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NOTES:
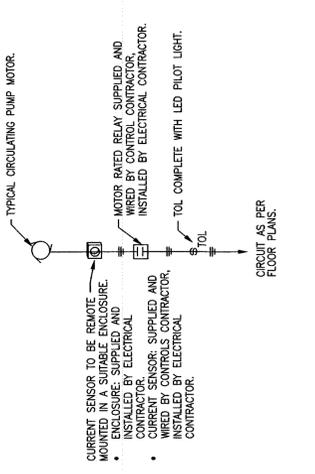1. SUGGESTED LENGTH, FINAL LENGTH SHALL BE CONFIRMED ON SITE.

HEAT TRACING SCHEDULE

HEATING CABLE DESIGNATION	PIPE DESIGNATION	LOCATION	PIPE SIZE / TYPE	PIPE LENGTH	MAINTAINING TEMPER.	MIN. AMBIENT TEMPERATURE	HEATING CABLE LENGTH	HEATING CABLE	VOLTAGE	LOAD	FEEDER SIZE	PANEL	CONTROL PANEL	POWER CONNECTION KIT	END SEAL	HEAT TRACE RATIO	LABEL	ALUMINUM TAPE	COMMENTS
DCW-HT1	DOMESTIC COLD WATER	MARGINAL WHARF NORTH TUNNEL	103mm, 53mm HDPE	86m	4°C	-29°C	105m	SELF REGULATED	208V	1.6KW	P73	PANEL DD, CCT# 2, 4 CIRCUIT BREAKER 30A, 2P	PANEL HTCP1	DCW-PK1	DCW-ES1	ONE (1)	YES	AS REQUIRED	
DCW-HT2	DOMESTIC COLD WATER	MARGINAL WHARF SOUTH TUNNEL	103mm, 53mm HDPE	103m	4°C	-29°C	115m	SELF REGULATED	208V	1.89KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 6, 8 CIRCUIT BREAKER 30A, 2P	PANEL HTCP1	DCW-PK2	DCW-ES2	ONE (1)	YES	AS REQUIRED	
DCW-HT3	DOMESTIC COLD WATER	MARGINAL WHARF SOUTH TUNNEL	103mm, 53mm HDPE	87m	4°C	-29°C	115m	SELF REGULATED	208V	1.75KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 10, 12 CIRCUIT BREAKER 30A, 2P	PANEL HTCP1	DCW-PK3	DCW-ES3	ONE (1)	YES	AS REQUIRED	
DCW-HT4	DOMESTIC COLD WATER	FINGER WHARF SOUTH TUNNEL	53 mm HDPE	76m	4°C	-29°C	81m	SELF REGULATED	208V	1.52KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 14, 16 CIRCUIT BREAKER 30A, 2P	PANEL HTCP1	DCW-PK4	DCW-ES4	ONE (1)	YES	AS REQUIRED	
DCW-HT5	DOMESTIC COLD WATER	FINGER WHARF SOUTH TUNNEL	53 mm HDPE	80m	4°C	-29°C	97m	SELF REGULATED	208V	1.59KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 18, 20 CIRCUIT BREAKER 30A, 2P	PANEL HTCP1	DCW-PK5	DCW-ES5	ONE (1)	YES	AS REQUIRED	
DCW-HT6	DOMESTIC COLD WATER	FINGER WHARF SOUTH TUNNEL	53 mm HDPE	61m	4°C	-29°C	85m	SELF REGULATED	208V	1.24KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 1, 3 CIRCUIT BREAKER 30A, 2P	PANEL HTCP2	DCW-PK6	DCW-ES6	ONE (1)	YES	AS REQUIRED	
DCW-HT7	DOMESTIC COLD WATER	FINGER WHARF NORTH TUNNEL	53 mm HDPE	78m	4°C	-29°C	81m	SELF REGULATED	208V	1.55KW	P78	PANEL DD, CCT# 5, 7 CIRCUIT BREAKER 30A, 2P	PANEL HTCP1	DCW-PK7	DCW-ES7	ONE (1)	YES	AS REQUIRED	
DCW-HT8	DOMESTIC COLD WATER	FINGER WHARF NORTH TUNNEL	53 mm HDPE	82m	4°C	-29°C	98m	SELF REGULATED	208V	1.63KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 9, 11 CIRCUIT BREAKER 30A, 2P	PANEL HTCP1	DCW-PK8	DCW-ES8	ONE (1)	YES	AS REQUIRED	
DCW-HT9	DOMESTIC COLD WATER	FINGER WHARF NORTH TUNNEL	53 mm HDPE	63m	4°C	-29°C	85m	SELF REGULATED	208V	1.28KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 13, 15 CIRCUIT BREAKER 30A, 2P	PANEL HTCP2	DCW-PK9	DCW-ES9	ONE (1)	YES	AS REQUIRED	
REC-HT1	RECIRCULATING COLD WATER	MARGINAL WHARF NORTH TUNNEL	25mm HDPE	101m	4°C	-29°C	103m	SELF REGULATED	208V	2.02KW	P74	PANEL DD, CCT# 17, 19 CIRCUIT BREAKER 30A, 2P	PANEL HTCP1	REC-PK1	REC-ES1	ONE (1)	YES	AS REQUIRED	
REC-HT2	RECIRCULATING COLD WATER	MARGINAL WHARF SOUTH TUNNEL	25mm HDPE	101m	4°C	-29°C	104m	SELF REGULATED	208V	2.02KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 21, 23 CIRCUIT BREAKER 30A, 2P	PANEL HTCP1	REC-PK2	REC-ES2	ONE (1)	YES	AS REQUIRED	
REC-HT3	RECIRCULATING COLD WATER	FINGER WHARF SOUTH TUNNEL	25mm HDPE	96m	4°C	-29°C	98m	SELF REGULATED	208V	1.93KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 22, 24 CIRCUIT BREAKER 30A, 2P	PANEL HTCP1	REC-PK3	REC-ES3	ONE (1)	YES	AS REQUIRED	
REC-HT4	RECIRCULATING COLD WATER	FINGER WHARF SOUTH TUNNEL	25mm HDPE	91.5m	4°C	-29°C	95m	SELF REGULATED	208V	1.83KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 26, 28 CIRCUIT BREAKER 30A, 2P	PANEL HTCP2	REC-PK4	REC-ES4	ONE (1)	YES	AS REQUIRED	
REC-HT5	RECIRCULATING COLD WATER	FINGER WHARF SOUTH TUNNEL	25mm HDPE	91.5m	4°C	-29°C	95m	SELF REGULATED	208V	1.83KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 30, 32 CIRCUIT BREAKER 30A, 2P	PANEL HTCP2	REC-PK5	REC-ES5	ONE (1)	YES	AS REQUIRED	
REC-HT6	RECIRCULATING COLD WATER	MARGINAL WHARF NORTH TUNNEL	25mm HDPE	97m	4°C	-29°C	99m	SELF REGULATED	208V	1.95KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 34, 36 CIRCUIT BREAKER 30A, 2P	PANEL HTCP2	REC-PK6	REC-ES6	ONE (1)	YES	AS REQUIRED	
REC-HT7	RECIRCULATING COLD WATER	FINGER WHARF SOUTH TUNNEL	25mm HDPE	94m	4°C	-29°C	97m	SELF REGULATED	208V	1.87KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 38, 40 CIRCUIT BREAKER 30A, 2P	PANEL HTCP2	REC-PK7	REC-ES7	ONE (1)	YES	AS REQUIRED	
REC-HT8	RECIRCULATING COLD WATER	FINGER WHARF NORTH TUNNEL	25mm HDPE	94m	4°C	-29°C	97m	SELF REGULATED	208V	1.87KW	WIRE SIZE 2#6 + #8 BOND IN 27 PVC CONDUIT	PANEL DD, CCT# 42, 44 CIRCUIT BREAKER 30A, 2P	PANEL HTCP1	REC-PK8	REC-ES8	ONE (1)	YES	AS REQUIRED	
HT10	EXISTING FIRE WATER	FINGER WHARF SOUTH TUNNEL						EXISTING HEAT TRACING SYSTEMS TO REMAIN				PANEL DD, CCT# 25, 27 CIRCUIT BREAKER 30A, 2P	PANEL HTCP1	EXISTING HEAT TRACING SYSTEMS TO REMAIN					
HT11	EXISTING FIRE WATER	FINGER WHARF SOUTH TUNNEL						EXISTING HEAT TRACING SYSTEMS TO REMAIN				PANEL DD, CCT# 29, 31 CIRCUIT BREAKER 30A, 2P	PANEL HTCP2	EXISTING HEAT TRACING SYSTEMS TO REMAIN					
HT2-1	EXISTING FIRE WATER	FINGER WHARF SOUTH TUNNEL						EXISTING HEAT TRACING SYSTEMS TO REMAIN				PANEL DD, CCT# 33, 35 CIRCUIT BREAKER 30A, 2P	PANEL HTCP2	EXISTING HEAT TRACING SYSTEMS TO REMAIN					
HT9	EXISTING ROOM HEATER	BACKFLOW PREVENTER ROOM						EXISTING HEAT TRACING SYSTEMS TO REMAIN				PANEL DD, CCT# 37, 39 CIRCUIT BREAKER 15A, 2P	PANEL HTCP1	EXISTING HEAT TRACING SYSTEMS TO REMAIN					

SCHEMATIC – RECIRCULATING PUMPS P1&P2 (1 / E-106)
SCALE : NTS

- CURRENT SENSOR TO BE REMOTE MOUNTED IN A SUITABLE ENCLOSURE. ENCLOSURE SUPPLIED AND INSTALLED BY CONTROL ELECTRICAL CONTRACTOR. CURRENT SENSOR, SUPPLIED AND WIRED BY CONTROLS CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.
- TYPICAL CIRCULATING PUMP MOTOR.
- MOTOR RATED RELAY SUPPLIED AND WIRED BY CONTROL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.
- TOL COMPLETE WITH LED PILOT LIGHT.
- TOL.
- CIRCUIT AS PER FLOOR PLANS.

PANEL DD SCHEDULE (2 / E-106)
SCALE : NTS

Panel: "DD"
Location: WARF ELEC. BLD.
Type: CSA Type 1
Mounting: Surface
Feeder: Re-existing
Frame:
Size: 225A, 208/120 V 3Ph, 4W.
Rating: 225A 208/120 V 3Ph, 4W

No.	Brk.	Description	Load	Phase		Load	Description	Brk.	No.
1	30A/2P	Heating circuit DCW-HT1	0.62	A	0.800	Heating circuit DCW-HT8	30A/2P	2
3			0.62	B	0.800			4
5	30A/2P	Heating circuit DCW-HT7	0.775	C	0.945	Heating circuit DCW-HT2	30A/2P	6
7			0.775	A	0.945			8
9	30A/2P	Heating circuit DCW-HT3	0.815	B	0.875	Heating circuit DCW-HT3	30A/2P	10
11			0.815	C	0.875			12
13	30A/2P	Heating circuit DCW-HT4	0.84	A	0.780	Heating circuit DCW-HT4	30A/2P	14
15			0.84	B	0.780			16
17	30A/2P	Heating circuit DCW-HT5	0.800	C	0.965	Heating circuit REC-HT1	30A/2P	18
19			0.800	A	0.965			20
21	30A/2P	Heating circuit REC-HT1	1.01	B	0.985	Heating circuit REC-HT2	30A/2P	22
23			1.01	C	0.985			24
25	30A/2P	Existing Heating circuit HT10	1	A	0.915	Heating circuit REC-HT4	30A/2P	26
27			1	B	0.915			28
29	30A/2P	Existing Heating circuit HT11	1	C	0.975	Heating circuit REC-HT7	30A/2P	30
31			1	A	0.975			32
33	15A/2P	Existing Heating circuit HT2-1		B	0.935	Heating circuit REC-HT8	30A/2P	34
35		Existing controller HTCP1	0.5	C	0.935			36
37	15A/1P	New Controller HTCP1	0.5	A	0.6	Existing controller HTCP2	15A/1P	38
39	15A/1P	Existing Load (outside plug)	0.5	B	0.6	Existing load (Fuel Tank)	15A/1P	40
41	15A/1P	Existing load (Room Lighting)	0.5	C	0.6	Existing load	15A/1P	42
43	15A/1P	Existing Load (outside plug)	0.5	A	0.6	Existing Load	15A/1P	44
45	15A/1P	Existing Load (outside plug)	0.5	B	0.6	Existing Load	15A/1P	46
47	15A/1P	Existing Load (outside plug)	0.5	C	0.6	DDC Panel	30A/2P	48
49	30A/2P	Existing Load	0.5	A	0.6	spare	15A/1P	50
51		spare		B	0.6	spare	15A/1P	52
53	15A/1P	spare		C			20A/1P	54
55	15A/3P	RECIRCULATING PUMP	0.420	A	0.420	RECIRCULATING PUMP	15A/3P	56
57			0.420	B	0.420			58
59			0.420	C				60

Phase "A" Total kVA: 16.810
Phase "B" Total kVA: 16.650
Phase "C" Total kVA: 15.780
Total kVA

Notes:
* - Indicates Breaker To Be Complete With Handle Locking Device.