



**REQUEST FOR PROPOSAL to**

**Remove and Replace Heating Boilers in the Maintenance Garage  
at the  
North Bay Jack Garland Airport**

**May, 2017**

**REQUEST FOR PROPOSAL TO REMOVE AND REPLACE HEATING BOILERS IN THE  
MAINTENANCE GARAGE FOR**

**North Bay Jack Garland Airport Corporation**

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**Disclaimer**

The information contained within this RFP may not be complete, accurate, adequate or correct (specifically with regards to drawings, distances, materials, etc.). Each vendor should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP and obtain independent advice from appropriate sources, including but not limited to internal assessments by each vendor.

While the North Bay Jack Garland Airport Corporation has provided the most accurate and complete information available to it, it may be possible that some information or details have been unintentionally omitted from this RFP.

## **1.0 INTRODUCTION**

### **1.1 Purpose**

The purpose of this Request for Proposal (RFP) is to provide vendors with information to prepare and submit qualifications for the removal and replacement of boilers and other technical infrastructure located in the Maintenance Garage of the North Bay Jack Garland Airport [AIRPORT].

A mandatory site meeting will be held on May 3 at 10:30am in order to review the expectations of what the North Bay Jack Garland Airport Corporation is working to achieve through this replacement, and provide a walkthrough of the various locations for the boilers and affected areas. All prospective vendors must attend this meeting. The meeting will be held at the airport Maintenance Garage at 55 Maintenance Ave., North Bay, ON, P1B 8G2.

### **1.2 Location**

North Bay Airport is located approximately 8 km from the North Bay City Centre. The aerodrome elevation is 370m (1215') above sea level. Strategically located near the trans-Canada Highway 17 and Highway 11, and the Ontario Northland Railway, the airport serves not only the City of North Bay itself but the surrounding districts of Nipissing, Parry Sound, Temiskaming, and many other communities within Northern Ontario. Access to the airport from major ground transportation corridors including Highways 11 and 17 is via Airport Road.

### **1.3 Background**

The airport operates on a 24 hour per day, 7 day per week basis with approximately 75,000 passengers and 25,000 aircraft using the facilities annually. During the course of a normal work day there is approximately 60 persons working or attending class in the various buildings.

#### **Maintenance Garage Compound**

This maintenance garage building itself was built in the early 1960's and is the work space for the airport operations. The Maintenance Garage Compound is comprised of the Maintenance Garage, a cold-storage building, a chemical storage building, a sand shed, and a fuel station for airport operations vehicles.

Only the primary Maintenance Garage, located at 55 Maintenance Ave., is served by a heating boiler and associated infrastructure.

The airport's Maintenance Garage current heating system comprises of:

- Two Volcano (now doing business as Indeck) Boilers
  - o Model # ST-40F-D7HL (Starfire Firetube)
  - o Max W Pressure 30 PSI
  - o Production/Installation Date 1989
  - o Capacity 40HP
  - o Electrical Load: 550V 3PH 60Hz 2 Amp
  - o Gas Input 1675 MBTU/Hr per boiler
  - o Manifold Pressure 3WC
  
- Two 1.5 HP US Electrical Motors (Emerson Electric Co.)

- Electrical Load: 230/460V 3PH 60Hz 5/2.5 Amp
- 1730 RPM
- 13 Dunham Brush Unit Heaters (10 large, and 3 small)
- Approximately 26m (85 ft) of total baseboard radiant heaters, within 7 rooms
- Approximately 7.5m (24.5 ft) of total baseboard electrical heaters, within 1 room

All equipment has been rigorously maintained through annual service contracts with premier local service providers.

The Maintenance Garage is serviced by Fiber Optic communications which connects to the Administration Building. Hydro and natural gas is also supplied to the Maintenance Garage.

Please see Appendix A for the layout of the Maintenance Garage and associated systems.

## 2.0 OBJECTIVES

### 2.1 General

The objectives are to partner with a proven Mechanical Company [VENDOR] who will deliver a comprehensive, state-of-the-art, high quality and cost effective replacement for the heating boilers that serve the Maintenance Garage for the North Bay Jack Garland Airport [AIRPORT] which will completely replace the current system and be constantly used throughout a life span of approximately 30 years.

The contract will include the provision of the comprehensive equipment/system development, purchase of necessary products, installation of the hardware and associated hydro and natural gas, and the removal of all components of the current heating boilers in the Maintenance Garage that have become obsolete following the installation of the new boilers.

**The objectives are to replace the current heating boilers, remove the old boilers, and generally update the hardware found in the boiler room, replace heating fan units throughout the facility, and replace all electric baseboard heaters while leaving other components throughout the remainder of the building intact where feasible. Overall this work should be done to create an effective heating plan for the facility that makes use of modern efficiency units.**

The intent is not a general one for one replacement but rather to upgrade the system to meet the requirements of the facility.

All makes, models, and hardware (as defined by the VENDOR to meet the specifications within this document) will be considered as part of this project.

**The AIRPORT looks forward to partnering with a VENDOR to develop a comprehensive replacement to meet all operational needs, while using the specialized expertise of the VENDOR.**

### 3.0 REQUIREMENTS

In providing the services to remove and replace the boilers in the Maintenance Garage for the AIRPORT, the following is a brief description of the general requirements:

- Provide a comprehensive plan to meet the current needs of the AIRPORT, effectively addressing the heating needs of the maintenance garage (approx. 20,500 ft<sup>2</sup>) and a future expansion (approx. 5,500 ft<sup>2</sup>);
- Provide a list of all sub-contractors, including their roles within the proposed project, their contact information, and their relevant qualifications;
- Demolition and removal of the old boilers, pumps, expansion tanks, heating fans, electrical baseboards, etc., in compliance with all applicable provincial and national laws and industry standards;
- Current piping associated with the supply and return of water for the purposes of heating will remain intact, and is not to be addressed as part of this project, unless specifically required to connect to the new boiler(s) and heaters;
- Remove all existing ventilation through the roof of the boiler room, and insulate, patch, and repair roof as required, to prevent all leaks, and provide associated warranty for labour and material;
- Remove/cap all glycol and associated heating system connected to or associated with the Chemical Storage Building and Sand Dome, adjacent but separate from the main Maintenance Garage;
- Haul away and dispose of all debris associated with or directly caused by the demolition of old boilers and boiler system components listed above;
- The respondent shall provide all labor, materials, boiler(s), pumps, piping, wiring, insulation, expansion tanks, burners, controls, and any other item or equipment required for completion of the project and fulfillment of commissioning of the complete system;
- Purchase boiler(s) and associated materials/hardware to fulfill the developed plan which meets the current needs of the AIRPORT;
- Installation of boiler(s) and associated materials/hardware to fulfill the developed plan which meets the current needs of the AIRPORT;
- Installation/removal/rehabilitation of housekeeping pad, as required;
- Replace/Install all supply and return piping removed as part of the demolition phase;
- Install/run all new electrical wiring and natural gas supply lines to the boiler(s), as required;
- Install new drains/condensation pipes as required;
- Install ventilation for the boilers through the exterior walls of the boiler room;

- Install new insulation, in compliance with all applicable provincial and national laws and industry standards, on all new piping;
- Install expansion tanks as applicable;
- Calibrate controls and tune combustion for maximum efficiency;
- Provide system schematics and as built diagrams for all installed hardware, as well as associated hydro, natural gas, and communication lines (including all new components and components utilized from the old system);
- Provide comprehensive training/orientation on the system to AIRPORT staff as part of the initial turn-over/hand-over of the boilers, as required;
- Provide warranty on all installation labour and components;
- Provide all necessary engineering, permits, and inspections required for any and all phases of this project;
- Conduct all removal, installation, or other work beginning August 2017 and completion prior to October 2017;
- Observe and enforce construction safety measures as required by the National Building Code 1990, Part 8, Occupational Health and Safety Act and Regulations for Construction Projects, Revised Statutes of Ontario 1980, Chapter 321, Revised Regulations of Ontario 1980, Regulation 691, as amended by O.Reg. 156/84 and O. Reg. 635/86 and Ontario Regulation 714/82, Workmen's Compensation Board and municipal statutes and authorities (Ensure the most recent versions of these documents are available and referenced);
- Observe and comply with all effective environmental legislation and regulations;
- Observe and comply with all effective codes, standards, regulations, and laws pertaining to boilers, pressure vessels, pressure piping, including CSA B51-14 and O. Reg. 220/01;
- Observe and comply with all effective codes, standards, regulations, and laws pertaining to electrical, structural construction, etc. (including, but not limited to, Ontario Electrical safety Code (OESC), Electrical Safety Association (ESA), Electrical and Electronic Manufacturers Associations of Canada (EEMAC), Ontario Building Code (OBC), Canadian Standards Association (CSA), Underwriter's Laboratories of Canada (ULC), National Building Code of Canada (NBC), and North Bay and local governing authority requirements; and,
- Observe and comply with ASHRAE standards

The VENDOR will be responsible for providing all material and equipment other than those noted to be supplied by the AIRPORT below.

The AIRPORT will provide no material, resources, or equipment as part of this project.



The AIRPORT will provide a secure facility for the storage of supplied material, resources, or equipment of the VENDOR. The AIRPORT will also work with the VENDOR in developing a schedule of work in order to coordinate the removal of airport vehicles from the Maintenance Garage in order to provide unobstructed access to the VENDOR while also ensuring no operational impact occurs to the AIRPORT.

Additional work requirements may be requested by the Airport Manager at any time. Such requests will be processed via change orders with associated separate purchase/work orders, which will be invoiced separately at the end of the project.

**All VENDOR employees, and those of its subcontractors, who will coordinate the work onsite will be required to participate in a safety and security briefing at the airport prior to commencement of the project.**

#### **4.0 TERM OF CONTRACT**

The term of this agreement is for the duration of the project, which is to be completed within two (2) months from commencement of onsite work, or less. This service will commence at 00:01 hours on the 1st day of the project as proposed by the VENDOR and terminate at no later than 24:00 hours 60 days later, subject to earlier termination, completion, or preapproved extensions. Should an extension be required the proponent must provide a written request to the AIRPORT not less than 30 days prior to the end of the contract. Any such request shall include documented, justifiable evidence that an extension should be granted. All work will be completed prior to October 15<sup>th</sup>, 2017 at the latest.

Every effort will be made by the AIRPORT's representatives to cooperate with the VENDOR's construction schedule.

The VENDOR's construction schedule will need to take into consideration the operational requirements and restrictions of the AIRPORT's and all its tenants operations as applicable. It is the AIRPORT's intent that the construction schedule never interferes with, nor in any way impedes, the day-to-day operations.

**The VENDOR will therefore conduct all tasks related to the removal and replacement of the Maintenance Garage boilers when they are not required to be used by the AIRPORT.**

#### **4.1 Payment**

The AIRPORT will be invoiced only at the completion of the entire project. Any taxes shall be invoiced and paid in association with the total contract price.

## **5.0 OBLIGATIONS**

### **The VENDOR**

The selected VENDOR will be considered the primary contractor and will assume total responsibility to provide the AIRPORT with all material and services needed to make the system fully operational by the agreed upon date. As such they:

Shall supply technical staff who will comply with all statutory and local airport regulations in effect from time to time throughout the "Term of Contract";

Shall fulfill all requirements listed above within this document.

Shall comply with all airport safety and security instructions throughout the course of their work, in order to ensure regular operations of the airport remain unaffected at all times.

Shall be responsible for any lost or not returned restricted area passes. The AIRPORT maintains the right to remove or reject for any reason any employee(s) from providing services under the Agreement.

Shall provide any uniforms, personal protective equipment (PPE), tools, and equipment for employees throughout the project, as required.

Shall provide all necessary components for the project, less those provided by the AIRPORT as listed previously.

Shall designate one (1) person as project manager responsible for all work contained within the project. This person will coordinate all activities with the AIRPORT.

Shall be able to provide a (4) hour to onsite response time or better in cases of outages as part of their follow-up service and support technician package. The proposal should specify details of the closest office and expected response times.

### **The AIRPORT**

Shall provide a safety and security briefing for all proponent employees prior to commencement of the project.

Shall provide access to job sites as required, including restricted areas through the use of issuing keys or security escorts.

Shall designate one (1) person as project manager responsible for all work contained within the project. This person will coordinate all activities with the VENDOR.

## **5.1 Code and Regulation Compliance**

VENDOR shall review all relevant codes, statues, regulations and by-laws applicable to the work required, and ensure those authorities having jurisdiction are consulted and approvals as appropriate are secured or complied with. These may include but not be limited to:

- Department of Labour, Occupations Environmental Regulations
- The Workers Compensation Industrial Health and Safety Regulations

## 6.0 INSTRUCTIONS TO VENDORS

### 6.1 General

Eligible vendors must provide with their proposal:

1. Proof of licence to conduct business within the Province of Ontario.
2. Letter of good standing with the Workplace Safety & Insurance Board.
3. Proof of General and Professional Liability Insurance \$5,000,000 inclusive per occurrence.

The information contained in the proposal must be organized under the same headings and in the same order as outlined in the following section entitled "Mandatory Proposal Components".

### 6.2 Mandatory Proposal Components

Please order proposal as follows:

#### 1.0 Introduction, including the following:

- 1.1. Introductory letter describing the firm's commitment to the RFP, signed and sealed as outlined above.
- 1.2. Letter of good standing with the Workplace Safety and Insurance Board.
- 1.3. Letter from Insurance Company stating availability Liability Insurance specific to this contract. The successful Proponent will be required to carry a minimum of \$5,000,000 in general liability. The insurance coverage cannot be modified without written consent of the Owner.
- 1.4. Tender cost must be broken down in separate components as listed in Schedule 1A below.

### Schedule 1A - Cost of Services

Maintenance Garage Boiler Replacement	Cost	HST
Supply of Boiler(s) and Associated Hardware		
Supply of Heaters and Associated Hardware		
Removal (off-site) of Boilers, Heaters, and Associated Hardware		
Installation of all Proposed Components		
Supply of Associated 'As-Built' Mechanical Schematics/Drawings		
Engineering (if applicable)		

Service Rates	Cost	HST
Hourly Rate for Service (Not to include any service required for warranty work)		
Vehicle Rates for Service (Mileage, etc.)		

- 2.0 Corporate Overview
  - 2.1 History of Firm(s) and experience in general.
  - 2.2 Related Experience – A summary of relevant experience of the proposed RFP.
    - 2.2.1 References of Relevant Work
  - 2.3 Statement of ability to handle this work in conjunction with any existing workloads.
- 3.0 Project Overview
  - 3.1 Overall System Design
  - 3.2 Hardware Equipment and Capabilities
  - 3.3 Expected Benefits of the Proposed System – Efficiency gains, energy savings, etc.
  - 3.3 Software Products and Capabilities (If Applicable)
- 4.0 Work Implementation Schedule
  - 4.1 Project Timeline and Major Milestones
    - 4.1.1 System Design
    - 4.1.2 Procurement of Product and Equipment
    - 4.1.3 Installation
    - 4.1.4 Removal of Obsolete Equipment
    - 4.1.5 System Training
- 5.0 Warranty Overview
  - 5.1 Equipment and Product Warranties
  - 5.2 Service and Labour Warranties
- 6.0 Service and Support
  - 6.1 Service Technician Information
  - 6.2 Service Call Rates

**Illustrated brochures and professional publications may be attached and submitted to augment the data and information listed above and included in the qualifications document.**

**Illustrated brochures and professional publications do not replace any component, in part or in full, of the “Mandatory Proposal Components”.**

## 7.0 PROPOSAL EVALUATION CRITERIA

The VENDOR proposal shall be evaluated in accordance with the following criteria. Proposals will be evaluated by the North Bay Jack Garland Airport Corporation on the basis of perceived “best value” to the AIRPORT as such, the lowest price may not mean award. The North Bay Jack Garland Airport Corporation reserves the right to select and award using its sole discretion and to reject any and all proposals as it sees fit.

The Airport Manager and team will carry out a project assessment and make recommendations to the Airport Board. The evaluation will use the criteria set out as outlined below.

<b><u>Envelope</u></b>	<b><u>Total Value 100 points</u></b>
• Proposal Quality -overall organization, quality of proposal	10 points
• Understanding of the Requirements - demonstrated understanding of the requirements	10 points
• Heating Systems and Similar Work Related Experience - qualifications and experience of firm & personnel	30 points
• Methodology - depth, detail, clarity of the submission, timeline	15 points
• Total Cost to Provide Service	35 points

### **Acceptance or Rejection of Tenders**

The AIRPORT reserves the right to reject any or all tenders in the best interest of the Corporation. The lowest or any tender will not necessarily be accepted.

## **8.0 SUBMISSION INSTRUCTIONS**

### **8.1 Address for Submission of Proposals**

Address for submittal of Proposals:

Clearly mark in sealed packages:

**PROPOSAL SUBMISSION FOR:  
Maintenance Garage Heating Plant  
North Bay Jack Garland Airport Corporation  
50 Terminal St., Suite 1  
North Bay, Ontario  
P1B 8G2**

### **8.2 Closing Time for Submission of Proposals**

Proposals must be received no later than:

**3:00pm on Wednesday May 31, 2017**

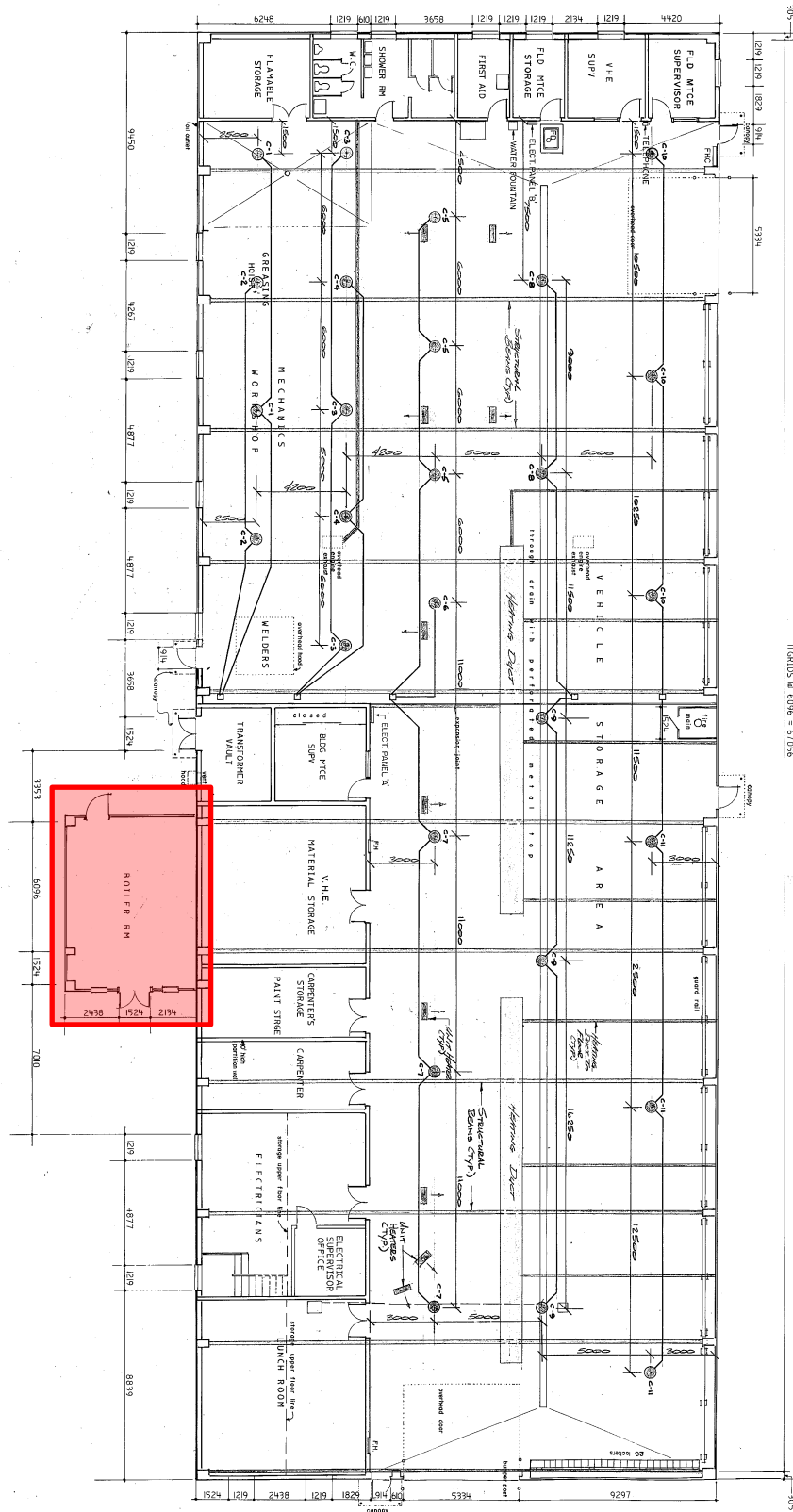
### **8.3 Enquiries from Proponents**

Proponents are to direct enquiries during the proposal call period to:

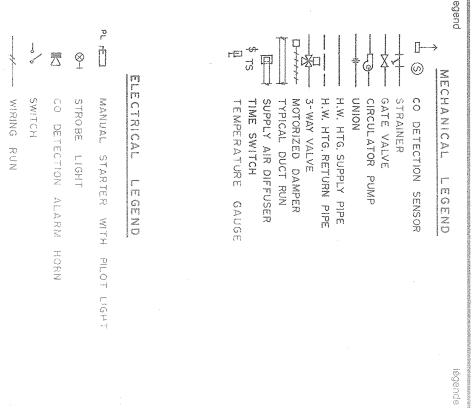
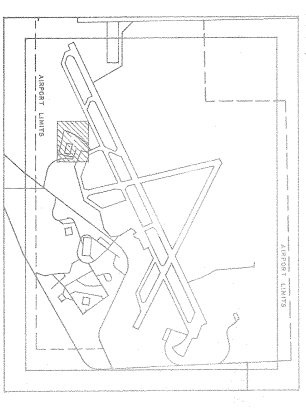
Bryan Avery  
Security/Operations and Service Development Manager  
Phone: 705-474-3026 Ext 5305 Fax: 705-474-3020  
Email: [bryan.avery@northbayairport.com](mailto:bryan.avery@northbayairport.com)  
North Bay Jack Garland Airport Corporation  
50 Terminal St. Suite 1  
North Bay, Ontario P1B 8G2



Appendix A – Maintenance Garage Layouts



Note: Red box delineates Boiler Room.



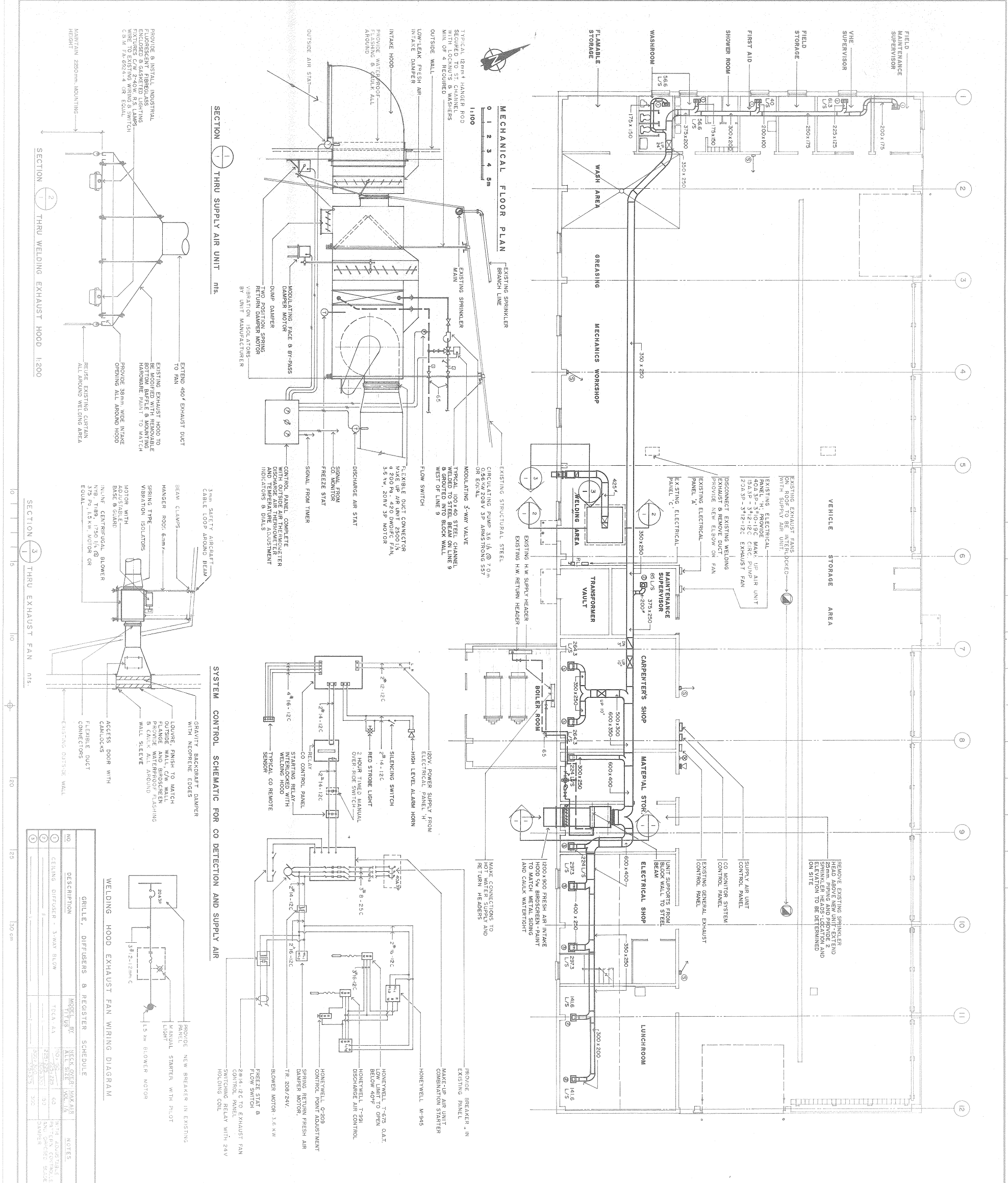
**AS BUILT**

**PIOTROWSKI CONSULTANTS LTD.**  
 MECHANICAL ELECTRICAL ENGINEERS  
 NORTH BAY ONTARIO

**NORTH BAY AIRPORT**  
 IMPROVE VENTILATION SYSTEM  
 IN MAINTENANCE GARAGE

**FLOOR PLAN AND DETAILS**

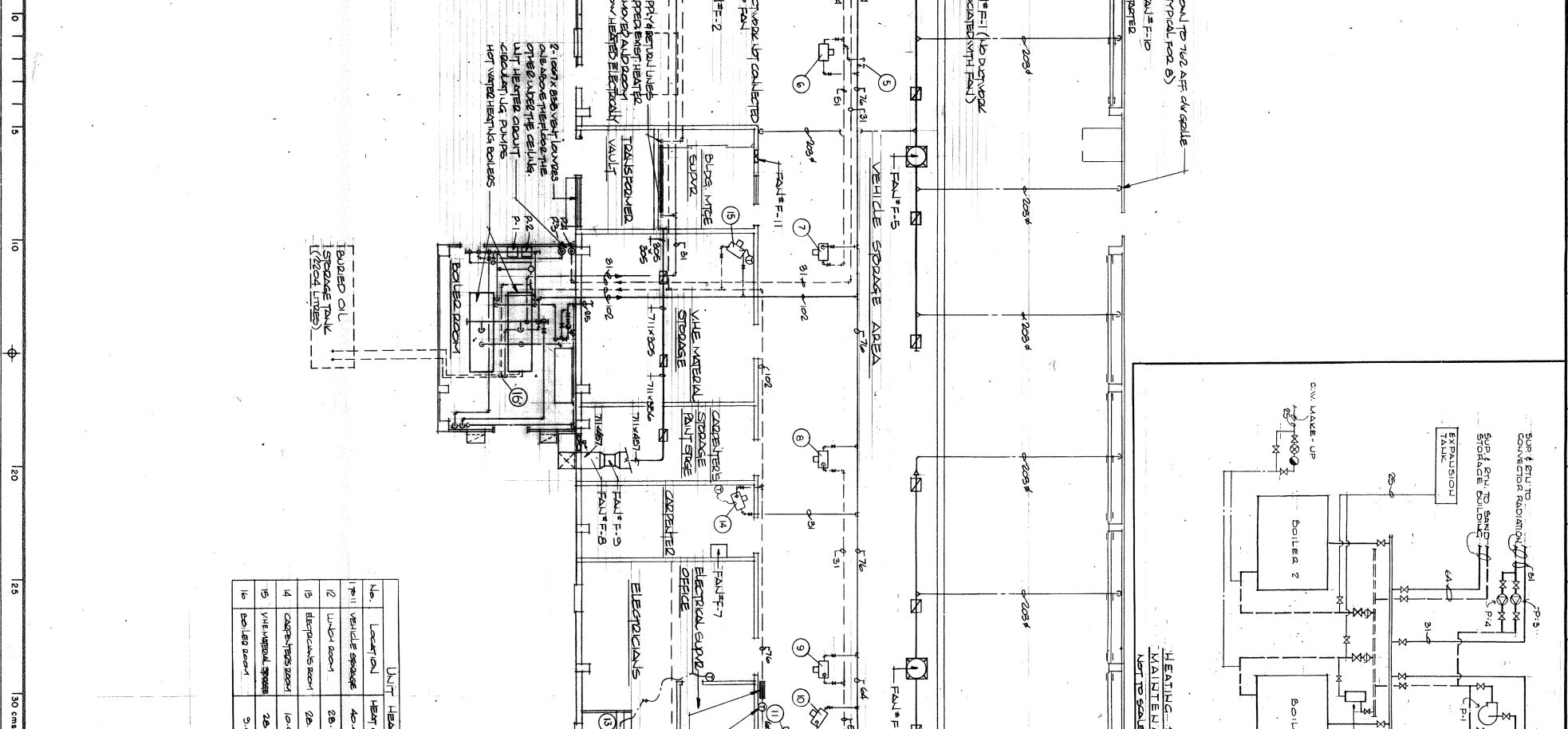
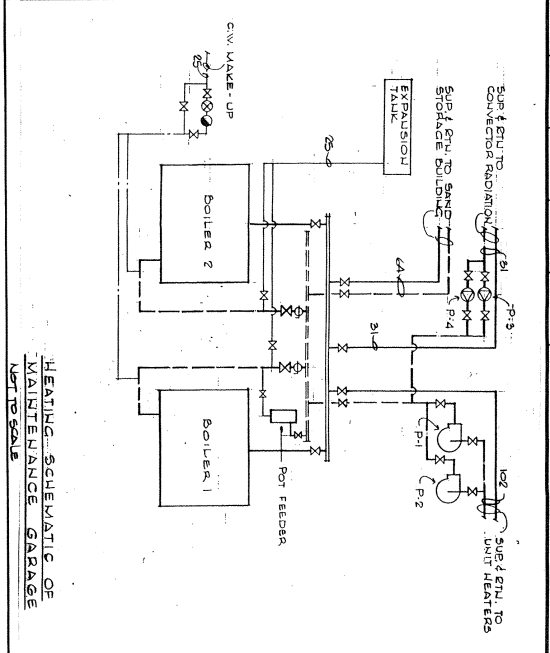
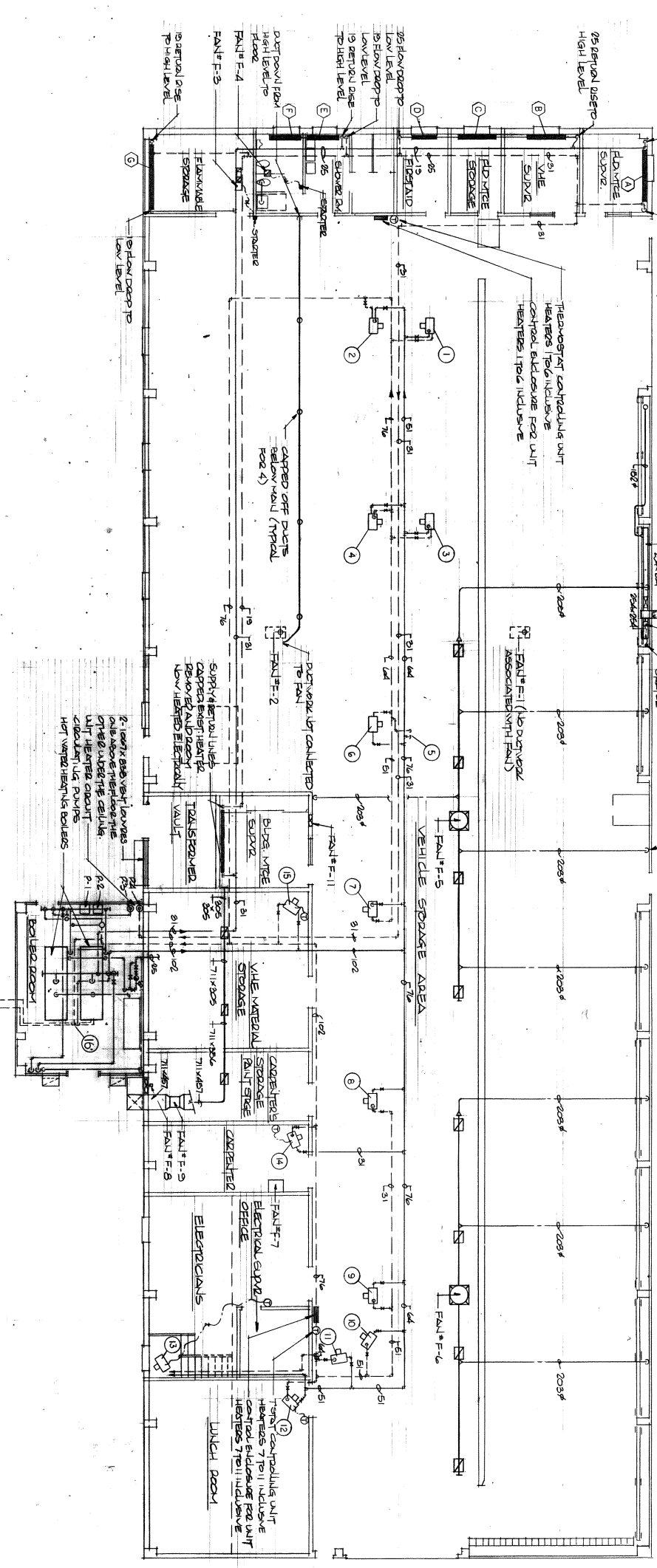
NO.	DESCRIPTION	MODELS	DATE	NOTES
1	CEILING DIFFUSER - 3WAY BLOW	TDCA A1	07/20/22	REVISIONS
2	GRILLE, DIFFUSERS & REGISTER SCHEDULE			



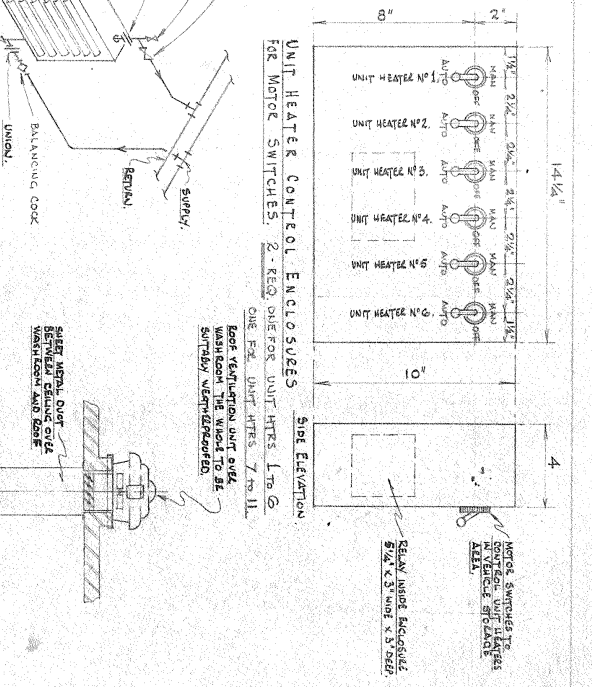
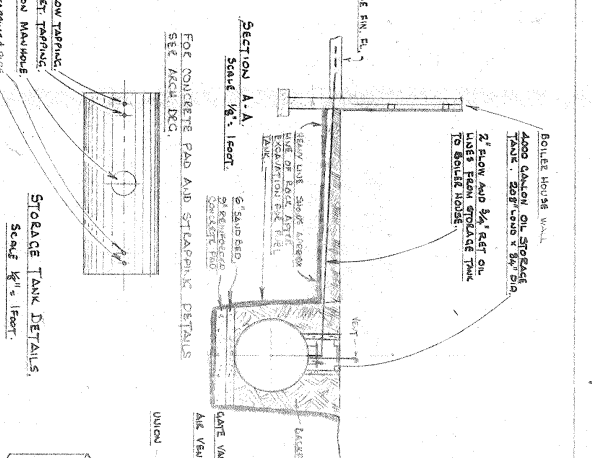
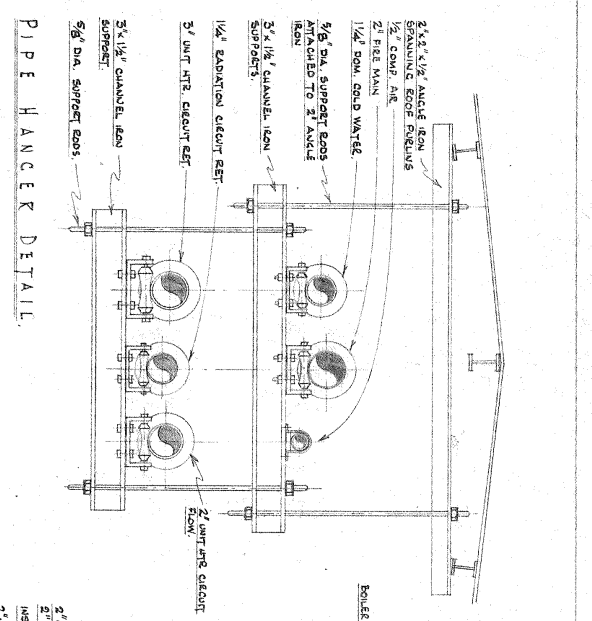
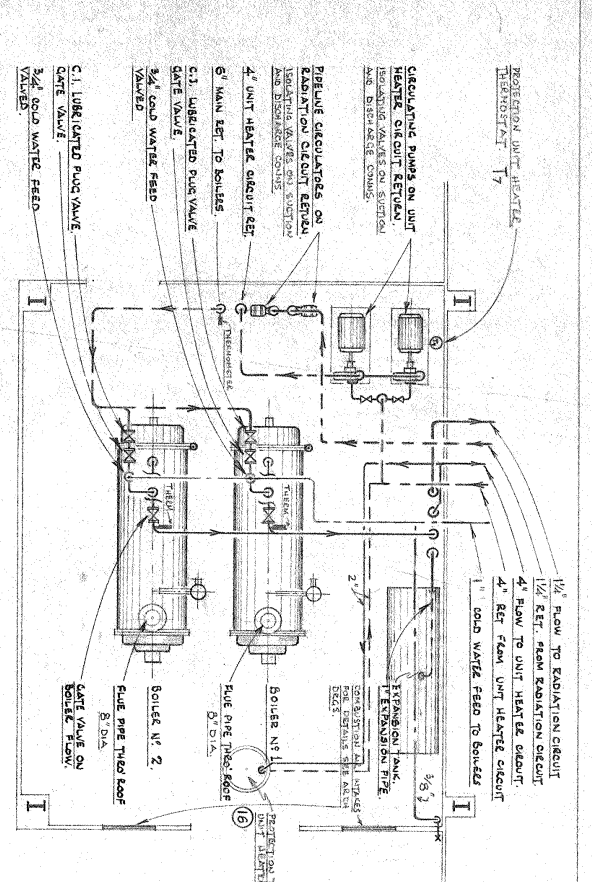
SECTION 1 THRU SUPPLY AIR UNIT NTS.  
 SECTION 2 THRU WELDING EXHAUST HOOD 1:200  
 SECTION 3 THRU EXHAUST FAN NTS.

WALL FINI	LOCATION	LENGTH (m)	HEIGHT (m)	NO. OF BOVS	CONSTRUCTION	WALL FINI SCHEDULE
A	FLOOR SPRINGS	24.65	2.95	1	13	WALL FINI SCHEDULE
B	WALL SPRINGS	18.20	2.95	1	13	WALL FINI SCHEDULE
C	FLOOR SPRINGS	6.05	2.95	1	13	WALL FINI SCHEDULE
D	FLOOR SPRINGS	6.10	2.95	1	13	WALL FINI SCHEDULE
E	WALL SPRINGS	10.24	2.95	2	13	WALL FINI SCHEDULE
F	WALL SPRINGS	10.24	2.95	2	13	WALL FINI SCHEDULE
G	WALL SPRINGS	10.24	2.95	2	13	WALL FINI SCHEDULE
H	WALL SPRINGS	10.24	2.95	2	13	WALL FINI SCHEDULE

No.	LOCATION	HEAT OUTPUT	CONSTRUCTION	TYPE
1	VEHICLE STORAGE	40.4 kW	51	WALL MOUNTED (CON. UNIT)
2	VEHICLE STORAGE	28.9 kW	51	WALL MOUNTED (CON. UNIT)
3	ELECTRICIAN'S ROOM	28.9 kW	51	WALL MOUNTED (CON. UNIT)
4	COPY/PRINT ROOM	10.0 kW	51	WALL MOUNTED (CON. UNIT)
5	VEHICLE STORAGE	28.9 kW	51	WALL MOUNTED (CON. UNIT)
6	VEHICLE STORAGE	28.9 kW	51	WALL MOUNTED (CON. UNIT)



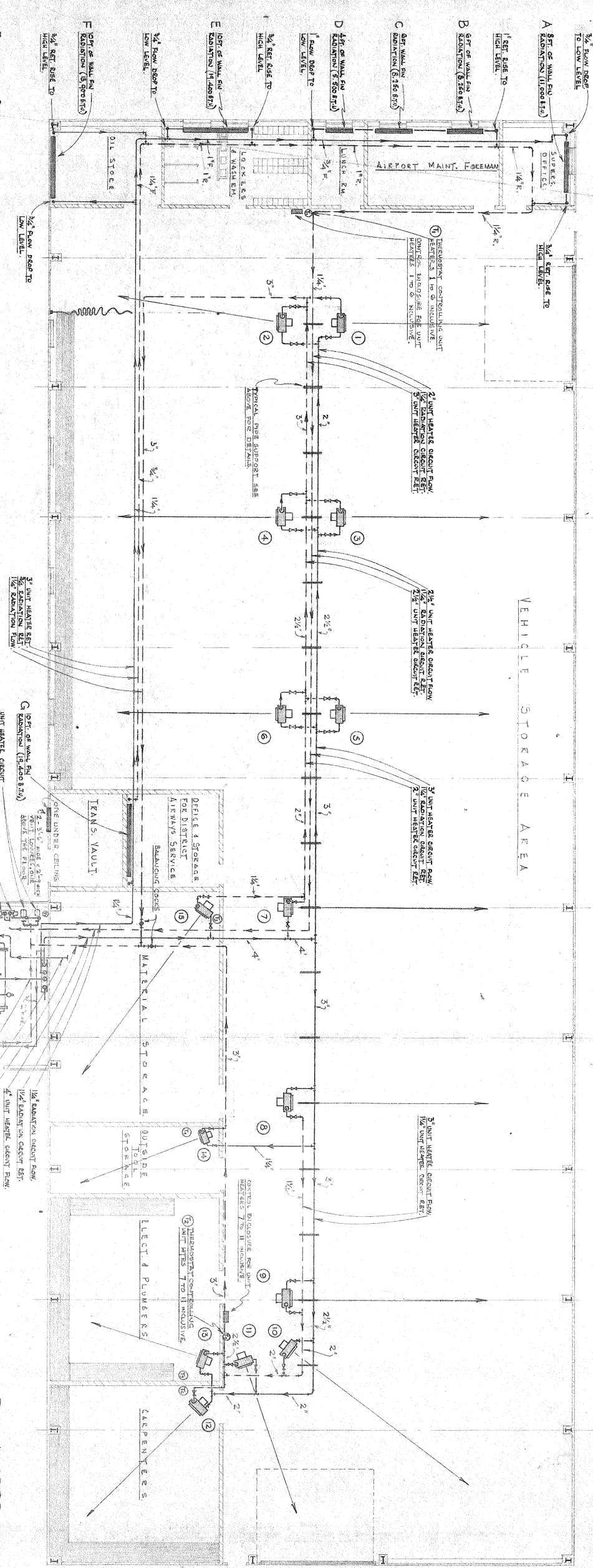
TRANSPORT CANADA AIR		TRANSPORTS CANADA AIR	
CONSTRUCTION SERVICES - ONTARIO REGION SERVICES DE CONSTRUCTION - REGION DE L'ONTARIO			
location map: _____ carte de location: _____			
NOTE: THE CONTENTS OF THESE RECORD DRAWINGS ARE BASED ON A SITE SURVEY AND ORIGINAL DESIGN DRAWINGS.			
MECHANICAL ENGINEERS OKINS, LEIPIGER, CUPULINSKAS, KAMINKER & ASSOCIATES LIMITED TORONTO, ONTARIO			
Project Title: NORTH BAY AIRPORT MAINTENANCE GARAGE			
Drawing Title: FLOOR PLAN HEATING & VENTILATION			
Scale: 1:100 APPROX. (1/8") SCALE IN METERS			
designed by: RECORO DRAWING drawn by: D.J.Z. approved by: D.M.K.			
project date: FEBRUARY 1984			
sheet number: M-3 of 3			
regional manager: construction services 0135 0933 M003			



**Boiler House Plan**  
1/4" = 1' Foot

**Typical Unit Heater Couvs.**

**Unit Heater Control Enclosures for Motor Switches**



**FLOOR PLAN**  
SCALE 1/8" = 1' FOOT

THERMOSTAT SCHEDULE				WALL FIN SCHEDULE				UNIT HEATER SCHEDULE				
No.	Position	Location	Height	Length	Width	Material	Type	No.	Location	Height	Width	Type
1	WEST WALL STORAGE AREA	1 to 5	12'	5'	3"	Concrete	2"	1	WEST WALL STORAGE AREA	1 to 5	12'	5'
2	SOUTH WALL STORAGE AREA	7 to 11	12'	5'	3"	Concrete	2"	2	SOUTH WALL STORAGE AREA	7 to 11	12'	5'
3	WINDING STAIRS ROOM	15	12'	5'	3"	Concrete	2"	3	WINDING STAIRS ROOM	15	12'	5'
4	OUTSIDE TOILET	14	12'	5'	3"	Concrete	2"	4	OUTSIDE TOILET	14	12'	5'
5	ELECTRICAL & PUMPS	12	12'	5'	3"	Concrete	2"	5	ELECTRICAL & PUMPS	12	12'	5'
6	WASH ROOM	16	12'	5'	3"	Concrete	2"	6	WASH ROOM	16	12'	5'
7	BOILER HOUSE	16	12'	5'	3"	Concrete	2"	7	BOILER HOUSE	16	12'	5'

**JOB No 45CB**

**DEPARTMENT OF TRANSPORT**  
ONTARIO - CANADA

**CONSTRUCTION SECTION**

**ENGINEER: NORTH BAY - ONTARIO**

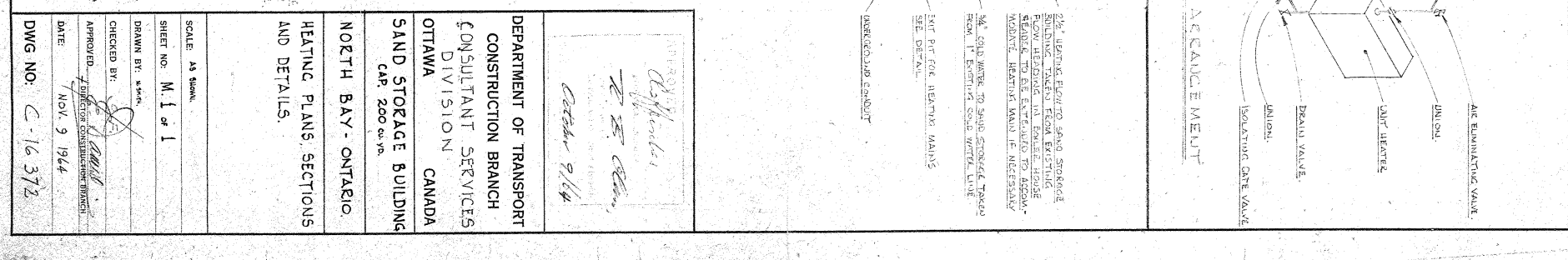
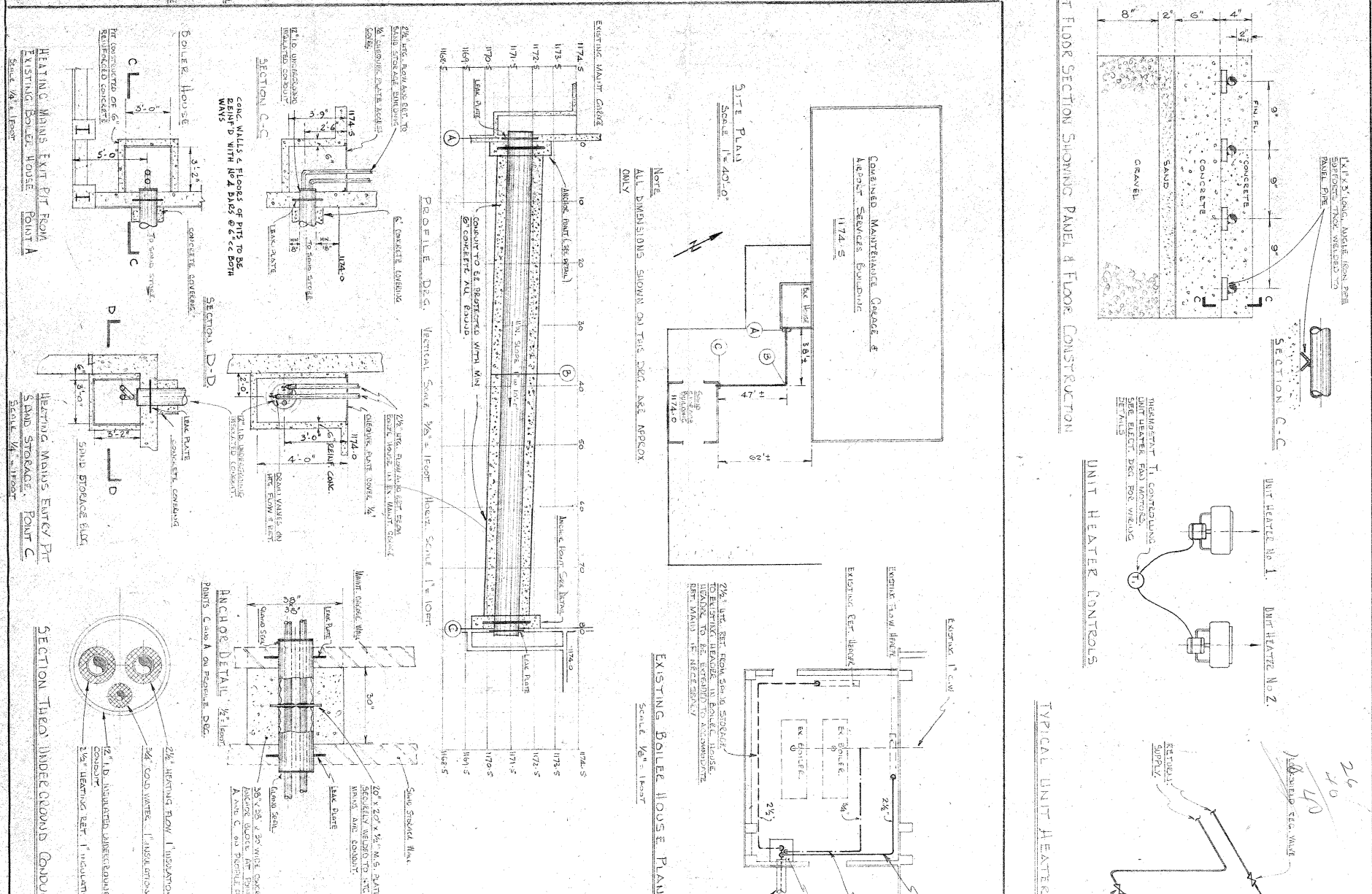
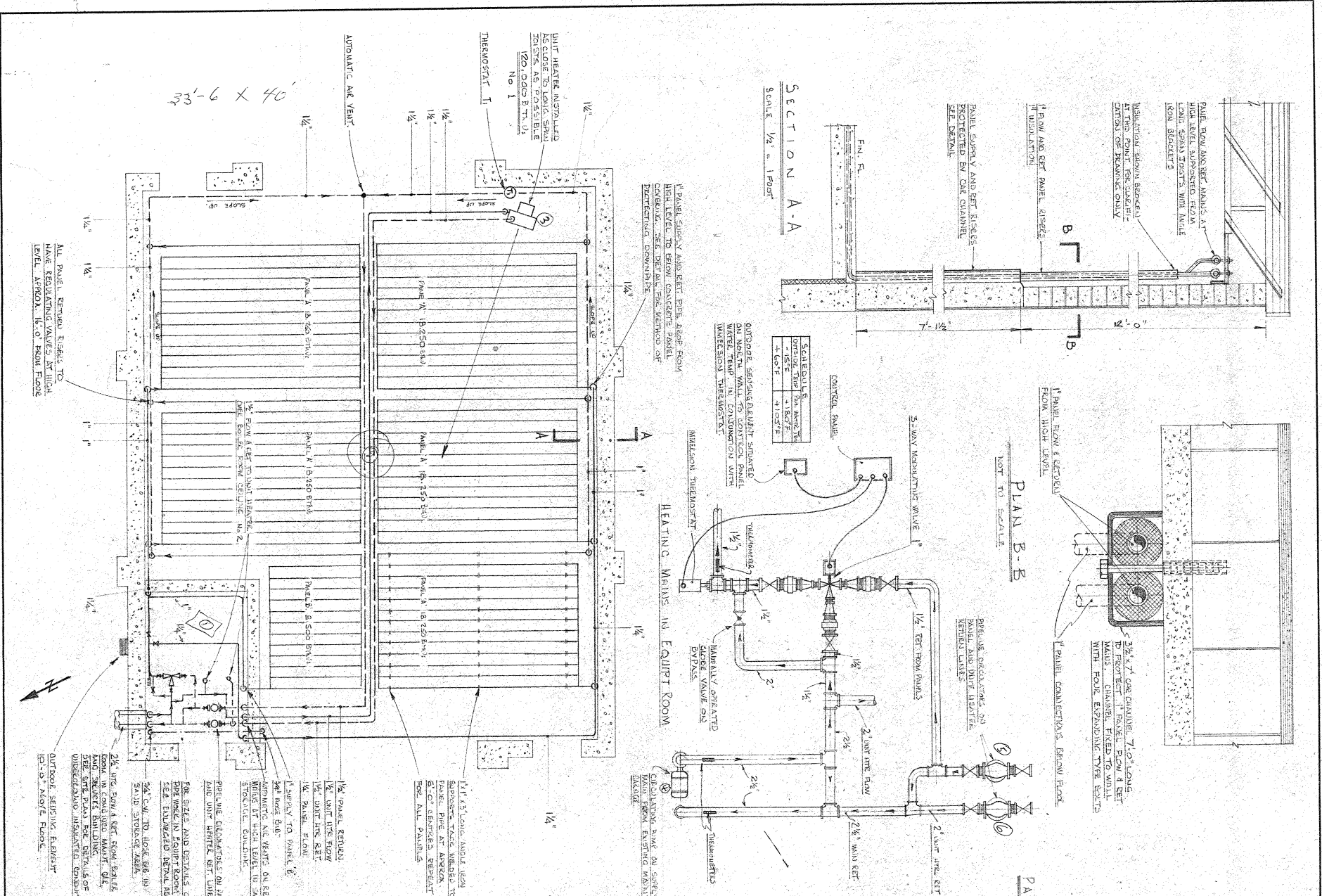
**DESIGNER: HEATING PLAN AND DETAILS**

DATE: 1961  
APPROVED: [Signature]  
FOR: [Signature]

MECH 1/3



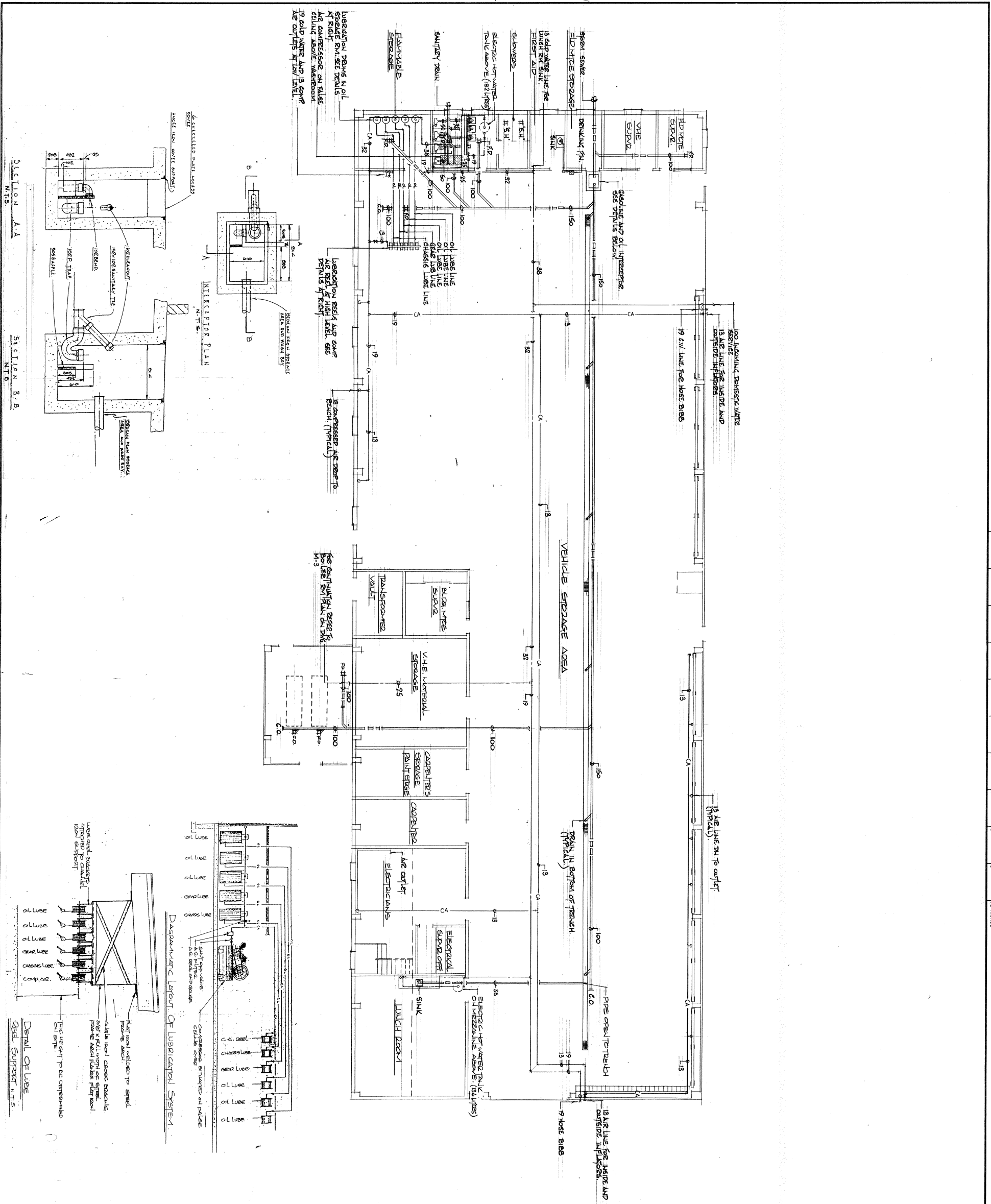
Outline  
 K. 1246YZ



UNIT HEATER NECESSARY DETAIL:  
 1. Unit Heater  
 2. Unit Heater  
 3. Unit Heater  
 4. Unit Heater  
 5. Unit Heater  
 6. Unit Heater  
 7. Unit Heater  
 8. Unit Heater  
 9. Unit Heater  
 10. Unit Heater  
 11. Unit Heater  
 12. Unit Heater  
 13. Unit Heater  
 14. Unit Heater  
 15. Unit Heater  
 16. Unit Heater  
 17. Unit Heater  
 18. Unit Heater  
 19. Unit Heater  
 20. Unit Heater

EXISTING BOILER HOUSE PLAN:  
 1. Boiler  
 2. Boiler  
 3. Boiler  
 4. Boiler  
 5. Boiler  
 6. Boiler  
 7. Boiler  
 8. Boiler  
 9. Boiler  
 10. Boiler  
 11. Boiler  
 12. Boiler  
 13. Boiler  
 14. Boiler  
 15. Boiler  
 16. Boiler  
 17. Boiler  
 18. Boiler  
 19. Boiler  
 20. Boiler

DEPARTMENT OF TRANSPORT  
 CONSULTANT SERVICES  
 DIVISION  
 OTTAWA CANADA  
 SAND STORAGE BUILDING  
 CAP 200 cu yd  
 NORTH BAY - ONTARIO  
 HEATING PLANS, SECTIONS  
 AND DETAILS.  
 SCALE: AS SHOWN  
 SHEET NO. M. 1 of 1  
 DRAWN BY: [Signature]  
 CHECKED BY: [Signature]  
 APPROVED: [Signature]  
 DATE: NOV 9 1964  
 DWG NO.: C-16 372



Transport Canada  
Transport Canada  
Air Air

CONSTRUCTION SERVICES — ONTARIO REGION  
SERVICES DE CONSTRUCTION — REGION DE L'ONTARIO

location map carte de location

NOTE  
THE CONTRACTOR'S OFFICE RECORD DRAWINGS ARE  
BASED ON A SITE SURVEY AND ORIGINAL DESIGN  
DRAWINGS.

RESIDENTIAL  
CONSULTANTS  
OKINS, LEIPIGER  
CUPLINKAS, KAMINKER  
& ASSOCIATES LIMITED  
TORONTO, ONTARIO



SYMBOLS	DENOTES
	BURIED SANITARY DRAIN
	HUNG SANITARY DRAIN
	BURIED STORM DRAIN
	HUNG STORM DRAIN
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	FLOOR DRAIN
	COMPRESSED AIR

no.	by	date	approved	revisions

Project title  
titre du projet  
**NORTH BAY AIRPORT  
MAINTENANCE GARAGE**

drawing title  
titre du dessin  
**FLOOR PLAN  
PLUMBING & DRAINAGE**

scale  
échelle  
1:100 APPROX. (1/8")  
1:100 APPROX. (1/8")

designed by  
conçue par  
**RECORD DRAWING**

drawn by  
dessiné par  
**D. J. Z.**

checked by  
vérifié par  
**D. M. K.**

approved by  
approuvé par  
**D. M. K.**

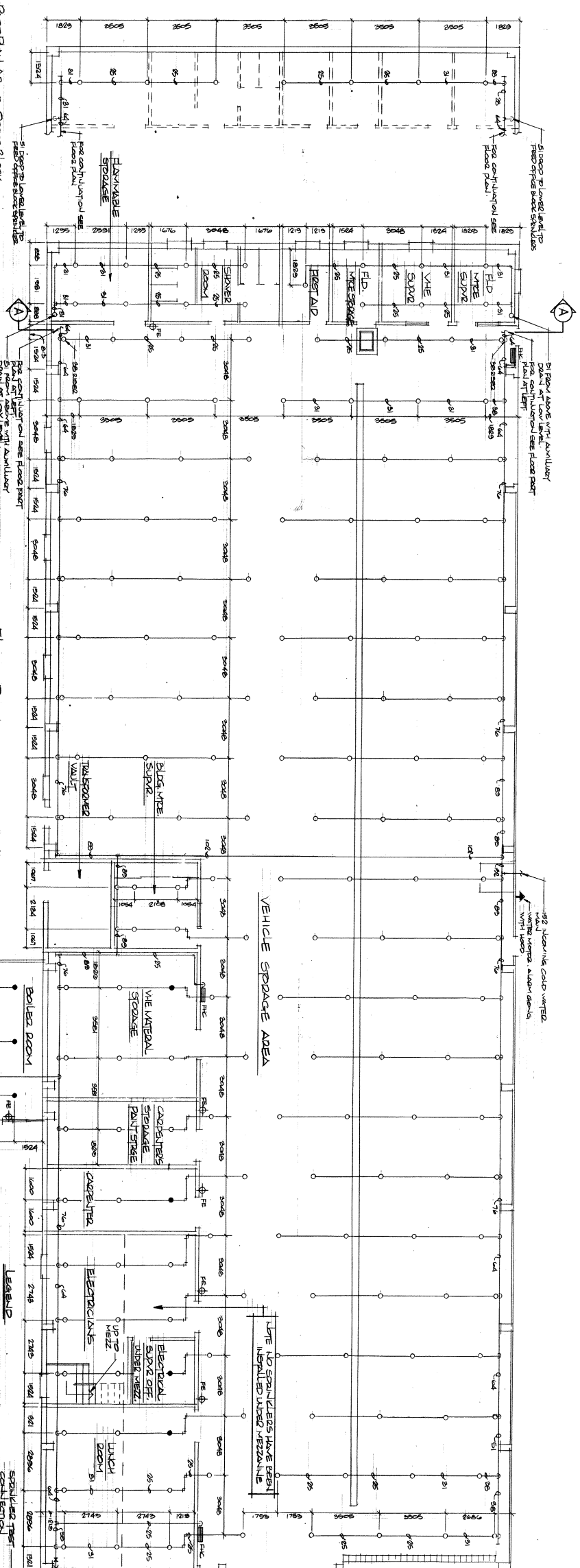
project date  
date du projet  
**FEBRUARY 1984**

sheet  
feuille  
**M-1**

of  
de  
**3**

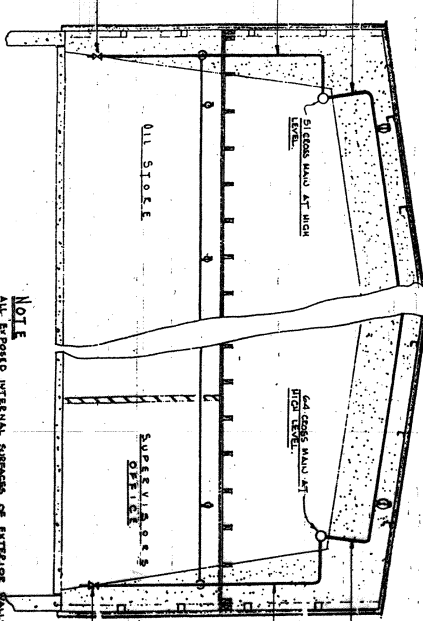
regional manager construction services  
gestion régional des services de construction

0 1 3 5 0 9 3 3 M 0 0 1



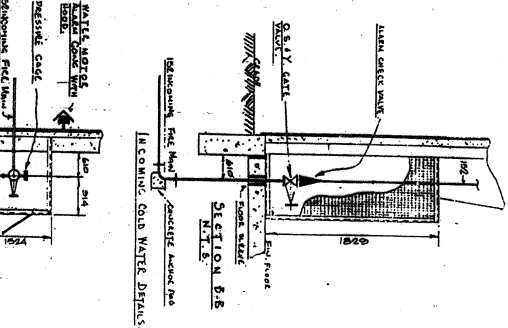
Part Plan Above Office Block  
SCALE 1:100

FLOOR PLAN  
SCALE 1:100



SECTION A-A  
SCALE 1:100

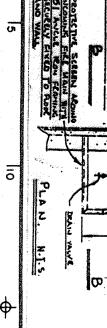
NOTE  
ALL EXPOSED INTERNAL SURFACES OF EXTERIOR WALLS AND  
TO BE SEALY COATED WITH ASBESTOS RESISTANT  
PAINT TO PREVENT WATER INTRUSION.



SECTION B-B  
SCALE 1:100

- Sprinkler operating temperature 74°C
- Sprinkler operating temperature 100°C
- Risk Free hose cabinet

LEASABLE  
SPRINKLER TEST  
COLLECTION



MECHANICAL  
SCALE 1:100

TRANSPORT CANADA AIR AIR			
CONSTRUCTION SERVICES - ONTARIO REGION SERVICES DE CONSTRUCTION - REGION DE L'ONTARIO			
location map carte de location			
NOTE THE CONTENTS OF THESE RECORD DRAWINGS ARE BASED ON A SITE SURVEY AND ORIGINAL DESIGN DRAWINGS.			
MECHANICALS OKINS, LEIPOIGER, CUPLINSKAS, KAMINKER & ASSOCIATES LIMITED TORONTO, ONTARIO			
NORTH BAY AIRPORT MAINTENANCE GARAGE			
Drawing title titre de dessin FLOOR PLAN SPRINKLERS			
scale échelle 1:100 APPROX. (1:98) SCALE IN METERS			
designed by conçu par RECORD DRAWING			
drawn by dessiné par D.J.Z.			
approved by approuvé par D.M.K.			
project date date de projet FEBRUARY 1984			
sheet feuille M-2 of 3			
Regional Manager Construction Services Directeur régional des services de construction			
013509333 M002			



Appendix B – Satellite Image of Maintenance Garage and Boiler Room Location



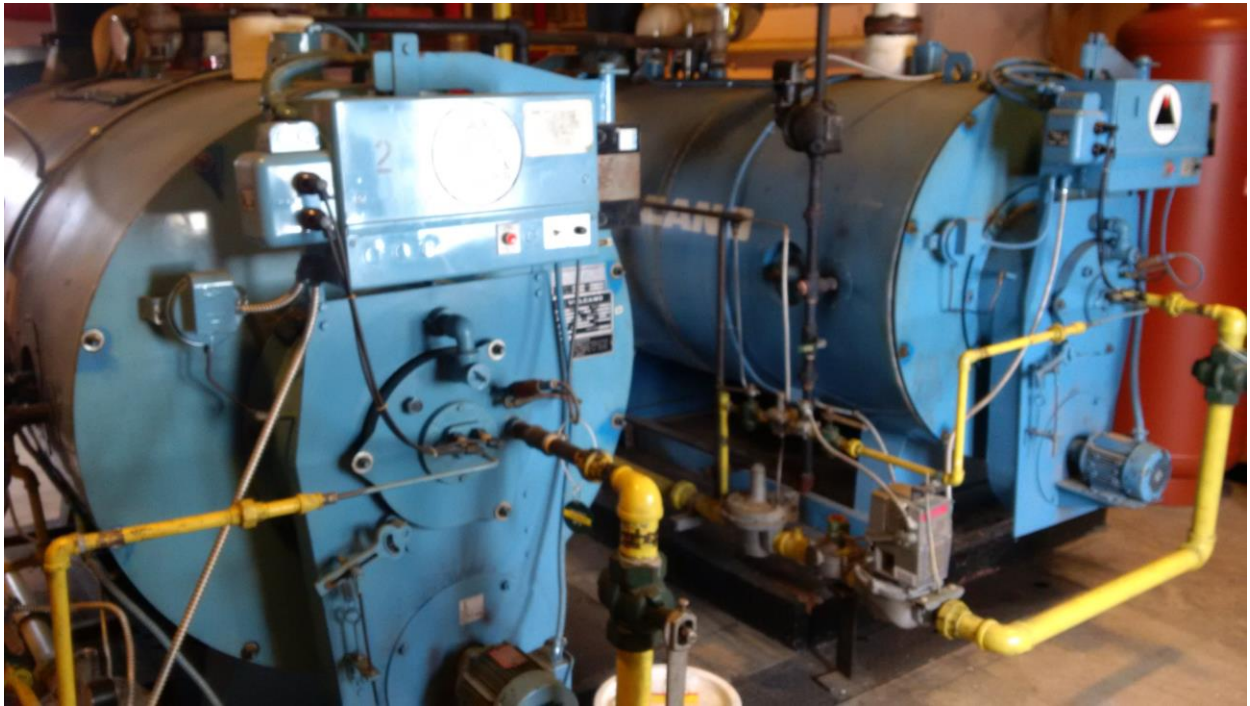
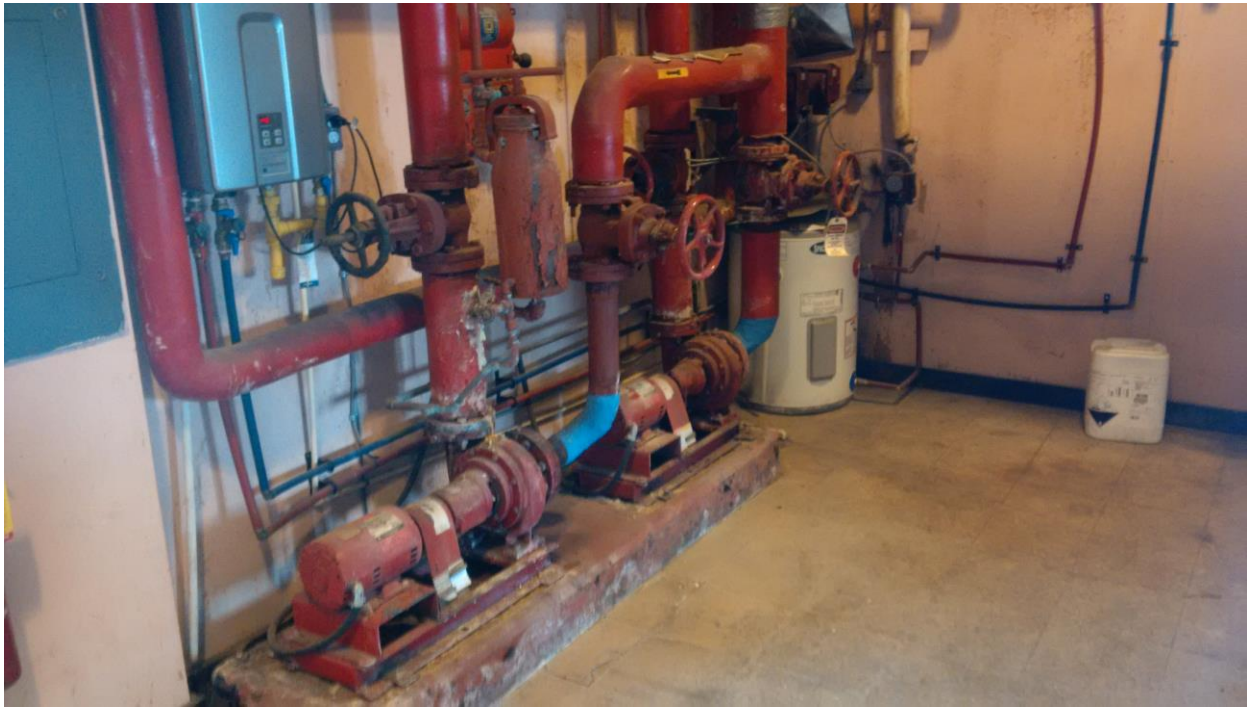
**Note:** Red box delineates Boiler Room.



Appendix C – Photos of Current Boiler Setup







Appendix D – Photos of Associated HVAC Equipment in the Maintenance Garage





