-PT-03	Pressure Transmitter	0	0	1	0
FS-02	Flow Switch	1	0	1	0
Tag	Description	DI	DO	AI	AO
07-P-03	Rosedale Pump 3 (Standby)	12	1	11	0
07-PT-05	Pressure Transmitter	0	0	1	0

FS-03	Flow Switch	1	0	1	0
07-PT-11	Pressure Transmitter	0	0	1	0
07-FT-01	Flow Meter (Magflow) 900	2	0	1	0
07-ZS-BV11	Isolation Chamber Valve (Butterfly Valve Position Switch)	5	0	1	1
07-FT-02	Flow Meter (Magflow) 100	2	0	1	0
01-LT-01	Level Transmitter (Ultrasonic)	0	0	1	0
07-P-04	Nqadu Water Pump 1 (Duty)	12	1	11	0
07-PT-07	Pressure Transmitter	0	0	1	0
FS-04	Flow Switch	1	0	1	0
07-P-05	Nqadu Water Pump 2 (Standby)	12	1	11	0
07-PT-09	Pressure Transmitter	0	0	1	0
FS-05	Flow Switch	1	0	1	0
07-PT-13	Pressure Transmitter	0	0	1	0
07-FT-03	Flow Meter (Magflow) 200	2	0	1	0
07-PT-14	Pressure Transmitter	0	0	1	0
07-ZS-HA07	Nqadu Isolation Chamber Valve (RSV Position Switch)	5	0	1	1
01-LT-02	Level Transmitter (Ultrasonic)	0	0	1	0
07-CR01	Crane Hoist	2	0	0	0
Total		83	5	76	2
MCC 7 - SUPERNATANT PUMP STATION					
Tag	Description	IO List			
		DI	DO	AI	AO
08-AP-01	Sludge Storage Tank Mixer 1	12	1	0	0
08-AP-02	Sludge Storage Tank Mixer 2	12	1	0	0
08-AP-03	Sludge Storage Tank Mixer 3	12	1	0	0
08-AP-04	Sludge Storage Tank Mixer 4	12	1	0	0
10-SRP-01	Supernatant Return Pump 1 (Duty)	12	1	0	0
10-SRP-02	Supernatant Return Pump 2 (Standby)	12	1	0	0
09-LT-01	Level Transmitter (Ultrasonic)	0	0	1	0
10-LT-01	Level Transmitter (Ultrasonic)	0	0	1	0
10-FS-01	Flow Switch	1	0	1	0
10-FS-02	Flow Switch	1	0	1	0
10-FT-01	Flow Meter (Magflow) 100	2	0	1	0
Total		76	6	5	0
MCC - TEMPORARY RAW WATER PUMP STATION					
Tag	Description	IO List			
		DI	DO	AI	AO
INC-01	Incomer 1	0	0	0	0
01-TEP-01	Temporary Raw Water pump 1 (Duty)	0	0	0	0
01-TEP-02	Temporary Raw Water pump 2 (Duty)	0	0	0	0
01-PT-02	Pressure Transmitter	0	0	1	0
01-PT-04	Pressure Transmitter	0	0	1	0
01-FS-01	Flow Switch	1	0	1	0
01-FS-02	Flow Switch	1	0	1	0
01-LS-01	Level Transmitter (Ultrasonic)	0	0	1	0
TBC	Flow Meter (Magflow) 500	2	0	1	0
Total		4	0	6	0

ANNEXURE C

LOAD LIST

MCC 1 - DOSING BUILDING						
Tag	Description	Rated Power (kW)	Calculated Full Load Current (A)	Voltage (V)	Application	Starting Type
INC-01	Incomer 1	-	63.00	400	-	INC
CTRF-01	Control Transformer	3	6.16	400	-	CTRF
02-XVF-BV04	Inlet Control Valve	0.75	1.62	400	-	FDR
11-DP-01/02	Coagulant Dosing Pumps	0.37	0.83	400	Pumps	FDR
FUTURE	Modulating Actuator	0.75	1.62	400	-	FDR
FUTURE	Coagulant Dosing Pumps 2	0.37	0.83	400	Pumps	FDR
DB-01	MCC Local DB	-	63.00	400	-	FDR
MCC 2 - FILTER PLANT ROOM						
Tag	Description	Rated Power (kW)	Calculated Full Load Current (A)	Voltage (V)	Application	Starting Type
INC-01	Incomer 1	-	250.00	400	-	INC
05-FBP-01	Filter Backwash Motor 1 (Duty)	15	27.96	400	Pumps	VSD
05-FBP-02	Filter Backwash Motor 2 (Duty)	15	27.96	400	Pumps	VSD
05-FBP-03	Filter Backwash Motor 3 (Standby)	15	27.96	400	Standby	VSD
05-BP-01	Blower Motor 1 (Duty)	30	57.12	400	Blowers	DOL
	Blower Motor 1 - Forced Air Cooling Fan	0.37	0.83	400	Fans	DOL
05-BP-02	Blower Motor 2 (Standby)	30	57.12	400	Standby	DOL
	Blower Motor 1 - Forced Air Cooling Fan	0.37	0.83	400	Standby	DOL
03-BS-01	Clarifloculator Bridge Motor 1	0.55	1.23	400	Agitators	DOL
03-BS-02	Clarifloculator Bridge Motor 2	0.55	1.23	400	Agitators	DOL
03-BS-03	Clarifloculator Bridge Motor 3	0.55	1.23	400	Agitators	DOL
03-BS-04	Clarifloculator Bridge Motor 4	0.55	1.23	400	Agitators	DOL
TBC	Shutter Door Motor	0.25	0.56	400	-	FDR
FDR-01	MCC - Filter Building 1	-	63.00	400	-	FDR
FDR-02	MCC - Filter Building 2	-	63.00	400	-	FDR

CTRF-01	Control Transformer	3	6.16	400	Control TRF	CTRF
DB-01	MCC Local DB	-	63.00	400	-	FDR
MCC 2A- FILTER BUILDING 1						
Tag	Description	Rated Power (kW)	Calculated Full Load Current (A)	Voltage (V)	Application	Starting Type
INC-01	Incomer 1	-	63.00	400	-	INC
04-XV-BV01	Filter Bed 1 - Settled water inlet valve	0.75	1.62	400	-	FDR
04-XV-BV02	Filter Bed 1 - Filter outlet valve	0.75	1.62	400	-	FDR
04-XV-BV03	Filter Bed 1 - Backwash Valve	0.75	1.62	400	-	FDR
04-XV-BV04	Filter Bed 1 - Blower Valve	0.75	1.62	400	-	FDR
04-XV-GS01	Filter Bed 1 - Backwash Channel	0.75	1.62	400	-	FDR
04-XV-BV05	Filter Bed 2 - Settled water inlet valve	0.75	1.62	400	-	FDR
04-XV-BV06	Filter Bed 2 - Filter outlet valve	0.75	1.62	400	-	FDR
04-XV-BV07	Filter Bed 2 - Backwash Valve	0.75	1.62	400	-	FDR
04-XV-BV08	Filter Bed 2 - Blower Valve	0.75	1.62	400	-	FDR
04-XV-GS02	Filter Bed 2 - Backwash Channel	0.75	1.62	400	-	FDR
04-XV-BV09	Filter Bed 3 - Settled water inlet valve	0.75	1.62	400	-	FDR
04-XV-BV10	Filter Bed 3 - Filter outlet valve	0.75	1.62	400	-	FDR
04-XV-BV11	Filter Bed 3 - Backwash Valve	0.75	1.62	400	-	FDR
04-XV-BV12	Filter Bed 3 - Blower Valve	0.75	1.62	400	-	FDR
04-XV-GS03	Filter Bed 3 - Backwash Channel	0.75	1.62	400	-	FDR
04-XV-BV13	Filter Bed 4 - Settled water inlet valve	0.75	1.62	400	-	FDR
04-XV-BV14	Filter Bed 4 - Filter outlet valve	0.75	1.62	400	-	FDR
04-XV-BV15	Filter Bed 4 - Backwash Valve	0.75	1.62	400	-	FDR
04-XV-BV16	Filter Bed 4 - Blower Valve	0.75	1.62	400	-	FDR
04-XV-GS04	Filter Bed 4 - Backwash Channel	0.75	1.62	400	-	FDR
CTRF-01	Control Transformer	3	6.16	400	Control TRF	CTRF

DB-01	MCC Local DB	-	63.00	400	-	FDR
MCC 2B- FILTER BUILDING 2						
Tag	Descirption	Rated Power (kW)	Calculated Full Load Current (A)	Voltage (V)	Application	Starting Type
INC-01	Incomer 1	-	63.00	400	-	INC
04-XV-BV17	Filter Bed 1 - Settled water inlet valve	0.75	1.62	400	-	FDR
04-XV-BV18	Filter Bed 1 - Filter outlet valve	0.75	1.62	400	-	FDR
04-XV-BV19	Filter Bed 1 - Backwash Valve	0.75	1.62	400	-	FDR
04-XV-BV20	Filter Bed 1 - Blower Valve	0.75	1.62	400	-	FDR
04-XV-BV21	Filter Bed 2 - Settled water inlet valve	0.75	1.62	400	-	FDR
04-XV-BV22	Filter Bed 2 - Filter outlet valve	0.75	1.62	400	-	FDR
04-XV-BV23	Filter Bed 2 - Backwash Valve	0.75	1.62	400	-	FDR
04-XV-BV24	Filter Bed 2 - Blower Valve	0.75	1.62	400	-	FDR
04-XV-BV25	Filter Bed 3 - Settled water inlet valve	0.75	1.62	400	-	FDR
04-XV-BV26	Filter Bed 3 - Filter outlet valve	0.75	1.62	400	-	FDR
04-XV-BV27	Filter Bed 3 - Backwash Valve	0.75	1.62	400	-	FDR
04-XV-BV28	Filter Bed 3 - Blower Valve	0.75	1.62	400	-	FDR
04-XV-BV29	Filter Bed 4 - Settled water inlet valve	0.75	1.62	400	-	FDR
04-XV-BV30	Filter Bed 4 - Filter outlet valve	0.75	1.62	400	-	FDR
04-XV-BV31	Filter Bed 4 - Backwash Valve	0.75	1.62	400	-	FDR
04-XV-BV32	Filter Bed 4 - Blower Valve	0.75	1.62	400	-	FDR
04-XV-GS05	Filter Bed 1 - Backwash Channel	0.75	1.62	400	-	FDR
04-XV-GS06	Filter Bed 2 - Backwash Channel	0.75	1.62	400	-	FDR

04-XV-GS07	Filter Bed 3 - Backwash Channel	0.75	1.62	400	-	FDR
04-XV-GS08	Filter Bed 4 - Backwash Channel	0.75	1.62	400	-	FDR
CTRF-01	Control Transformer	3	6.16	400	Control TRF	CTRF
DB-01	MCC Local DB	-	63.00	400	-	FDR
MCC 3 - CHLORINE BUILDING						
Tag	Description	Rated Power (kW)	Calculated Full Load Current (A)	Voltage (V)	Application	Starting Type
INC-01	Incomer 1	-	63.00	400	-	INC
12-CHL-xx	Extractor fan on emergency Dry Scrubber	0.55	1.23	400	Fans	DOL
12-CL-01	Chlorinator 1	0.55	1.23	400	-	FDR
12-CL-02	Chlorinator 2	0.55	1.23	400	-	FDR
FUTURE	Chlorinator 1 (Future)	0.55	1.23	400	-	FDR
FUTURE	Chlorinator 2 (Future)	0.55	1.23	400	-	FDR
TBC	Heating Tape 1	0.25	0.56	400	-	FDR
TBC	Heating Tape 2	0.25	0.56	400	-	FDR
TBC	Wall-mounted panel heater	0.55	1.23	400	-	FDR
TBC	Gas Leak detector	0.55	1.23	400	-	FDR
CTRF-01	Control Transformer	3	6.16	400	Control TRF	CTRF
DB-01	MCC Local DB	-	63.00	400	-	FDR
MCC 4- BACKWASH RECYCLING BUILDING						
Tag	Description	Rated Power (kW)	Calculated Full Load Current (A)	Voltage (V)	Application	Starting Type
INC-01	Incomer 1	-	100.00	400	-	INC

08-RBP-01	Back wash recyc Motor 1 (Duty)	7.5	10.42	400	Pumps	VSD
08-RBP-02	Back wash recyc Motor 2 (Duty)	7.5	10.42	400	Pumps	VSD
08-RBP-03	Back wash recyc Motor 3 (Standby)	7.5	10.42	400	Pumps	VSD
08-AP-01	Backwash Storage Tank Mixer 1	7.5	14.24	400	Agitators	DOL
08-AP-02	Backwash Storage Tank Mixer 2	7.5	14.24	400	Agitators	DOL
TBC	Shutter Door Motor	0.25	0.56	400	-	FDR
CTRF-01	Control Transformer	3	6.16	400	Control TRF	CTRF
DB-01	MCC Local DB	-	63.00	400	-	FDR
MCC 5A - CLEAR WATER PUMP STATION						
Tag	Descirption	Rated Power (kW)	Calculated Full Load Current (A)	Voltage (V)	Application	Starting Type
INC-01	Incomer 1	-	4000.00	400	-	INC
07-P-01	Rosedale Pump 1 (Duty)	500	882.71	400	Pumps	SS
07-P-02	Rosedale Pump 2 (Duty)	500	882.71	400	Pumps	SS
07-P-03	Rosedale Pump 3 (Standby)	500	882.71	400	Standby	SS
BUS-01	Bus Section 1	-	4000.00	400	-	-
INC-02	Incomer 2 (Future)	-	4000.00	400	-	INC
FUTURE	Rosedale Pump 4 (Future)	500	882.71	400	Pumps	SS
FUTURE	Rosedale Pump 5 (Future)	500	882.71	400	Pumps	SS
FUTURE	Rosedale Pump 6 (Future)	500	882.71	400	Standby	SS
BUS-02	Bus Section 2	-	4000.00	400	-	-
MCC 5B - CLEAR WATER PUMP STATION						
Tag	Descirption	Rated Power (kW)	Calculated Full Load Current (A)	Voltage (V)	Application	Starting Type
INC-03	Incomer 3	-	4000.00	400	-	INC

07-P-04	Nqadu Water Pump 1 (Duty)	200	346.05	400	Pumps	SS
07-P-05	Nqadu Water Pump 2 (Standby)	200	346.05	400	Standby	SS
07-P-06 to P16	FRESH AIR AND EXTRACTION FANS FOR HVAC	11 X 1.5	16.5	400	HVAC	DOL
01-FDR-01	MCC 1 - DOSING BUILDING	-	63.00	400	-	FDR
01-FDR-02	MCC 2 - FILTER PLANT ROOM	-	250.00	400	-	FDR
01-FDR-03	MCC 3 - CHLORINE BUILDING	-	80.00	400	-	FDR
01-FDR-04	MCC 4 -BACKWASH RECYCLING BUILDING	-	100.00	400	-	FDR
01-FDR-05	MCC 7 - SUPERNATANT PUMP STATION	-	125.00	400	-	FDR
01-FDR-06	MCC 6 - SLUDGE DEWATERING	-	160.00	400	-	FDR
01-FDR-07	Workshop and Storage Building	-	63.00	400	-	FDR
01-FDR-09	MCC 8 - FILTER PLANT ROOM (Future)	-	250.00	400	-	FDR
01-FDR-10	MCC 9 - BACKWASH RECYCLING BUILDING (Future)	-	100.00	400	-	FDR
01-FDR-11	MCC 10 - SUPERNATANT PUMP STATION (Future)	-	125.00	400	-	FDR
01-FDR-12	MCC 11 - SLUDGE DEWATERING (Future)	-	160.00	400	-	FDR
CTRF-01	Control Transformer	3	6.16	400	Control TRF	CTRF
DB-01	MCC Local DB	-	63.00	400	-	FDR
MCC 6 - SLUDGE DEWATERING						
Tag	Description	Rated Power (kW)	Calculated Full Load Current (A)	Voltage (V)	Application	Starting Type
INC-01	Incomer 1	-	63.00	400	-	INC
TBC	Sludge feed pump 1	5.5	10.42	400	Pumps	VSD
TBC	Sludge feed pump 2	5.5	10.42	400	Pumps	VSD
TBC	Dehydrator Unit 1	7.5	14.24	400	-	FDR
TBC	Dehydrator Unit 2	7.5	14.24	400	-	FDR
TBC	Screw conveyor 1	1.5	3.17	400	Conveyors	DOL
TBC	Screw conveyor 2	1.5	3.17	400	Conveyors	DOL
CTRF-01	Control Transformer	3	6.16	400	Control TRF	CTRF
DB-01	MCC Local DB	-	63.00	400	-	FDR

MCC 7 - SUPERNATANT PUMP STATION						
Tag	Descirption	Rated Power (kW)	Calculated Full Load Current (A)	Voltage (V)	Application	Starting Type
INC-01	Incomer 1	-	125.00	400	-	INC
08-AP-01	Sludge Storage Tank Mixer 1	7.5	14.24	400	Agitators	DOL
08-AP-02	Sludge Storage Tank Mixer 2	7.5	14.24	400	Agitators	DOL
08-AP-03	Sludge Storage Tank Mixer 3	7.5	14.24	400	Agitators	DOL
08-AP-04	Sludge Storage Tank Mixer 4	7.5	14.24	400	Agitators	DOL
10-SRP-01	Supernatant Return Pump 1 (Duty)	11	20.91	400	Pumps	DOL
10-SRP-02	Supernatant Return Pump 2 (Standby)	11	20.91	400	Pumps	DOL
CTRF-01	Control Transformer	3	6.16	400	Control TRF	CTRF
DB-01	MCC Local DB	-	63.00	400	-	FDR
MCC - TEMPORARY RAW WATER PUMP STATION						
Tag	Descirption	Rated Power (kW)	Calculated Full Load Current (A)	Voltage (V)	Application	Starting Type
INC-01	Incomer 1	-	1000.00	400	-	INC
01-TEP-01	Temporary Raw Water pump 1 (Duty)	200	346	400	Pumps	SS
01-TEP-02	Temporary Raw Water pump 2 (Duty)	200	346	400	Pumps	SS
01-TEP-03	Temporary Raw Water pump 3 (Duty)	200	346	400	Pumps	SS
DB-01	MCC Local DB	-	63.00	400	-	FDR