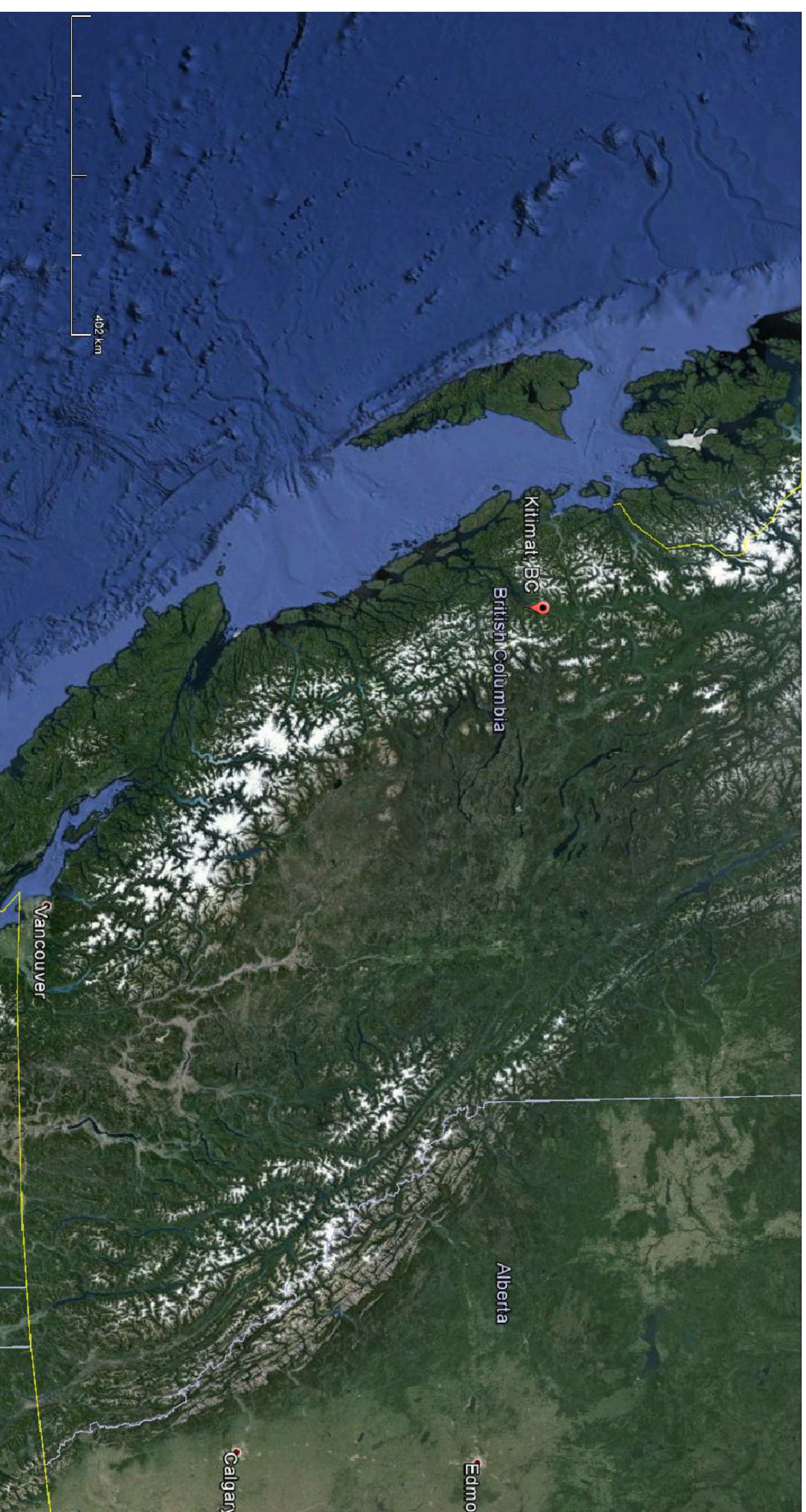


FISHERIES AND OCEANS CANADA
 REAL PROPERTY AND TECHNICAL SUPPORT

KITIMAT - RIVER HATCHERY OFFICE HEATING SYSTEM

283 HAISLA BLVD KITIMAT, BC

MECHANICAL DRAWING LIST			
DRAWING NO.	TITLE PAGE	DESCRIPTION	SCALE
M0.01			NOT TO SCALE
M0.02	DRAWING NOTES AND SYMBOL SCHEDULE		NOT TO SCALE
M1.01		MECHANICAL PLAN - DEMOLITION	1:100
M1.02		MECHANICAL PLAN - NEW CONSTRUCTION	1:50



2 KITIMAT FISH HATCHERY – BC MAP
 M0.01 SCALE: NOT TO SCALE



1 KITIMAT FISH HATCHERY – SITE PLAN
 M0.01 SCALE: NOT TO SCALE

DWG. NO.	DRAWING REFERENCES

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 604-273-8888
 www.amegroup.com

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PROJECT ADDRESS:
 KITIMAT RIVER HATCHERY
 KITIMAT BLVD
 KITIMAT BC
 V8C 2G7

NO.	DATE	REVISIONS
1	24-JAN-15	ISSUED FOR TENDER
2	24-JAN-15	ISSUED FOR TENDER
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FISHERIES AND OCEANS CANADA
 REAL PROPERTY AND TECHNICAL SUPPORT

KITIMAT - RIVER HATCHERY
 OFFICE AREA HEATING SYSTEM
 TITLE PAGE

SCALE	AS SHOWN
M0.01	NOT TO SCALE

MECHANICAL ABBREVIATIONS			
AD	AREA DRAIN	HWR	HEATING WATER RETURN
AFT	ABOVE FINISHED FLOOR	HWS	HEATING WATER SUPPLY
AHU	AIR HANDLING UNIT	ID	INSIDE DIAMETER
BDD	BACKDRIFT DAMPER	INV	INVERT
BHP	BREAK HORSEPOWER	KW	KILOWATT
CD	CONTROL DAMPER	LWB	LEAKING AIR DRY BULB
CFM	CUBIC FEET PER MINUTE	LAI	LEAKING AIR TEMPERATURE
C/W	COMPLETE WITH	LWB	LEAKING AIR WE BULB
DB	DRY BULB	LES	LEANS
CE	CONNECT TO EXISTING	MAK	MAXIMUM
CCW	CONNECT TO EXISTING COOL WATER	MD	MOTORIZED DAMPER
DC	DIRECT DIGITAL CONTROL	MCH	MECHANICAL
DEG	DEGREE	MNS	MINIMUM
DHW	DOMESTIC HOT WATER	NYS	NOT TO SCALE
DN	DAMPER	O/A	OUTDOOR AIR
DN	DOWN	OBD	OPPOSED BLOW DAMPER
DNG	DRAINING	OD	OPEN END/DOOR
DNR	DOMESTIC HOT WATER RECIRCULATION	OS	OPEN SHUTTER
E/A	EXHAUST AIR	PS	POUNDS PER SQUARE INCH
EAB	EXHAUST AIR DRY BULB	R/A	RETURN AIR
EXR	EXHAUST AIR TEMPERATURE	R/R	RETURN AIR
EWB	EXHAUST AIR WE BULB	RPM	REVOLUTIONS PER MINUTE
EFF	EFFICIENCY	RWL	RADIANT WATER LEADER
ELIC	ELECTRICAL	S/A	SUPPLY AIR
ESP	EXTERNAL STATIC PRESSURE	SS	SUPPLY AIR
EZH	EXHAUST	SP	SPRINKLER
FD	FLOORS DRAIN	SS	STAINLESS STEEL
FE	FIRE EXTINGUISHER	SP	STEEL
FLA	FULL LOAD AMPS	SPEC	SPECIFICATION
FTR	FLOOR	T/A	TRANSFER AIR DUCT
FT	FEET PER MINUTE	TB	TO BE CONTINUED
FT	FEET/FOOT	TBU	TYPICAL
FM	FLOORS	TBU	TYPICAL
FS	FEET/FOOT	TSP	TYPICAL
GA	GALLONS	TY	TYPICAL
GPM	GALLONS PER MINUTE	W/S	WET BULB
HORSEPOWER		W/S	WET BULB

EQUIPMENT TAG	SERVICE	TYPE	MOUNTING TYPE	POWER	REMARKS
EH-1	STORGE LOBBY	ELECTRIC	CEILING MOUNTED	208/1/60	ALL

NOTES:
1. COLOUR WHITE
2. C/W ADAPTER FOR T-BAR CEILING
3. RECESSED IN CEILING
4. THE INTD BUILDING CONTROL SYSTEM

EQUIPMENT TAG	DESCRIPTION/TYP	SERVICE	REMARKS
SC-1	ROUND DUCT SUPPLY GRILLE	SUPPLY AIR	ALL
RG-1	ROUND DUCT RETURN GRILLE	RETURN AIR	ALL

NOTES:
1. PROVIDE DIFFUSERS AND GRILLES WITH ROBBER STYLES THAT ARE COMPATIBLE WITH ADJACENT WALLS AND CEILING SYSTEMS.
2. NC LEVELS BASED ON OC/NM BANDS 2-7. SOUND POWER LEVELS MINUS A ROOM ABSORPTION OF 10 DB. MEASURED PER ASHRAE 70-91.

EQUIPMENT TAG	LOCATION	SERVICE	CAPACITY (KW)	POWER (V/PH/Hz)	AIRFLOW (L/S)	EAT (DEG. C)	EAT (DEG. C)	LAT (L/PH IN)	NOTES
EH-1	MECHANICAL/ELECTRICAL	AH-5	11	208/1/60	830	15.5	27.8	600X450	ALL
DH-1	OFFICE 1	OFFICE 1	4	208/1/60	140	12.7	32.2	342.9X254	ALL
DH-2	LUNCH RM	LUNCH RM	3	208/1/60	110	12.7	32.2	342.9X254	ALL
DH-3	STAFF FEMALE	STAFF FEMALE	2	208/1/60	80	12.7	32.2	292.1X203.2	ALL
DH-4	STAFF MALE	STAFF MALE	2	208/1/60	80	12.7	32.2	292.1X203.2	ALL
DH-5	LOBBY	LOBBY	1	208/1/60	45	12.7	32.2	292.1X203.2	ALL
DH-6	OFFICE 3	OFFICE 3	3	208/1/60	90	12.7	32.2	342.9X254	ALL
DH-7	WET LAB	WET LAB	3	208/1/60	110	12.7	32.2	342.9X254	ALL
DH-8	DRY LAB	DRY LAB	3	208/1/60	110	12.7	32.2	342.9X254	ALL
DH-9	OFFICE 2	OFFICE 2	2	208/1/60	85	12.7	32.2	292.1X203.2	ALL

NOTES:
1. C/W SCR TYPE CONTROLLER, AIR PROWING SWITCH & HIGH TEMP. LIMIT.
2. BUILT-IN TRANSDUCER.
3. SUP-IN DUCT MOUNTED HEATER.
4. BUILT-IN AIR FLOW SENSOR.
5. 2" AIR DUCT MOUNTED HEATER.
6. C/W SCREENS ON BOTH SIDES OF COIL.
7. BUILT-IN DISCONNECT.
8. THE INTD BUILDING CONTROL SYSTEM.

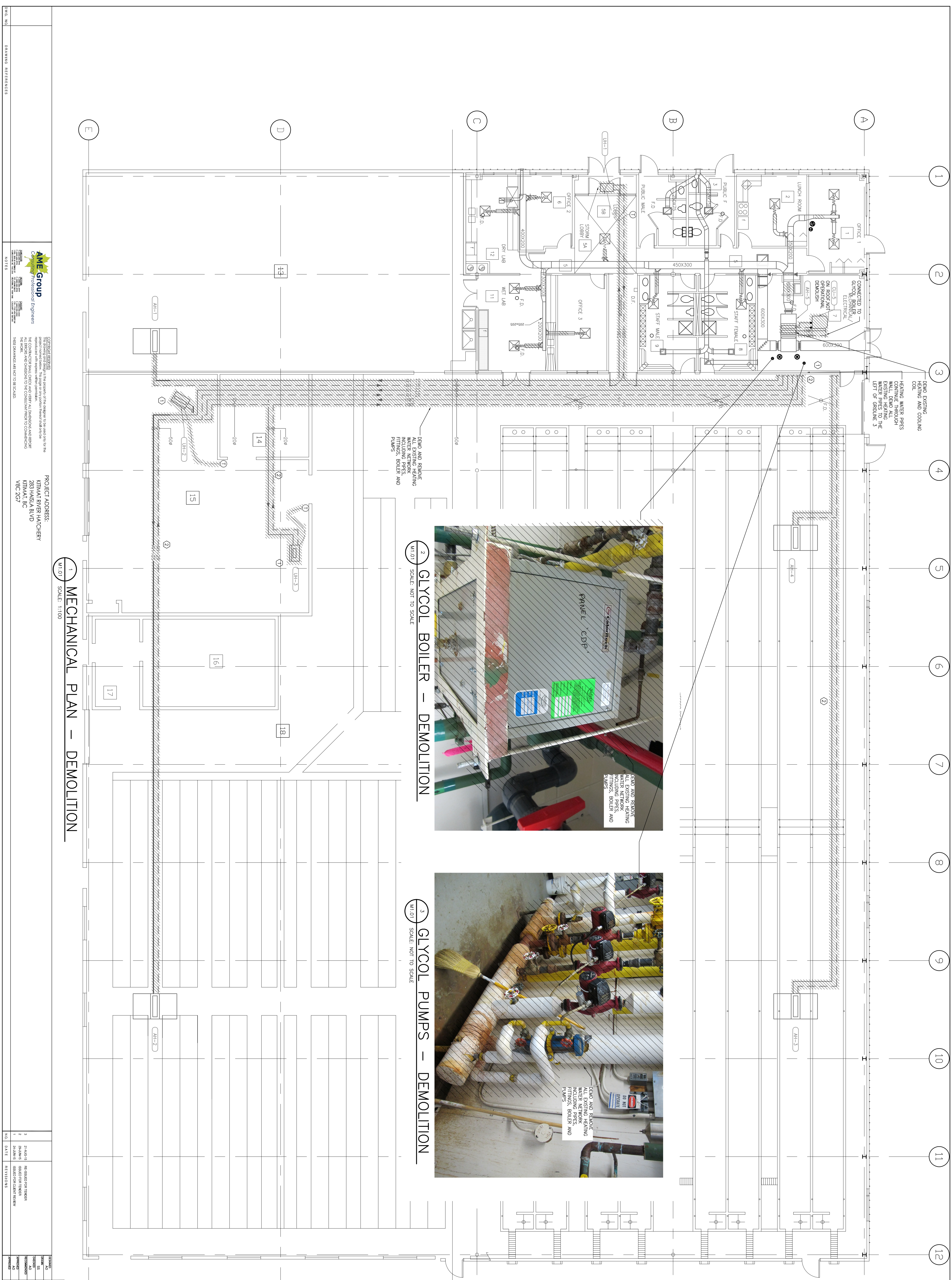
EQUIPMENT TAG	DESCRIPTION/TYP	SUPPLY TAN VOLUME (L/S)	ESP (IN)	MCA	MOTOR SUPPLY	POWER SUPPLY	HEATING SECTION INPUT (DEG. C)	OUTPUT (DEG. C)	EAT. DB (DEG. C)	L.A.T. DB (DEG. C)	NOTES
F-1	GAS FIRED FURNACE - HORIZONTAL DISCHARGE - CEILING MOUNTED	660	128	10.8	0.5	150/1/60	15.2	23.4	15.2	37	ALL

NOTES:
1. SINGLE POINT CONNECTION TO UNIT
2. THE INTD BUILDING CONTROL SYSTEM
3. COMPLETE WITH MANUFACTURER RECOMMENDED FUEL PIPING

EQUIPMENT TAG	LOCATION	INDOOR UNIT	OUTDOOR UNIT	TYPE	TOTAL CLG CAP (KW)	AIR FLOW (LPS)	WORKING FLUID	COOLING COIL DESIGN CONDITIONS	HEATING COIL DESIGN CONDITIONS	NOTES
HP-1	MECHANICAL	INDOOR UNIT	OUTDOOR UNIT	SHIP	10.5	660	R-134A	EABR (°C) 17.2 EABW (°C) 12.8	EABR (°C) 11.9 EABW (°C) 15.5	ALL 1,2,3

NOTES:
1. UNITS TO BE SINGLE POINT POWER CONNECTION
2. THE INTD BUILDING CONTROL SYSTEM
3. PROVIDE 25MM COPPER CONDENSATE DRAIN
4. COIL TO FIT INTO EXISTING AH-5, 600X450MM IN DIMENSION. CONTRACTOR TO CONFIRM ON SITE

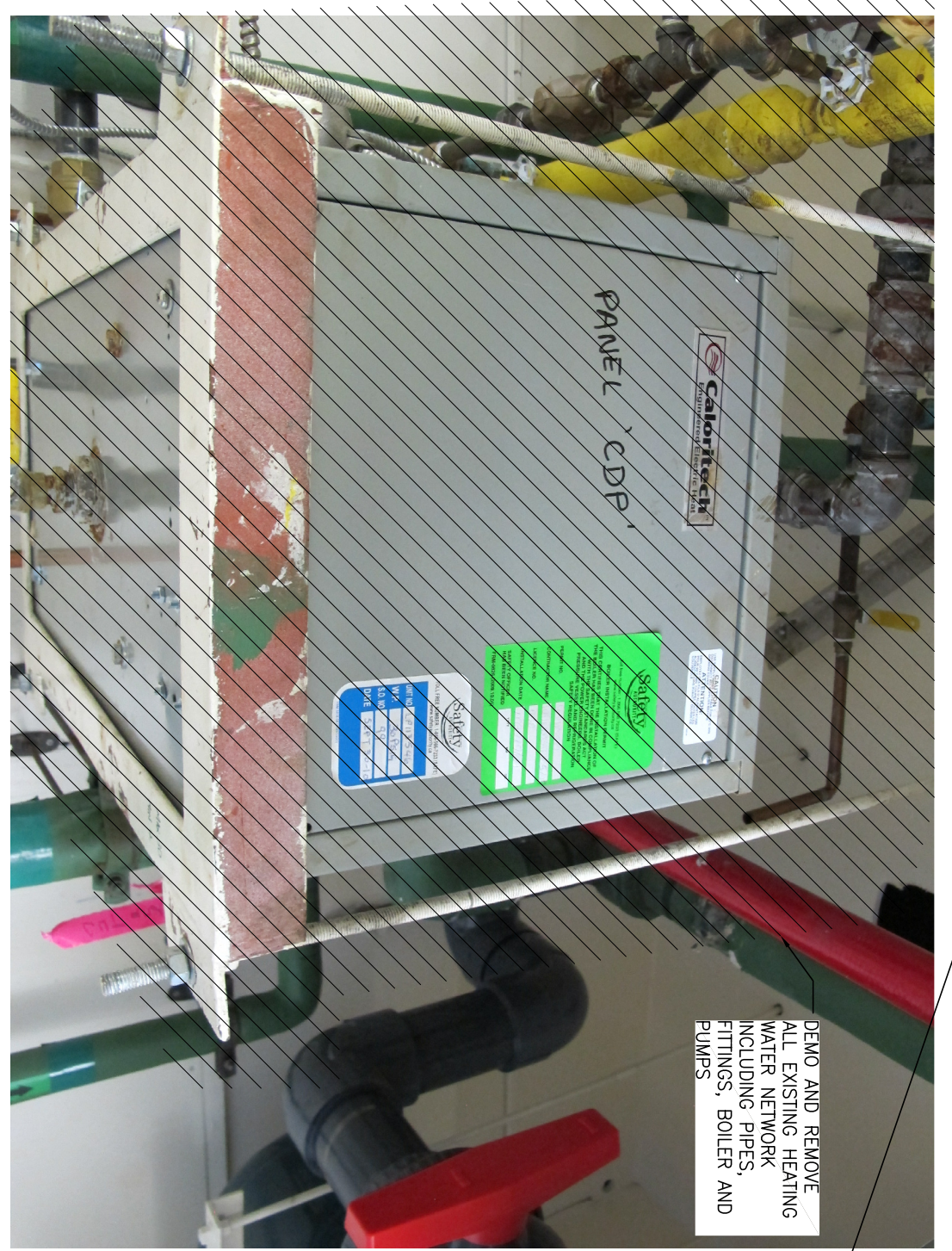
DRAWING REFERENCES	AME Group		PROJECT ADDRESS: KINMA RIVER/HATCHERY KIDULAT BLVD KIDULAT BC VRC 2027
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	CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT THE CONTRACTOR TO THE ARCHITECT WITHIN 14 DAYS OF RECEIVING THE WORK.		
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NOTES			SCALE: AS SHOWN DATE: REVISIONS: MO. 02



DEMO EXISTING HEATING AND COOLING SINK

HEATING WATER PIPES CONDUIT THROUGH EXISTING HEATING WATER PIPES TO THE LEFT OF GRIDLINE 3

DEMO AND REMOVE ALL EXISTING HEATING WATER NETWORK INCLUDING PIPES, FITTINGS, BOILER AND PUMPS



2 GLYCOL BOILER — DEMOLITION
M1.01 SCALE: NOT TO SCALE



3 GLYCOL PUMPS — DEMOLITION
M1.01 SCALE: NOT TO SCALE

KEY NOTES

1 CONTRACTOR TO DEMOLISH ALL HEATING WATER INFRASTRUCTURE INCLUDING, BUT NOT LIMITED TO, PIPES, FITTINGS, BOILER AND PUMPS TO THE LEFT OF GRIDLINE 3 AS WELL AS UH-2 AND UH-3

2 CONTRACTOR TO DEMO HEATING WATER PIPING EAST OF GRIDLINE 3.

1 MECHANICAL PLAN — DEMOLITION
M1.01 SCALE: 1:100

AME Group
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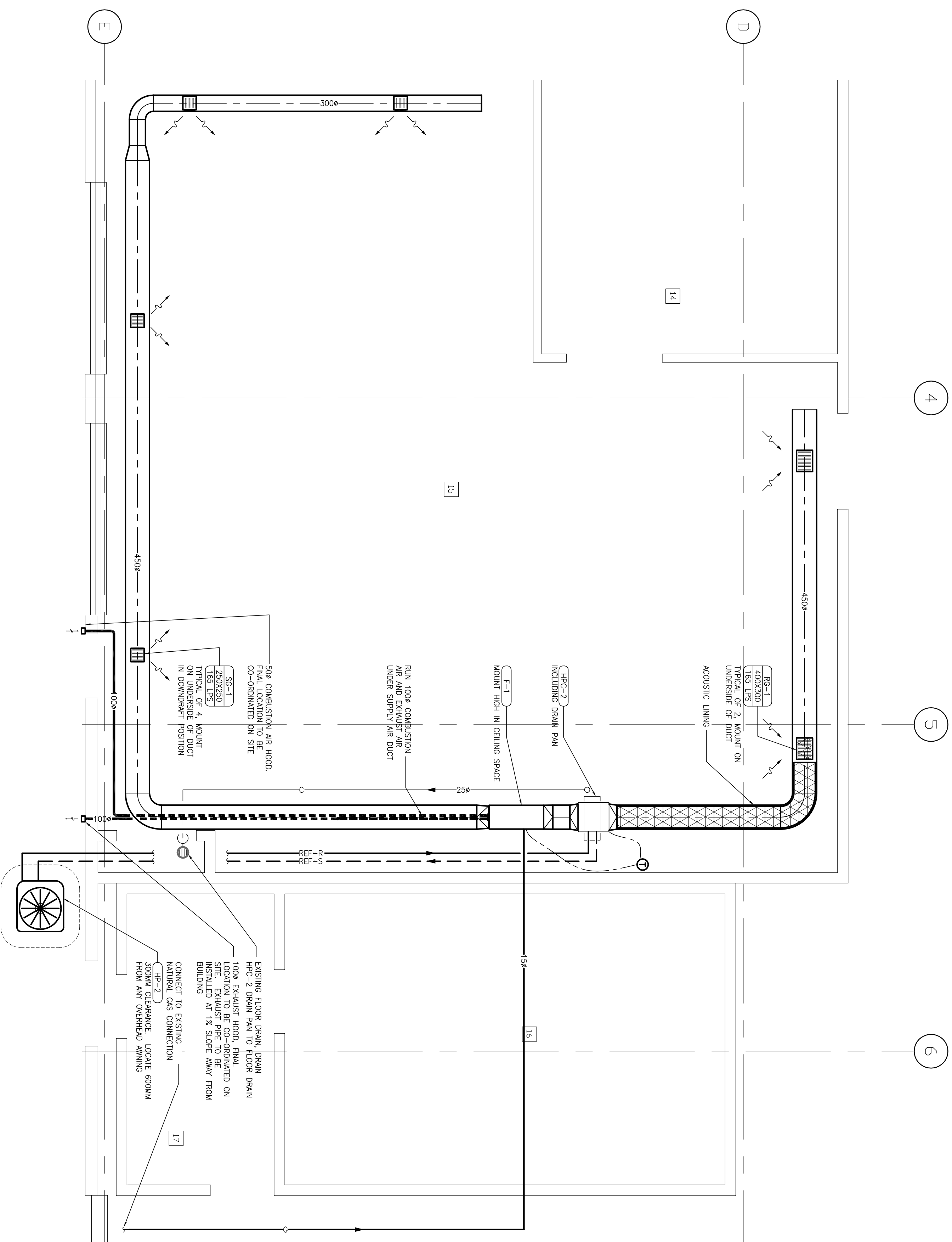
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KITMAT BLVD
KITMAT BC
V8C 2G7

NO.	DATE	REVISIONS
1	24.JAN.15	ISSUED FOR CLIENT REVIEW
2	24.JAN.15	REVISION FOR TENDER
3	27.AUG.15	REVISION FOR TENDER

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NATIONAL SCIENCE AND TECHNOLOGY SERVICE

**KITMAT - RIVER HATCHERY
OFFICE AREA HEATING SYSTEM
MECHANICAL PLAN -
DEMOLITION**

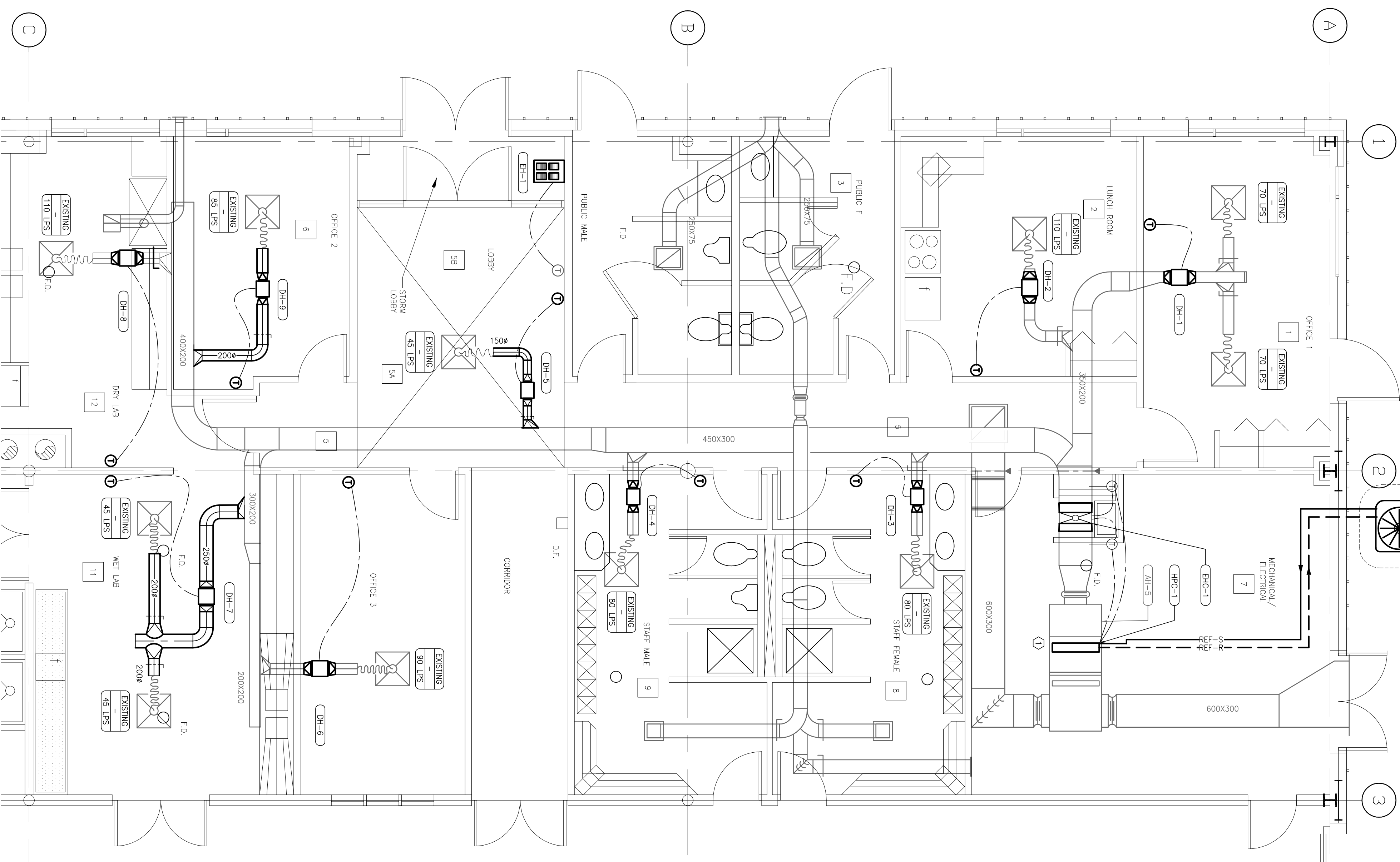
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DATE: 2015
REVISION: NUMBER
M1.01
REVISION



1 SHOP MECHANICAL PLAN - NEW CONSTRUCTION
M1.02 SCALE: 1:30

KEY NOTES

1 CONTRACTOR TO SERVICE AH-5 INCLUDING, BUT NOT LIMITED TO, CHANGE FILTERS AND CHECK BEENS AS PART OF THE MECHANICAL SCOPE OF WORK.



2 OFFICE MECHANICAL PLAN - NEW CONSTRUCTION
M1.03 SCALE: 1:50

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PROJECT ADDRESS:
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3	24-MAR-15	REVISION FOR CHANGE

ISSUES

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2	24-MAR-15	REVISION FOR CHANGE
3	24-MAR-15	REVISION FOR CHANGE

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FISHERIES AND OCEANS CANADA
REAL PROPERTY AND TECHNICAL SUPPORT
KITIMAT - RIVER HATCHERY
OFFICE AREA HEATING SYSTEM
MECHANICAL PLAN -
NEW CONSTRUCTION

DATE
21-MAR-15
DRAWING NUMBER
M1.02
REVISION