



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Public Works and Government Services Canada
ATB Place North Tower
10025 Jasper Ave./10025 ave. Jasper
5th floor/5e étage
Edmonton
Alberta
T5J 1S6
Bid Fax: (780) 497-3510

**SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

**Vendor/Firm Name and Address
Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution
Public Works and Government Services Canada
ATB Place North Tower
10025 Jasper Ave./10025 ave Jasper
5th floor/5e étage
Edmonton
Alberta
T5J 1S6

Title - Sujet AAFC Facility System Renovation	
Solicitation No. - N° de l'invitation EP922-172162/B	Amendment No. - N° modif. 002
Client Reference No. - N° de référence du client AAFC EP922-172162	Date 2017-02-01
GETS Reference No. - N° de référence de SEAG PW-\$PWU-066-10951	
File No. - N° de dossier PWU-6-39263 (066)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-02-13	Time Zone Fuseau horaire Mountain Standard Time MST
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Lee, Mony	Buyer Id - Id de l'acheteur pwu066
Telephone No. - N° de téléphone (780) 224-6675 ()	FAX No. - N° de FAX (780) 497-3510
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

Solicitation No. - N° de l'invitation
EP922-172162/B

Amd. No. - N° de la modif.
002

Buyer ID - Id de l'acheteur
PWU066

Client Ref. No. - N° de réf. du client
AAFC EP922-172162

File No. - N° du dossier
PWU-6-39263

CCC No./N° CCC - FMS No./N° VME

MODIFICATION DE L'INVITATION No. 002

Revision:

Solicitation Closes – L'invitation prend fin

On – Le 2017-02-13

At - à 02:00 PM

Time Zone – Fuseau horaire – Mountain Standard Time

Veillez consulter la version anglaise de la modification no 002.

The Bidding Documents are amended as noted in this Addendum, which consists of one (1) page and the following attachments:

1. Q&A
2. Added Specifications: 23 07 15 Thermal Insulation for Piping
3. Drawings: E100 Electrical Demolition and Renovation

This addendum is issued prior to bid closing to amend the bid documents. This Addendum will form part of the Contract Documents. Include in the Bid price all such revisions which will become part of the Work. Perform all such Work in accordance with the contract documents.

Acknowledge receipt of this Addendum by reference in the Bid Form submitted by the bidding Contractors. Ensure that all parties submitting bids are aware of all items included in this addendum.

1. Q&A

1	Q	There does not seem to be a clear path to move the tank from upstairs to the new location, we are wondering if there should be some allowance for door frame removal & reinstallation at a couple of critical locations in our scope or if this is something that will be by owner.
	A	Allow contingency for door frame removal and reinstallation for the mechanical room exterior door. Existing tank can be moved to the main floor through the louvers in the mechanical room to the exterior.
2	Q	Drawing H100 refers to UNIT No. MUA-1. Will an equivalent manufacturer for the MUA-1 be accepted?
	A	Equivalent manufacturers will be accepted.
3	Q	Can we get the dimensions of the two Process Hot water tanks that we are installing in the new Mechanical room?
	A	One of the storage tanks is a AO Smith, uninsulated model T-200A, 762mm Ø (30") and 1,797mm (70 ¾") long. The second storage tank (actually installed in the second floor mechanical room) dimensions can't be confirmed as the steel tank dimensions are covered by insulation.
4	Q	Please clarify what rough carpentry scope that is required very unclear as it looks like it was half completed?
	A	The only carpentry scope will be what is required to install the new double doors in the new mechanical room.
5	Q	Is the Asbestos abatement still required have not seen any addendum.? May we know the scope of work and photos of asbestos abatement as during site visit no clarity was provided to this question
	A	Asbestos testing will be required for wall and ceiling penetrations as well as piping insulation. Any necessary asbestos abatement will be added as a change order.
6	Q	On drawing H104 in the existing penthouse boiler there is a P-4 heat exchanger circulation pump that is not on the Mechanical schedule. Are we suppose to exclude this or include it. Please provide specification for the pump equipment list drawing H100.Is this a new pump we have to supply besides the P-3 pump?

	A	<p>Include P-4 pump as shown in the schematic on drawing H104. See the following table for the revised specs for both pumps.</p> <table border="1"> <thead> <tr> <th></th> <th>MANUFACTURER</th> <th>MODEL</th> <th>FLUID</th> <th>FLOW</th> <th>HEAD</th> <th>MOTOR</th> <th>RPM</th> <th>ELECTRICAL</th> </tr> </thead> <tbody> <tr> <td>P-3</td> <td>ARMSTRONG</td> <td>ASTRO 250</td> <td>WATER</td> <td>0.8 L/s</td> <td>35,87 KPag</td> <td>0.12 kW</td> <td>1800</td> <td>120/1/60</td> </tr> <tr> <td>P-4</td> <td>ARMSTRONG</td> <td>1060 3D</td> <td>WATER</td> <td>9.5 L/s</td> <td>74.72 KPag</td> <td>1.12 kW</td> <td>1800</td> <td>208/3/60</td> </tr> </tbody> </table>		MANUFACTURER	MODEL	FLUID	FLOW	HEAD	MOTOR	RPM	ELECTRICAL	P-3	ARMSTRONG	ASTRO 250	WATER	0.8 L/s	35,87 KPag	0.12 kW	1800	120/1/60	P-4	ARMSTRONG	1060 3D	WATER	9.5 L/s	74.72 KPag	1.12 kW	1800	208/3/60
	MANUFACTURER	MODEL	FLUID	FLOW	HEAD	MOTOR	RPM	ELECTRICAL																					
P-3	ARMSTRONG	ASTRO 250	WATER	0.8 L/s	35,87 KPag	0.12 kW	1800	120/1/60																					
P-4	ARMSTRONG	1060 3D	WATER	9.5 L/s	74.72 KPag	1.12 kW	1800	208/3/60																					
7	Q	The piping drawing H103 is this to the correct scale 1:50 as there are measurements at bottom of drawing that do not match. Please confirm the Drawing size for dimension check																											
	A	Drawing's scale is 1:50. Size piping lengths to scale.																											
8	Q	What is the dimension of the piping changing elevations from new main floor mechanical room to the existing penthouse boiler room? Not shown on drawings																											
	A	The dimensions are those shown on the schematic on drawing H104.																											
9	Q	Is the glycol supply is supplied by Mechanical contractor for the make-up air handling unit piping? Please provide quantity and specification for glycol if it needs to be supplied.																											
	A	Supply 15 gallons of Univar Vanfrost propylene glycol.																											
10	Q	What is the thickness of the Walls, Floor slab that we need to core through for the piping and electrical.?																											
	A	Maximum wall thickness is 102mm (4"). All floor coring will be through wooden floors through the existing wooden building extension.																											
11	Q	Please provide details if circulation pump/s required breaker panel and pump starter panel? Please provide scope of supply.																											
	A	Breakers for new pumps already included in design; provide motor starters as detailed in keynote 5 on drawing E100.																											
12	Q	Please clarify insulation requirement and specification for piping insulation. Please clarify scope if insulation for piping is required or not. Drawing does not clearly mention any thing about this.																											
	A	See attached specification Section 23 07 15 Thermal Insulation for piping.																											
13	Q	Please provide details for wall penetration. Scope and sizes. Drawing does not provide info on wall penetration and sealing info.																											
	A	Wall penetration sealing information is included in specification Section 23 05 05. Fire retardant sealing is only necessary in the boiler room. All wall penetrations are located in the boiler/mechanical room on the second floor except for the 40mm softened water line to the steam boiler. Scope and sizes of wall penetrations will be field verified.																											
14	Q	Please confirm piping to be considered as per P&I diagram shown on H 103 drawing. Other drawings show lot of piping but does not have any details like size, where to connect etc.																											
	A	Follow piping sizes on schematic on drawing M104. Connection to existing piping will be determined on site by Departmental Representative.																											

END OF ADDENDUM #01

1 GENERAL

1.01 REFERENCES

- .1 American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)
 - .1 ASHRAE Standard 90.1-[01], Energy Standard for Buildings Except Low-Rise Residential Buildings (IESNA co-sponsored; ANSI approved; Continuous Maintenance Standard).
- .2 American Society for Testing and Materials International (ASTM)
 - .1 ASTM B 209M-[04], Standard Specification for Aluminum and Aluminum Alloy Sheet and Plate [Metric].
 - .2 ASTM C 335-[04], Standard Test Method for Steady State Heat Transfer Properties of Horizontal Pipe Insulation.
 - .3 ASTM C 411-[04], Standard Test Method for Hot-Surface Performance of High-Temperature Thermal Insulation.
 - .4 ASTM C 449/C 449M-[00], Standard Specification for Mineral Fiber-Hydraulic-Setting Thermal Insulating and Finishing Cement.
 - .5 ASTM C 533-[2004], Calcium Silicate Block and Pipe Thermal Insulation.
 - .6 ASTM C 547-[2003], Mineral Fiber Pipe Insulation.
 - .7 ASTM C 795-[03], Standard Specification for Thermal Insulation for Use in Contact with Austenitic Stainless Steel.
 - .8 ASTM C 921-[03a], Standard Practice for Determining the Properties of Jacketing Materials for Thermal Insulation.
- .3 Canadian General Standards Board (CGSB)
 - .1 CGSB 51-GP-52Ma-[89], Vapour Barrier, Jacket and Facing Material for Pipe, Duct and Equipment Thermal Insulation.
 - .2 CAN/CGSB-51.53-[95], Poly (Vinyl Chloride) Jacketing Sheet, for Insulated Pipes, Vessels and Round Ducts
- .4 Department of Justice Canada (Jus)
 - .1 Canadian Environmental Assessment Act (CEAA), 1995, c. 37.
 - .2 Canadian Environmental Protection Act (CEPA), 1999, c. 33.
 - .3 Transportation of Dangerous Goods Act (TDGA), 1992, c. 34.
- .5 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
- .6 Manufacturer's Trade Associations
 - .1 Thermal Insulation Association of Canada (TIAC): National Insulation Standards (Revised 2004).
- .7 Underwriters' Laboratories of Canada (ULC)
 - .1 CAN/ULC-S102-[03], Surface Burning Characteristics of Building Materials and Assemblies.
 - .2 CAN/ULC-S701-[01], Thermal Insulation, Polystyrene, Boards and Pipe Covering.
 - .3 CAN/ULC-S702-[1997], Thermal Insulation, Mineral Fibre, for Buildings
 - .4 CAN/ULC-S702.2-[03], Thermal Insulation, Mineral Fibre, for Buildings, Part 2: Application Guidelines.

1.02 DEFINITIONS

- .1 For purposes of this section:
 - .1 "CONCEALED" - insulated mechanical services in suspended ceilings and non-accessible chases and furred-in spaces.
 - .2 "EXPOSED" - will mean "not concealed" as specified.

- .2 TIAC ss:
 - .1 CRF: Code Rectangular Finish.
 - .2 CPF: Code Piping Finish.

1.03 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submittals: in accordance with Section [01 33 00 - Submittal Procedures].
- .2 Product Data:
 - .1 Submit manufacturer's printed product literature, specifications and datasheet in accordance with Section 01 33 00 - Submittal Procedures. Include product characteristics, performance criteria, and limitations.
 - .1 Submit two copies of Workplace Hazardous Materials Information System (WHMIS) Material Safety Data Sheets (MSDS) in accordance with Section 01 33 00 - Submittal Procedures.
- .3 Shop Drawings:
 - .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures.
- .4 Samples:
 - .1 Submit samples in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Submit for approval: complete assembly of each type of insulation system, insulation, coating, and adhesive proposed. Mount sample on 12 mm plywood board. Affix label beneath sample indicating service.
- .5 Quality assurance submittals: submit following in accordance with Section 01 33 00 - Submittal Procedures.
 - .1 Certificates: submit certificates signed by manufacturer certifying that materials comply with specified performance characteristics and physical properties.
 - .2 Instructions: submit manufacturer's installation instructions.
 - .1 Departmental Representative will make available 1 copy of systems supplier's installation instructions.

1.04 QUALITY ASSURANCE

- .1 Qualifications:
- .2 Installer: specialist in performing work of this Section, and have at least 3 years of successful experience in this size and type of project, qualified to standards of TIAC.
- .3 Health and Safety:
 - .1 Do construction occupational health and safety in accordance with Section 01 35 29.06 - Health and Safety Requirements.

1.05 DELIVERY, STORAGE AND HANDLING

- .1 Packing, shipping, handling and unloading:
 - .2 Deliver, store and handle in accordance with manufacturer's written instructions and Section 01 61 00 - Common Product Requirements.
 - .3 Deliver, store and handle materials in accordance with manufacturer's written instructions.
 - .4 Deliver materials to site in original factory packaging, labelled with manufacturer's name, address.
- .2 Storage and Protection:
 - .1 Protect from weather, construction traffic.
 - .2 Protect against damage.
 - .3 Store at temperatures and conditions required by manufacturer.

- .3 Waste Management and Disposal:
 - .1 Construction/Demolition Waste Management and Disposal: separate waste materials for recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
 - .2 Place excess or unused insulation and insulation accessory materials in designated containers.
 - .3 Divert unused metal materials from landfill to metal recycling facility approved by Departmental Representative.
 - .4 Dispose of unused adhesive material at official hazardous material collections site approved by Departmental Representative.

2 PRODUCTS

2.01 FIRE AND SMOKE RATING

- .1 In accordance with CAN/ULC-S102.
 - .1 Maximum flame spread rating: 25.
 - .2 Maximum smoke developed rating: 50.

2.02 INSULATION

- .1 Mineral fibre specified includes glass fibre, rock wool, slag wool.
- .2 Thermal conductivity ("k" factor) not to exceed specified values at 24 degrees C mean temperature when tested in accordance with ASTM C 335.
- .3 TIAC Code A-1: rigid moulded mineral fibre without factory applied vapor retarder jacket.
 - .1 Mineral fibre: to CAN/ULC-S702.
 - .2 Maximum "k" factor: to CAN/ULC-S702.
- .4 TIAC Code A-3: rigid moulded mineral fibre with factory applied vapour retarder jacket.
 - .1 Mineral fibre: to CAN/ULC-S702.
 - .2 Jacket: to CGSB 51-GP-52Ma.
 - .3 Maximum "k" factor: to CAN/ULC-S702.
- .5 TIAC Code C-2: mineral fibre blanket faced [with] [without] factory applied vapour retarder jacket (as scheduled in PART 3 of this section).
 - .1 Mineral fibre: to CAN/ULC-S702.
 - .2 Jacket: to CGSB 51-GP-52Ma.
 - .3 Maximum "k" factor: to CAN/ULC-S702.
- .6 TIAC Code A-6: flexible unicellular tubular elastomer.
 - .1 Jacket: to CGSB 51-GP-52Ma.
 - .2 Maximum "k" factor: to CAN/ULC-S702.
 - .3 Certified by manufacturer: free of potential stress corrosion cracking corrodants.

2.03 INSULATION SECUREMENT

- .1 Tape: self-adhesive, aluminum, plain, 50 mm wide minimum.
- .2 Contact adhesive: quick setting.
- .3 Canvas adhesive: washable.
- .4 Tie wire: 1.5 mm diameter stainless steel.
- .5 Bands: stainless steel, 19mm wide, 0.5 mm thick.

2.04 CEMENT

- .1 Thermal insulating and finishing cement:
 - .1 Hydraulic setting on mineral wool, to ASTM C 449/C 449M.

2.05 VAPOUR RETARDER LAP ADHESIVE

- .1 Water based, fire retardant type, compatible with insulation.

2.06 INDOOR VAPOUR RETARDER FINISH

- .1 Vinyl emulsion type acrylic, compatible with insulation.

2.07 OUTDOOR VAPOUR RETARDER FINISH

- .1 Reinforcing fabric: fibrous glass, untreated 305 g/m².

2.08 JACKETS

- .1 ABS Plastic:
 - .1 One-piece moulded type with pre-formed shapes as required.
 - .2 Colours: by Departmental Representative.
 - .3 Minimum service temperatures: -40 degrees C.
 - .4 Maximum service temperature: 82 degrees C.
 - .5 Moisture vapour transmission: 0.012 perm.
 - .6 Thickness: 0.75 mm.
 - .7 Fastenings:
 - .1 Solvent weld adhesive compatible with insulation to seal laps and joints.
 - .2 Tacks.
 - .3 Pressure sensitive vinyl tape of matching colour.
 - .8 Locations:
 - .1 For outdoor use ONLY.
- .2 Canvas:
 - .1 220gm/m² cotton, plain weave, treated with dilute fire retardant lagging adhesive to ASTM C 921.
 - .2 Lagging adhesive: compatible with insulation.
- .3 Aluminum:
 - .1 To ASTM B 209.
 - .2 Thickness: 0.50 mm sheet.
 - .3 Finish: smooth.
 - .4 Joining: longitudinal and circumferential slip joints with 50mm laps.
 - .5 Fittings: 0.5mm thick die-shaped fitting covers with factory-attached protective liner.
 - .6 Metal jacket banding and mechanical seals: stainless steel, 19mm wide, 0.5mm thick at 300 mm spacing.

2.09 WEATHERPROOF CAULKING FOR JACKETS INSTALLED OUTDOORS

- .1 Caulking to: Section 07 92 00 - Joint Sealants.

3 EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheet.

3.02 PRE-INSTALLATION REQUIREMENT

- .1 Pressure testing of piping systems and adjacent equipment to be complete, witnessed and certified.
- .2 Surfaces clean, dry, free from foreign material.

3.03 INSTALLATION

- .1 Install in accordance with TIAC National Standards.
- .2 Apply materials in accordance with manufacturers instructions and this specification.
- .3 Use two layers with staggered joints when required nominal wall thickness exceeds 75 mm.
- .4 Maintain uninterrupted continuity and integrity of vapor retarder jacket and finishes.
 - .1 Install hangers, supports outside vapor retarder jacket.
- .5 Supports, Hangers:
 - .1 Apply high compressive strength insulation, suitable for service, at oversized saddles and shoes where insulation saddles have not been provided.

3.04 REMOVABLE, PRE-FABRICATED, INSULATION AND ENCLOSURES

- .1 Application: at [expansion joints], [valves], [primary flow measuring elements] [flanges and unions at equipment].
- .2 Design: [to permit movement of expansion joint] [and] [to permit periodic removal and replacement] without damage to adjacent insulation.
- .3 Insulation:
 - .1 Insulation, fastenings and finishes: same as system.
 - .2 Jacket: [aluminum] [SS] [PVC] [ABS] [high temperature fabric].

3.05 INSTALLATION OF ELASTOMERIC INSULATION

- .1 Insulation to remain dry. Overlaps to manufacturers instructions. Ensure tight joints.
- .2 Provide vapor retarder as recommended by manufacturer.

3.06 PIPING INSULATION SCHEDULES

- .1 Includes valves, valve bonnets, strainers, flanges and fittings unless otherwise specified.
- .2 TIAC Code: [A-1].
 - .1 Securements: SS bands at 300mm on centre.
 - .2 Seals: lap seal adhesive, lagging adhesive.
 - .3 Installation: TIAC Code 1501-H.
- .3 Thickness of insulation as listed in following table.
 - .1 Run-outs to individual units and equipment not exceeding 4000 mm long.
 - .2 Do not insulate exposed runouts to plumbing fixtures, chrome plated piping, valves, fittings.

Piping	Pipe Sizes mm (in)	Insulation Thickness mm (in)	Recovery Jacket
.1 Domestic Cold Water Piping	40 (1½") & under 50 (2") & over	15 (½") 25 (1")	Canvas

Piping	Pipe Sizes mm (in)	Insulation Thickness mm (in)	Recovery Jacket
.2 Domestic Hot Water Supply & Recirculation Piping	50 (2") & under 65 (2½") & over	25 (1") 40 (1½")	Canvas
.3 Domestic Hot Water Supply & Recirculation Piping (Non-conditioned Space or Outside)	50 (2") & under 65 to 100 (2½" to 4") 150 (6") & over	65 (2½") 75 (3") 89 (3½")	Canvas or Aluminum Jacketing (Outside)
.4 Drinking Water Piping	All sizes	25 (1")	Canvas
.5 Irrigation Piping Inside Building	All sizes	25 (1")	Canvas
.6 Vents within 3m (10'-0") of Roof Outlet	All sizes	25 (1")	Canvas
.7 Chilled Water Piping Plug Load Cooling Piping "Free" Cooling Piping	15 (½") to 65 (2½") 75 (3") to 150 (6") 200 (8") & over	25 (1") 40 (1½") 50 (2")	Canvas
.8 Glycol Heating Piping Glycol Heat Recovery Piping	15 (½") to 50 (2") 50 (2½") to 150 (6") 200 (8") and Over	25 (1") 40 (1½") 50 (2")	Canvas
.9 Hot Water Heating Piping (Do not insulate within Radiation Enclosures except for mains) (Do not insulate controlled branch run- outs or risers in heated spaces)	15 (½") to 50 (2") 50 (2½") to 150 (6") 200 (8") and Over	25 (1") 40 (1½") 50 (2")	Canvas
.4 Finishes:			
.1 Exposed indoors: canvas jacket.			
.2 Exposed in mechanical rooms: aluminum.			
.3 Concealed, indoors: canvas on valves, fittings. No further finish.			
.4 Use vapour retarder jacket on TIAC code A-3 insulation compatible with insulation.			
.5 Finish attachments: SS screws, at 150 mm on centre. Seals: closed.			
.6 Installation: to appropriate TIAC code CRF/1 through CPF/5.			

3.07 FIELD QUALITY CONTROL

- .1 Verification requirements in accordance with Section 01 45 00, include:
 - .1 Materials and resources.
 - .2 Storage and collection of recyclables.
 - .3 Construction waste management.
 - .4 Resource reuse.
 - .5 Recycled content.
 - .6 Local/regional materials.
 - .7 Certified wood.
 - .8 Low-emitting materials.

3.08 CLEANING

- .1 Proceed in accordance with Section 01 74 11 - Cleaning.
- .2 Upon completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.

END OF SECTION



Revisions	Description	Date
1	Issued for Tender	2017/01/04
2	Issued for Client Review	2016/08/11
3	Issued for 100% Review	2016/08/11
4	Issued for Client Review	2016/08/11
5	Design Completion	2016/08/18

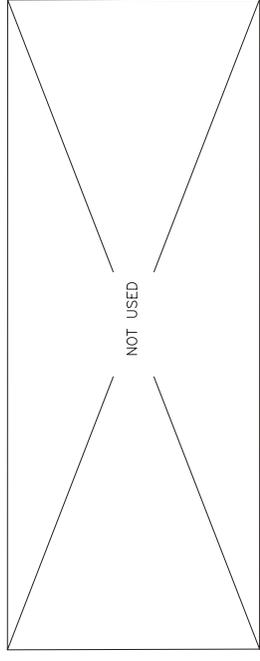
LACOMBE RESEARCH FACILITY

600 C And E Trail, Lacombe, AB
 Project No. Lacombe AB
 600 C And E Trail
 ABATOIR

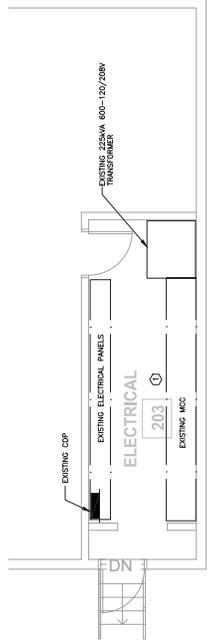
ABATOIR MECHANICAL EQUIPMENT ROOM PLANS

Drawn by	Checked by
Approved by	Approved for
Project Manager	Administrateur de Projet
Sheeting Title	Title de feuille

Project No./No. de projet	Drawing No./No. de dessin	Revision No.
115302873	E100	1



C. BOILER ROOM - PROPOSED ELECTRICAL
 E101 1:50



D. MECHANICAL PENTHOUSE PLAN - ELECTRICAL DEMOLITION
 E101 1:50

LOAD	DESCRIPTION	LOCATION	NO.	SIZE	NO.	NO.	NO.	NO.
1	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	1	225VA	1	1	1	1
2	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	2	225VA	2	2	2	2
3	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	3	225VA	3	3	3	3
4	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	4	225VA	4	4	4	4
5	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	5	225VA	5	5	5	5
6	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	6	225VA	6	6	6	6
7	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	7	225VA	7	7	7	7
8	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	8	225VA	8	8	8	8
9	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	9	225VA	9	9	9	9
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14	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	14	225VA	14	14	14	14
15	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	15	225VA	15	15	15	15
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19	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	19	225VA	19	19	19	19
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23	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	23	225VA	23	23	23	23
24	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	24	225VA	24	24	24	24
25	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	25	225VA	25	25	25	25
26	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	26	225VA	26	26	26	26
27	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	27	225VA	27	27	27	27
28	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	28	225VA	28	28	28	28
29	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	29	225VA	29	29	29	29
30	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	30	225VA	30	30	30	30
31	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	31	225VA	31	31	31	31
32	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	32	225VA	32	32	32	32
33	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	33	225VA	33	33	33	33
34	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	34	225VA	34	34	34	34
35	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	35	225VA	35	35	35	35
36	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	36	225VA	36	36	36	36
37	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	37	225VA	37	37	37	37
38	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	38	225VA	38	38	38	38
39	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	39	225VA	39	39	39	39
40	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	40	225VA	40	40	40	40
41	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	41	225VA	41	41	41	41
42	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	42	225VA	42	42	42	42
43	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	43	225VA	43	43	43	43
44	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	44	225VA	44	44	44	44
45	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	45	225VA	45	45	45	45
46	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	46	225VA	46	46	46	46
47	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	47	225VA	47	47	47	47
48	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	48	225VA	48	48	48	48
49	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	49	225VA	49	49	49	49
50	EXISTING 225VA 600-120/084 TRANSFORMER	LOCATING MCC ROOM	50	225VA	50	50	50	50

DEMOLITION GENERAL NOTES

- VERIFY DETAILS AND MATERIALS FOR DEMOLITION. VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING ANY DEMOLITION. DEMONSTRATE REPRESENTATIVE OF ANY DISCREPANCIES.
- ALL EQUIPMENT REMOVED DURING DEMOLITION TO BE TURNED OVER TO OWNER. WORK & WATERS IS TO BE REMOVED AS NOTED.

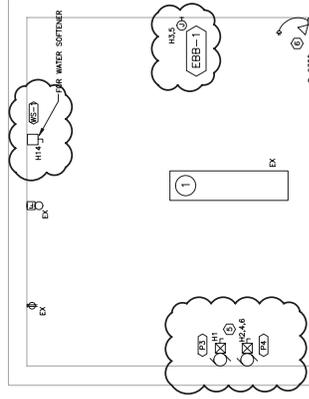
RENOVATION GENERAL NOTES

- SMALL ITEMS TO BE REMOVED AS NOTED. ITEMS TO BE REMOVED SHALL BE CONSIDERED AS LOST UNLESS OTHERWISE NOTED. DIFFERENCES ON SITE.
- ALL DEMOLITION WORK TO MEET REQUIREMENTS OF THE CANADIAN ELECTRICAL CODE.

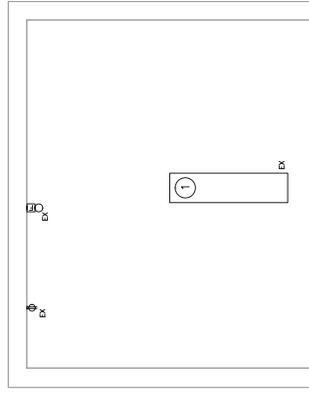
- KEY NOTES**
- REMOVE AND RE-INSTATE EXISTING FEEDER TO PUMP
 - REMOVE AND RE-INSTATE EXISTING FEEDER TO PUMP

LUMINAIRE SCHEDULE

TAG	DESCRIPTION	LAMPS	VOLUME	COMMENTS
1	EXISTING 225VA 600-120/084 TRANSFORMER	225VA 600-120/084	120	STANDARD 240-1200W OR EQUAL



B. ENLARGED MECHANICAL ROOM PLAN - PROPOSED ELECTRICAL
 E101 1:25



A. MECHANICAL ROOM - ELECTRICAL DEMOLITION
 E101 1:25

MAGGIE KOONS	SHUNDA		403-391-3110
BEN RIETEMA	SHUNDA		403-347-6831
Quentia Colb	Pineblow west		403-506-8874
Kevin Ede	FMC		403-896-3279
hesAich	402 electric		403-588-0498
Tyson Lukra	Cremac		403-588-1542
Derek Mrazec	D+T		403-860-8973
BUCK LUMSDEN	SCOTT BUILDERS		587-797-2816
Jeffrey Nagy	BHP Mechanical		780-482-2334
Paul Hallman	Canadas Finest		403-350-4086
Jordan Crown	Civic Mechanical		403-782-2975
Drew Gervey	Civic Mechanical		403-782-2975
John Alexander	1ST STAR Electric		587-675-3575
Neil Clarke	TYO Simplex Grinnell		780-246-3887
Brian Melvyn	D.S. will construction		587-876-9036
Bernad Malpano	AZ Tel group		780-232-4170
Tyler DeGagne			



**ATTENDANCE REGISTER
PUBLIC WORKS AND GOVERNMENT SERVICES CANADA
SITE VISIT**

PLACE: Lacombe Research Centre, 6000 C&E Trail, Lacombe, Alberta.

SOLICITATION NO: EP922-172162/B

PROJECT NO: R.073123.001

DATE: January 26 at 10:30
am MST

TITLE: AAFC Lacombe Research Facility Repair

COMPANY NAME	SIGNATURE	PRINT NAME	PHONE NO.	FAX NO.	BUS. CARD
Fintech Energy Ltd.	<i>Mick McLeod</i>	Mick McLeod	403-358-8402		
LCL general	<i>Adam Lestrelle</i>	Adam Lestrelle	403-877-5404		
Prime Boiler Services	<i>Shawn Brennan</i>	Shawn Brennan	403-506-1305		
Prime Boiler Services	<i>Darryl Compton</i>	Darryl Compton	403-346-8787		
Triple A Electric	<i>Pat Hicks</i>	Pat Hicks	403-346-6156		
SK Electric	<i>Shawn Kostu</i>	Shawn Kostu	403-358-2005		
LCL GENERAL	<i>Robert Lestrelle</i>	Robert Lestrelle	403-396-5920		
Dee-Jay Plumb & Heating	<i>Rod Dael</i>	Rod Dael	780-878-8566		
Access Custom Steel Metal	<i>Rod Coulter</i>	Rod Coulter	403-307-0605		
MAGNUM MECHANICAL	<i>Vic Kerr</i>	Vic Kerr	780-352-8542		
<i>James Davis</i>	<i>James Davis</i>	James Davis	587-989-7366		

CHAIRPERSON: James Davis PHONE: _____