



Buffalo & Fort Erie Public Bridge Authority

Request for Proposals for
***MECHANICAL DESIGN SERVICES
AT PEACE BRIDGE PLAZA, BUFFALO NY***

*1 Peace Bridge Plaza
Buffalo, NY 14213*

Date Issued: November 7, 2022

Submission Deadline: December 8, 2022 at 3:00 PM

BUFFALO & FORT ERIE PUBLIC BRIDGE AUTHORITY

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I. INTRODUCTION

A. General Information

The Buffalo and Fort Erie Public Bridge Authority ("the Authority") is seeking to hire engineering and design services for two identified mechanical system projects at the U.S. Plaza of the Peace Bridge in Buffalo, NY ("the Consultant").

Firms intending to respond to this RFP should notify Danielle McCaffery, Operations Coordinator, via email at dem@peacebridge.com. This will ensure that they receive all updates and/or amendments/addendums to this RFP.

All references to time of day within this RFP are expressed in Eastern Time Zone (EST).

B. Restrictions on Communications

From the date this RFP is issued until the contract award has been announced, no Respondent initiated contact with any Authority official shall be permitted regarding this RFP, other than written inquiries, as described in Section C herein. Contact includes, but is not limited to, any lobbying of individuals considered to have any influence over proposal evaluation and selection. Violation of this provision will be grounds for immediate disqualification.

C. Inquiries and Communications

All inquiries and communications relating to this RFP or the Project must be made by e-mail to:

Buffalo & Fort Erie Public Bridge Authority
Attention: Danielle McCaffery, Operations Coordinator
dem@peacebridge.com

There will be an opportunity available for submission of written questions. All questions or requests for clarification regarding this RFP must come from one point of contact per company no later than November 29, 2022 at 1:00 PM. Questions or requests for clarification received after such time and date will not receive a response from the Authority. All questions and answers will be posted online at www.peacebridge.com/rfp, and distributed via e-mail to those that provided contact information as requested, by December 2, 2022

Contact with the Authority or any of its personnel relating to this RFP or the Project other than as stated above may be grounds for disqualification of the Respondent.

D. Responses

Respondents must submit their Responses to this RFP to the Authority no later than December 8, 2022 at 3:00 PM in the manner, and with the documents and information, specified in Part V of this RFP to the following address:

Buffalo & Fort Erie Public Bridge Authority
Attention: Danielle McCaffery, Operations Coordinator
1 Peace Bridge Plaza, Buffalo, NY 14213

Respondents are responsible for all postage or courier costs, including cross-border costs, and ensuring its respective Response is received by the Authority at the address above by the time required.

E. Modifications to the RFP

The Authority may modify any part of the RFP prior to the deadline for submission of proposals by issuance of an addendum. Any addendum issued by the Authority will be posted to the Authority website and email notification of such posting will be distributed via e-mail to all firms that provided contact information as requested.

F. Requirements

All potential Respondents are required to attend a mandatory site meeting on November 22, 2022 at 10:30 AM at 1 Peace Bridge Plaza, Buffalo NY (3rd floor conference room). *Responses will not be accepted from Respondents who do not attend this site meeting.*

To be considered, a Respondent must submit one (1) hard copy and one electronic copy of the Response to the RFP, which must be received by the Authority as set out in Clause D of Part I of this RFP. The Authority reserves the right to reject any or all proposals submitted. Responses submitted will be evaluated by a Selection Committee of the Authority.

All members of the Consultant team, as well as all of the subcontractors and suppliers of any tier which will have a physical site presence to perform any part of the Work are required to undergo a security background review. Security reviews are conducted by U.S Customs and Border Protection (CBP). Individuals failing to obtain the necessary security clearances from CBP will not be allowed access to the Bridge site. Delivery personnel making short term visits to the site for loading/unloading are typically exempt from this requirement. All visitors to the Authority's sites, including site visits in connection with this RFP process, are required to be escorted by the Authority or the Authority's representatives.

There is no expressed or implied obligation for the Authority to reimburse responding firms for any expenses incurred in preparing qualifications in response to this request.

During the evaluation process, the Authority reserves the right, where it may serve the Authority's best interest, to request additional information or clarifications from proposers or to allow corrections of errors or omissions. At the discretion of the Authority's Selection Committee, Respondents may be requested to make oral presentations as part of the evaluation process.

All Responses become the property of the Authority. The Authority reserves the right to retain all Responses to the RFP submitted, and to use any ideas in a Response regardless of whether or not the applicable Respondent is selected. Submission of a Response indicates acceptance by the Respondent of the conditions contained in this RFP, unless clearly and specifically noted in the Response submitted.

All qualified Respondents will be afforded equal opportunity without discrimination because of race, creed, color, national origin, sex, age, disability or marital status. The Authority encourages minority and women-owned businesses to submit responses to the RFP.

G. Currency

All references to dollar amounts or currency in this RFP are references to United States dollars, unless expressly stated otherwise. All references to dollar amounts or currency in Responses will be deemed to be references to United States dollars, unless expressly stated otherwise.

II. DESCRIPTION OF THE AUTHORITY

A. Buffalo & Fort Erie Public Bridge Authority

The Peace Bridge is owned and operated by the Buffalo and Fort Erie Public Bridge Authority, which is an international compact entity created pursuant to a compact entered into by the State of New York, with the consent of the United States Congress, and by the Government of Canada. The Authority is governed by a ten-member Board consisting of five members from New York State and five members from Canada. The mission of the Authority is to be known as the premier Canada-United States international border crossing, providing excellence in customer service and an effective conduit for trade and tourism.

The Authority's principal asset and source of revenue is the Peace Bridge, a major international toll crossing spanning the Niagara River between Fort Erie, Ontario, and Buffalo, New York. The Authority also derives significant revenues in the form of rental and fee income from the United States Bureau of Customs and Border Protection (CBP), Public Works and Government Services Canada (PWGSC), United States and Canadian duty-free shops, and commercial brokers operating on the property owned by the Authority and from leases of communication conduits spanning the Peace Bridge.

B. General Information

The Authority owns and operates the Peace Bridge which is located at the Niagara River Crossing between Buffalo, New York and Fort Erie, Ontario. The Peace Bridge measures 3,580 feet in length from abutment to abutment. The roadway is 36 feet wide from curb to curb with two six-foot pedestrian sidewalks on either side of the bridge. The Peace Bridge is a three-lane bridge with twelve-foot wide lanes, able to accommodate heavy-duty commercial loads. The center lane of this three-lane bridge is reversible, allowing two-lane operation in one direction during peak hours. The main approaches to the Peace Bridge on the United States side are the New York State Thruway (I-190) and Porter Avenue, a four lane arterial. On the Canadian side, the principal approach highways are the Queen Elizabeth Way (QEW), Highway 3, a four lane highway; and the Niagara Parkway.

The Bridge opens into a joint Auto/Commercial Vehicle inspection plaza in the U.S., and separate Auto and Commercial Vehicle inspection plazas in Canada. The U.S. Plaza consists of two (2) inspection/administration buildings shared by government agencies, customs brokers, and the Authority; eight (8) commercial vehicle inspection lanes; eleven (11) auto inspection lanes; and a Duty Free shop. The Canadian Plaza consists of four (4) inspection/administration buildings occupied by PWGSC, CBP, and customs brokers; five (5) commercial inspection lanes; sixteen (16) auto inspection lanes; five (5) toll lanes; an Authority administration building; a maintenance shop; and a Duty Free shop.

III. SCOPE OF SERVICES

A. General

The Authority seeks a Consultant to perform engineering and design services for two identified HVAC system projects at the U.S. Plaza of the Peace Bridge in Buffalo, NY. The identified projects, explained in greater detail below, are limited to the U.S. Warehouse VRF System Replacement Project (see Section B herein) and the Willson Building Chiller Replacement Project (see Section C herein).

It is expected that the Consultant will provide key staff from local offices, and that all key staff submitted within this proposal attend the project kick-off meeting and all design meetings unless otherwise agreed to by the Authority. Select key staff, as deemed appropriate by the Authority, shall also attend all construction progress meetings.

B. Task 1: U.S. Warehouse VRF System Replacement Project

This project concerns a partial HVAC system replacement project at the U.S. Warehouse (Commercial Operations) facility on the U.S. Plaza of the Peace Bridge in Buffalo, NY. The purpose of this HVAC replacement project is to redesign and replace the end-of-life and underperforming Daikin VRV III heating/cooling system with improved reliability, maintainability, and lifespan. Existing boilers and heat recovery units are to remain.

It is anticipated that design for this project will commence in January, 2023 with design ready for contractor tender by March 15, 2023. This will allow construction to start in the fall of 2023 (see §B.3.a.viii regarding construction phasing details).

It is expected that in executing this project the Consultant will draw from their knowledge and experience with Variable Refrigerant Flow (VRF) / Variant Refrigerant Volume (VRV) system installations comparable to the size of this engagement.

1. U.S. Warehouse Building Description

This facility is used by U.S. Customs and Border Protection (CBP) and other government agencies 24 hours and day, 7 days a week, and must maintain operation throughout construction.

This building was originally constructed in 1957 and was expanded on and completely renovated in 2014-2016 which included the installation of new electrical and mechanical systems. There are three general sections to the Warehouse: the 3-story annex plus basement (ground floor) (1957), the dock (1957), and the 2-story addition (2016). The existing HVAC system for the building was installed and made operational in three phases (see Figure 2 herein for phasing zones).

Floorplans and select mechanical drawings from the 2016 installation are included in Appendix 1 (A1-1 and A1-2 respectively). Additional record drawings from the 2016 renovations are available to Respondents upon request. Please note that the 2016 record drawings may not accurately depict existing conditions, as minor changes have been completed since this date.

2. Existing HVAC System

a. General Components

The existing HVAC system consists of the following general components:

- VRV system – Daikin VRV III (see §B.2.b herein for details)
- Condensing Boilers (2) – LAARS, model NTH750
- Outdoor heat recovery units (2) – AAON Packaged Rooftop Units; models RN-015 and RN-018
- Indoor heat recovery unit (1) – Daikin Applied Indoor Air Handling Unit; model CAH012GHDC
- Split-System Air Conditioners (6) – Daikin SkyAir wall mounted ductless split systems, model FAQ18PVJU (indoor) and RZQ18PVJU9 (outdoor)
- Electric duct heaters (21) – Engineered Air; HF Series open coil
- Cabinet Unit Heaters (5) – Daikin Applied fan coil unit; model FCHC102, 103, 104, and FHVH102
- Electric Radiant Ceiling Panels (9) – MARKEL Electric; model CP803
- Miscellaneous unit heaters and exhaust fans

It is the intent of this project that all existing HVAC components shall remain except for those pertaining to the Daikin VRV III system.

Note: There is an accessible utility chase (located proximal to the elevator) running from the ground floor to the 3rd floor that may aid in design/constructability efforts.

b. Daikin VRV III Details

Six (6) Daikin VRV III air-cooled condensing units (ACCUs) are located at the ground floor, exterior to the building and under canopy cover. The ACCUs are connected to 35 branch selectors that are in turn connected to 58 indoor split units throughout the building.

More specifically, the existing Daikin VRV III System to be replaced consists of the components detailed in **Figure 1** below.

This system (especially Daikin components) has experienced moderate to high levels of errors and failures since the initial installation and is now showing signs of significant corrosion on components located outdoors. Outdoor units have been in place less than eight years and show signs of deterioration typical of units 20+ years old.

Figure 1: Existing Daikin VRV III components

Component	No. of Units	Model	Service Area	Additional Information
ACCU-1	2	REYQ168PBYD (REMQ96PBYD & REMQ72PBYD)	1 st Floor Annex	168,000 Btu/h
ACCU-2	2	REYQ144PBYD (REMQ72PBYD & REMQ72PBYD)	2 nd Floor Annex	144,000 Btu/h
ACCU-3	2	REYQ144PBYD (REMQ72PBYD & REMQ72PBYD)	3 rd Floor Annex	144,000 Btu/h
ACCU-4	3	REYQ312PBYD (REMQ96PBYD, REMQ96PBYD, & REMQ120PBYD)	1 st Floor Addition	312,000 Btu/h
ACCU-5	3	REYQ336PBYD(REMQ120PBYD, REMQ120PBYD & REMQ96PBYD)	2 nd Floor Addition	336,000 Btu/h
ACCU-6	1	N/A	Ground Floor	See <i>Note 1</i>
Component	Qty	Model	Additional Information	
Cassettes	29	FXZQ(xx)MVJU9	Indoor Split Air Conditioning Units	
Ducted Units	29	FXMQ(xx)PVJU	Indoor Split Air Conditioning Units	
Branch Selectors	35	Various (e.g. BSVQ60PVJU)	Connected to ACCU-1, ACCU-2, ACCU-3, ACCU-4, or ACCU-5 in various configurations	

Note 1: ACCU-6 is to be replaced with split system units prior to the execution of this project and should not be included in this design effort.

Figure 2: Phasing zones from 2016 warehouse renovations (Phase I = 2016 Addition floors 1 and 2, and ground floor; Phase II = Annex floors 1,2, and 3; Phase III = Dock)



3. Description of Work

a. Design Guidelines

- i. **Objective:** The purpose of this partial HVAC replacement project is to redesign and replace the end-of-life and underperforming Daikin VRV III heating/cooling system with improved reliability, maintainability, and useful life. Existing boilers and heat recovery units are to remain.
- ii. **Energy Efficiency:** The design should consider at a minimum Energy Star building requirements for energy efficiency.
- iii. **Heating/Cooling Capacity:** The current heating/cooling capacity of the HVAC system is adequate for most spaces and should be maintained. However, there are a few spaces that need to be re-evaluated under this design: Room 122/123 (main processing area), Room 156 (1st floor break room), Room 207 (AT-CET office), and Room 223 (2nd floor training room).
- iv. **Controls Contractor:** The Authority will use a third-party controls contractor for HVAC control hardware/software/programming required in the new design. The Consultant will be required to coordinate with the controls contractor during design. The current controls contractor for the U.S. Plaza is Stark Tech (previously named U&S Services Inc.); there is no intention to add or replace the controls contractor at this time.
- v. **Design Criteria:** When designing improvements to the mechanical systems, the Consultant shall be guided by a set of criteria to include, but not be limited to, the following:
 - Building Code, Safety Code, and industry best practices
 - Performance/appropriateness
 - Maintainability by Authority staff – high priority; the current Daikin VRV III system does not meet this requirement.
 - Useful life
 - Energy efficiency
 - Demolition, installation and lifecycle costs and value engineering
 - Preservation of 24/7 facility operation and degree of disruption during both demolition and installation (see §B.3.a.viii below for construction phasing information)
 - Required footprint (see §B.3.a.vii. below for mechanical space expansion/relocation information)

It is in the best interest of the Authority to select a solution that will satisfy design requirements at the most reasonable cost.

- vi. **System/Equipment Selection:** All design approaches – HVAC technologies, configurations, and/or equipment options – are open for consideration, including replacing the Daikin in kind with upgraded hardware and software or complete replacement with alternate technology (including additional boilers and chiller distributed to fan coil units in the spaces). Alternatives will be evaluated using a Feasibility Study described in §B.4.a. below.
- vii. **Mechanical Spaces:** Should any existing mechanical spaces require an increase in footprint or alternate location the Consultant shall be responsible for the design associated with constructing this space. Potential alternate/expansion space is identified in Appendix 1 (A1-3) herein. Any and all alternate/expansion equipment locations shall be approved by the Authority before design commences.
- viii. **Construction Schedule and Phasing:** It is anticipated that construction will commence in

the fall of 2023. Depending on design, it may be required that construction phases be allocated to specific periods within the calendar year to avoid HVAC downtime during months of extreme heat and extreme cold. It is therefore expected that this phased approach may require construction in years 2023, 2024, and 2025.

Suggested construction phasing is provided below based upon knowledge of current HVAC systems and facility operations. Alternate phasing may be proposed by the Consultant for approval by the Authority.

- Phase 1 – 3rd Floor Annex
- Phase 2 – 2nd Floor Annex
- Phase 3 – 1st Floor Annex and FDA
- Phase 4 – 2nd Floor Addition
- Phase 5 – 1st Floor Addition

4. Services and Deliverables

a. Feasibility Study

- Organize a project kick-off meeting to confirm scope and project delivery method
- Conduct any research, surveys, and meetings necessary to determine design requirements and possible design approach alternatives (HVAC technologies, configurations, systems and/or equipment options), including but not limited to ceiling cavity and vertical shaft limitations.
- Develop a minimum of three (3) possible design approaches (Design Alternates) for consideration
- Work with the Authority to develop a scoring system (criteria and weights) for evaluation of all Design Alternates
- Prepare for the Authority's review a concise report detailing the following for each Design Alternate:
 - Brief description of the approach
 - Preliminary major equipment schedule and cut sheets
 - Relevant vendor information
 - Planned equipment location (existing mechanical space or new)
 - Assessment of all design criteria identified in §B.3.a.v. herein, including a rough order of magnitude (ROM) cost for construction
- Evaluate each Design Alternate using the developed scoring system. Provide a recommendation of the preferred (best) alternate
- Provide a written narrative of the approach to design and implementation for the preferred alternate

b. Design

- Conduct any and all research, surveys, and meetings necessary to verify existing conditions, confirm scope requirements, and deliver plans and specifications
 - It is expected that load calculations will be required concerning heating/cooling needs for those rooms identified in §B.3.a.iii. herein. These calculations should consider at a minimum factors for occupancy, sun exposure, and wall location (interior/exterior) and material construction.
- Design to contain all necessary electrical, mechanical, plumbing, and architectural considerations for the project including all removals, relocation and demolition, as required
- Hold regular design meetings with Authority Staff
- Provide 60% design for construction plans and specifications as well as construction cost estimate for Authority review and comment
- Develop a commissioning program (with functional testing) to be included in 100% design for construction specifications.

- Provide 100% design for construction plans and specifications as well as construction cost estimate for Authority review and comment, and resolve all comments.
- Provide final 100% design for construction drawings and specifications to be incorporated into tender documents by the Authority

c. Tender Phase and Construction Contract Administration

- Assist the Authority in developing contractor prequalification requirements and evaluating responses to the Request for Prequalification Answer any and all questions during tender phase that concern the drawings and specifications
- Provide any and all addenda to the tender drawings and specifications as required
- Assist in evaluation of construction bids and qualifications as needed
- Attend construction progress meetings
- Answer any and all Requests for Information (RFIs) during construction regarding the drawings and specifications

d. Construction Support Services

- The Authority may request Construction Support Services (CSS) from the Consultant, including but not limited to materials testing and part-time resident engineer services as required to ensure adherence to the construction documents as well as best practices. If required, CSS will be approved with a lump sum or not-to-exceed change order and should not be included in the proposed costs for this Request for Proposal.

C. Task 2: Willson Building Chiller Replacement Project

This project concerns a replacement of the existing chiller servicing the Willson Building facility on the U.S. Plaza of the Peace Bridge in Buffalo, NY. The purpose of this replacement project is to replace end-of-life chiller equipment with similar to ensure system functionality. Replacement will include new chiller(s), mechanical room modifications, Building Management System controls integration, and a new refrigerant monitoring system.

It is anticipated that design for this project will commence in February 2023 with construction completed by November 15, 2023.

1. Willson Building Description

This facility is used by U.S. Customs and Border Protection (CBP) 24 hours and day, 7 days a week, and must maintain operation throughout construction. Floorplans for the Willson Building are included in Appendix 2 (A2-1) herein.

This building, originally constructed in 1955, was converted over its lifespan from a single-story (plus basement) administration building to a two-story building with adjoining bus processing area. The installation of the existing R-22 chiller was included in the 1998 large-scale renovations of the building. Mechanical upgrades (both heating and cooling) were made to the building in 2020 that included a new boiler system, all new fan coil units, new pump skids, and various other components. Select mechanical drawings are included in Appendix 2 (A2-2) herein for reference, and Issued for Construction drawings from the 1998 and 2020 renovations are available to Respondents upon request (please note that the drawings may not accurately depict existing conditions and should be verified by the Consultant).

2. Existing Chiller System

The existing chiller is located on the second story roof of the building and the refrigerant/water heat exchanger is located in the second story mechanical room (almost directly under the chiller).

The make/model of the existing chiller unit is as follows:

Trane Model: RTAA0804YJ01A3D1A3D1ABFGJNR

- Serial Number: U98H02353
- 80-ton, Air Cooled, Rotary Chiller

The refrigerant/water exchanger and pump skids are currently located in an inconvenient space, making maintenance difficult. See **Figure 3** below for photos.

The existing Building Management System is provided by Stark Tech and includes start/stop and alarm monitoring for the existing chiller, however does not include integrated controls.

3. Description of Work

a. Design Guidelines

- i. **Objective:** The primary objective of this project is to replace end-of-life equipment to ensure future system functionality while maintaining or improving the current cooling capabilities of the existing chiller.

The Consultant shall also satisfy the following secondary objectives in the design of the system:

- Integrate the proposed chiller controls with the existing BMS
- Install a new refrigerant monitoring system with local alarms and integrate with the existing BMS; the area to be monitored is limited to the mechanical room
- Make modifications as needed to the second-floor mechanical room to allow better maintainability of refrigerant/water exchanger and pump skids
- Evaluate the traveler processing area (Room #s 131, 138, 139) for opportunities for improvement in controlling the space temperature under varying heat loads. This space can experience a large swing in heat load with occupancy varying from a few people to over two hundred people at a given time
- Address maintenance access (fixed ladder) and fall protection concerns at the new proposed chiller

- ii. **Energy Efficiency:** The design should consider at a minimum Energy Star building requirements for energy efficiency.

- iii. **Controls Contractor:** The Authority will use a third-party controls contractor for HVAC control hardware/software/programming required in the new design. The Consultant will be required to coordinate with the controls contractor during design. The current controls contractor for the U.S. Plaza is Stark Tech (previously named U&S Services Inc.); there is no intention to add or replace the controls contractor at this time.

- iv. **Design Criteria:** When designing improvements to the chiller system, the Consultant shall be guided by a set of criteria to include, but not be limited to, the following:

- Building Code, Safety Code, and industry best practices
- Performance/appropriateness
- Maintainability by Authority staff
- Useful life
- Energy efficiency
- Demolition, installation and lifecycle costs and value engineering

- Preservation of 24/7 facility operation and degree of disruption (see §C.3.a.vii below for construction phasing information)
- Required footprint (see §C.3.a.vi. below for mechanical space expansion/relocation information)

It is in the best interest of the Authority to select a solution that will satisfy design requirements at the most reasonable cost.

- v. **System/Equipment Selection:** The Authority does not have a preferred design at this time. All design approaches – technologies, configurations, and/or equipment options – are welcomed for consideration.
- vi. **Mechanical Spaces:** Should any existing mechanical spaces require an increase in footprint or alternate location the Consultant shall be responsible for the design associated with constructing this space. Any and all alternate/expansion equipment locations shall be approved by the Authority before design commences. The Consultant will further be required to perform a structural evaluation of the roof in relation to sustaining the new chiller weight/footprint and design any and all modifications as needed.
- vii. **Construction Schedule and Phasing:** It is anticipated that construction will commence in the fall of 2023. Construction will be limited to the non-cooling season only (late fall through early spring) for any tasks that impact the existing cooling capacities for the building. Phasing may be proposed by the Consultant for approval by the Authority.

4. Services and Deliverables

a. Design

- Conduct any and all research, surveys, and meetings necessary to verify existing conditions, confirm scope requirements, and deliver plans and specifications
 - It is expected that load calculations will be required concerning cooling needs for those rooms identified in §C.3.a.i. herein. These calculations should consider at a minimum factors for occupancy, sun exposure, and wall location (interior/ exterior) and material construction.
- Propose the system/equipment solution to best satisfy the design guidelines in §C.3.a herein
- Design to contain all necessary electrical, mechanical, plumbing, and architectural considerations for the project including all removals, relocation and demolition, as required
- Provide 60% design for construction plans and specifications as well as construction cost estimate for Authority review and comment
- Provide 100% design for construction plans and specifications as well as construction cost estimate
- Provide final 100% design for construction drawings and specifications to be incorporated into tender documents by the Authority

b. Tender Phase and Construction Contract Administration

- Answer any and all questions during tender phase that concern the drawings and specifications
- Provide any and all addenda to the tender drawings and specifications as required
- Assist in evaluation of construction bids and qualifications as needed
- Attend construction progress meetings
- Answer any and all Requests for Information (RFIs) during construction regarding the drawings and specifications

c. Construction Support Services

- The Authority may request Construction Support Services (CSS) from the Consultant, including but not limited to materials testing and part-time resident engineer services as required to ensure adherence to the construction documents as well as best practices. If required, CSS will be approved with a lump sum or not-to-exceed change order and should not be included in the proposed costs for this Request for Proposal.

Figure 3: Willson Building Mechanical Room, exchanger and pump skids



IV. TIME REQUIREMENTS

A. Proposal Calendar

The following is a list of key dates up to and including the date proposals are due to be submitted:

Requests for Proposals issued	November 7, 2022
Mandatory site visit	November 22, 2022 at 10:30 AM
Due date for submission of questions	November 29, 2022 at 1:00 PM
Questions to be answered	December 2, 2022
Due date for Responses	December 8, 2022 at 3:00 PM

B. Expected Notification and Contract Dates

Short-listed firms notified	December 13, 2022
Presentations/interviews of short-listed firms	To be determined, at Authority discretion
Selected firm notified, contract award	December 19, 2022

The successful consultant must be prepared to commence performance for the services described herein immediately upon notice of award if directed by the Authority.

V. PROPOSAL REQUIREMENTS

A. General Requirements

1. **Inquiries** – Inquiries concerning the request for proposals and the subject of the request for proposals must be made in accordance with Clause C of Part I of this RFP. Contact with the Authority or any of its personnel relating to this RFP or the Project other than in accordance with Clause C of Part I may be grounds for disqualification of the Respondent.
2. **Addenda: Errors and Omissions** - Respondents discovering any ambiguity, conflict, discrepancy, omission or other error in this RFP, should immediately notify, prior to the due date for proposals, the contact person set forth in Section V.A.1 and advise of such error and request clarification or modification of the document. Modifications to this RFP will be issued by addenda and clarifications will be communicated by written notice to each party that was furnished a RFP.

If a Respondent fails to notify the Authority prior to the due date for Responses, of a known error, or an error that reasonably should have been known, the proposer assumes all risk. If awarded the contract, the Respondent shall not be entitled to additional compensation or time by reason of the error or its late submission.

3. **Submission of Proposals** - The following material is required to be included in all Responses for a Respondent to be considered:
 - a. One (1) hard copy and one (1) electronic copy of the Response to include the following:
 - (i) *Title Page* – Title page showing the request for proposals subject; the firm's name; the name, address, and telephone number of the contact person; and the date of the Response.
 - (ii) *Table of Contents*
 - (iii) *Transmittal Letter* – A signed letter of transmittal briefly stating the Respondent's understanding of the work to be completed, the commitment to perform the work, a statement why the firm believes itself to be best qualified to perform the engagement, and a statement that the Response is a firm and irrevocable offer. The transmittal letter should also state the name, telephone number and e-mail address of the official within the firm who will serve as the Authority's primary contact concerning the Response. An unsigned Response will be rejected.
 - (iv) *Non-collusive Response Certification* – The Respondent must provide a signed statement certifying the following:
 - o the Response is genuine and is not made in the interest of, or on behalf of, an undisclosed person, firm or corporation;
 - o that the Respondent has not directly or indirectly induced or solicited any other Respondent to submit a false or sham Response, or decline to submit a Response;
 - o that the Respondent has not sought, by collusion, to obtain any advantage over any other Respondent or over the Authority.

- (v) *Detailed Proposal* – The detailed proposal should follow the order set forth in Section B of Part V of this request for proposals.
 - (vi) *Cost Proposal* – The cost proposal should follow the order set forth in Section C of Part V of this request for proposals.
- b. Respondents should submit the completed Response in the manner set forth in Section D of Part I of this RFP.

B. Detailed Proposal

General Requirements – The purpose of the proposal is to demonstrate the qualifications, competence and capacity of the consultant seeking to undertake services in conformity with the requirements of this request for proposals. As such, the substance of proposals will carry more weight than their form or manner of presentation. The proposal should demonstrate the qualifications of the Respondent and of the particular staff to be assigned to this engagement. It should also specify the type of service approach that will meet the request for proposal requirements.

The proposal should address all the points outlined in the request for proposals. The proposal should be prepared simply and economically, providing a straightforward, concise description of the Respondent’s capabilities to satisfy the requirements of the request for proposals. While additional data may be presented, the following subjects, item Nos. 1 through 9, must be included. They represent the criteria against which the proposal will be evaluated. Responses are limited to twenty (20) pages, excluding the title page, table of contents, transmittal letter, non-collusive proposal certificate and cost bid, and requested resumes, prepared as single-sided pages on 8 ½ x 11 inch paper using at least 10 point type with standard margins.

For clarity purposes, the Authority requests that you restate each question, with the answer stated directly below each question.

- 1. Independence and Ethical Practices** – The Respondent should provide an affirmative statement that it is independent of and dealing at arm’s length with the Authority, is not in breach of the Authority’s Ethics Policy, and will avoid any actual or perceived conflict of interest. Conflict of interest is defined as a situation in which a person is, or is perceived to be, in a position to benefit more preferentially than in an open market situation. The Authority will provide copies of its Ethics Policy upon request by Respondents.
- 2. Licensed to Practice** – Each Respondent performing any part of the Work must provide an affirmative statement that each one is properly licensed (or capable of being, and not barred from becoming, licensed) to carry on business in the State of New York and/or the province of Ontario, as applicable, and as otherwise required to complete the Project.
- 3. Disciplinary Actions** – The Respondent should provide information on the circumstances and status of any disciplinary action taken or pending against the Respondent during the past five (5) years with federal or state regulatory bodies or professional organizations.
- 4. Respondent Qualifications and Experience** – The Respondent should include the following information:
 - a. Company name, location of firm headquarters, and location of office from which services would be rendered to the Authority.

- b. Description of the Respondent, including ownership structure, number of partners and employees, number of years in business, and a brief description of the services the firm offers.
- c. List your firm's most significant engagements (maximum of 5) for the last five (5) years that are similar in scope and size to the engagement described in this request for proposal. Include information on each engagement in the following format:
 - i. Name of client
 - ii. Number of years serving this client
 - iii. Name of personnel in charge of this client (project manager)
 - iv. Brief description of services provided

From these engagements, provide at least three (3) references containing contact name, address and telephone number

- d. List all anticipated primary sub-consultants proposed for this contract and include a description of the firm and contact information for each.
- e. List separately all engagements, within the last ten (10) years, with the Authority by type of engagement. Indicate the scope of work, date, the location of the firm's office from which the engagement was performed, and the name and telephone number of the principal client contact.

- 5. Experience of Project Manager and Key Staff** – The Respondent should identify the project manager, lead designer, and other key staff for the assignment. The Respondent should include information regarding staff qualifications required to satisfy the Scope of Services outlined in Part III of this RFP. The Respondent should also outline their capabilities in the following disciplines as appropriate: mechanical engineering (with an emphasis on HVAC design), mechanical system commissioning, electrical engineering, structural engineering, and architecture.

More specifically, the Respondent should include the following information:

- a. Provide an organizational hierarchy of key staff specific to this contract.
- b. For each key staff, detail the following:
 - a. General qualifications: general education, training, length of experience, positions held, time with firm, and so forth.
 - b. Adequacy for assignment: experience in specific sector or field.
 - c. Location: city and state of primary office
 - d. Experience in region: knowledge of local issues.
- c. In an appendix to the response, provide resumes for key professional staff who would be assigned to this engagement, including project managers for each primary sub-consultant.

- 6. Value-Added Services** – The Respondent should identify and describe services offered which may add value (i.e., decrease cost, increase efficiency, etc.) to the Authority.

- 7. Distinguishing Features** – The Respondent should identify and describe the most important attributes that distinguish your firm from competing firms, and how those attributes will benefit the Authority.

- 8. Identification of Anticipated Potential Problems** – The proposal should identify and

describe any anticipated potential problems/challenges in providing the service requested, the firm's approach to resolving these problems and any special assistance that will be requested from the Authority.

9. **Proposed Project Schedule** – Provide a schedule for the services indicated in Part III – Scope of Services – of this RFP, broken down into major tasks.

C. Cost Proposal

1. **Professional Fees** – The Authority is interested in achieving high quality services at the lowest possible cost.

The Authority will not be responsible for expenses incurred in preparing and submitting the technical proposal or the cost bid. Such costs should not be included in the proposal.

The cost proposal should be contained in a separate, sealed envelope. The first page of the cost bid should include the following information:

- a. Name of Respondent.
- b. Certification that the person signing the Response is entitled to represent the firm, empowered to submit the Response, and authorized to sign a contract with the Authority.
- c. The Respondent should provide an affirmative statement that the Response includes all services noted within Part III – Scope of Services – of this request for proposal.
- d. Provide examples of fees that you have charged on recent similar recent contracts.
- e. Describe proposed measures to reduce the costs of services, while maintaining high quality services.
- f. Supply an all-inclusive cost for performing the scope of services associated with **Task 1: U.S. Warehouse VRF System Replacement Project** outlined in Part III Section B of this RFP. Costs should include labour, equipment, travel time, and any other costs associated with the scope of work. Costs shall be broken down and presented by the categories detailed in Part III Section B.4 – Services and Deliverables – of this RFP (Feasibility Study, Design, and Construction Administration Services). Payment will be on a Lump Sum basis with milestone payments under the aforementioned categories.
- g. Supply an all-inclusive cost for performing the scope of services associated with **Task 2: Willson Building Chiller Replacement Project** outlined in Part III Section C of this RFP. Costs should include labour, equipment, travel time, and any other costs associated with the scope of work. Costs shall be broken down and presented by the categories detailed in Part III Section C.4 – Services and Deliverables – of this RFP (Design, and Construction Administration Services). Payment will be on a Lump Sum basis with milestone payments under the aforementioned categories.
- h. Supply a proposed 3-year rate sheet for any additional work to be assigned/performed. Rate sheets shall detail hourly rates for the various technical classifications of workers and identify specific personnel. Also include with the rate sheet a salary multiplier that includes a breakdown of overhead, profit, and types of expenses.

VI. EVALUATION PROCEDURES

A. Review of Responses

The Committee will review qualifications of the Responses. Consultants with unacceptably low technical qualifications will be eliminated from further consideration.

After the qualifications for each Respondent has been established, the cost proposal will be examined.

B. Evaluation Criteria

Responses will be evaluated by the Authority's Selection Committee using three sets of criteria. Respondents meeting the mandatory criteria will have their Responses evaluated for both technical qualifications and cost. The following represent the principal selection criteria, which will be considered during the evaluation process.

1. Mandatory Elements

- a. The Respondent is independent and has no conflict of interest with regard to any other work performed by the firm for the Authority.
- b. The Respondent adequately addresses actual and pending disciplinary actions and has a record of quality work.
- c. The Respondent adheres to the instructions in this request for proposal on preparing and submitting the Response.

2. Technical Quality

- a. Expertise and Experience
 - (i) The Respondent's qualifications and past experience and performance on similar engagements.
 - (ii) Project manager and key staff qualifications and past experience and performance on similar engagements.
 - (iii) The Respondent's approach towards identifying and resolving potential problems/challenges in providing the services requested.
 - (iv) The firm's distinguishing and value-added services.

3. Cost Proposal

Fee, while important, will not be the primary factor in the selection of an architectural firm, however, it will be considered when evaluating the overall value of the Response. The Authority is not obligated to accept the Respondent with the lowest cost proposal.

C. Oral Presentations

During the evaluation process, the Selection Committee, at their discretion, may request any one or all firms to make oral presentations. Such presentations will provide Respondents with an opportunity to answer any questions that the Selection Committee may have on their Response. Not all Respondents may be asked to make such oral presentations.

D. Final Selection

The Authority will select a Respondent based upon the recommendation of the Authority's Selection Committee.

It is anticipated that a firm will be selected by December 19, 2022. Following notification of the firm selected, it is expected that a contract will be executed between both parties within five business days.

The Authority reserves the right to enter into negotiations with any Respondent designed best qualified in order to determine satisfactory terms and conditions of a final contract and to end such negotiations, at its discretion, and to designate and commence negotiations with an alternate best qualified Respondent.

In accordance with the policy approved by the Board of Directors of the Authority, the Selection Committee will not conduct debriefing sessions with unsuccessful Respondents.

E. Right to Reject Proposals

Submission of a Response indicates acceptance by the Respondent of the conditions contained in this request for proposal unless clearly and specifically noted in the Response and confirmed in the contract between Authority and the Respondent selected.

As specifically endorsed by the Authority Board of Directors, contact or communications with personnel of the Authority other than as specified in Part I Section B of this RFP will result in automatic rejection of a proposal.

The Authority may reject Responses from those Respondents who do not attend the scheduled mandatory site meeting.

The Authority reserves the right without prejudice to reject any or all Responses, waive any and all informalities, and the right to disregard all non-conforming or conditional Responses. The Authority reserves the right to accept any Response deemed to be in its best interest even though the Response is not mathematically the lowest price.

VII. FORM OF AGREEMENT

A copy of the Authority's standard agreement is attached as Exhibit A herein. The Authority reserves the right to modify such standard agreement. The Authority will not use a consultant prepared agreement. The successful Respondent will be required to enter into a contract using the Authority's standard agreement. The firm is encouraged to review this agreement with their legal counsel before submitting a Response.

VIII. GENERAL TERMS AND CONDITIONS

The following General Terms and Conditions apply throughout this RFP and to the Response. Any change or amendment to the terms and conditions of this RFP are of no effect unless set out in a written Addendum to this RFP issued by the Authority.

C. Applicable Law

This RFP, and any contract, which may subsequently arise from this RFP, shall be governed by the law of the United States of America, as applicable to an international compact entity. The appropriate jurisdiction for any disputes which arise from the RFP or any contract which may arise from this RFP, shall be the United States district Court for the Western District of New York, provided this court has requisite jurisdiction.

The section titles are for convenience only and shall not be construed to affect the meanings of the sections titled.

D. No Obligation to Proceed

Nothing in this RFP obliges the Authority in any way to proceed to award a Contract or proceed with the Project. The Authority may terminate this selection process at any time and proceed with the Project, in whole or in part, in the same or some other manner, including reissuing the same or a different RFP in relation to the Project. This RFP does not constitute an offer to enter, or obligate the Authority to enter, into a contract with any person and is not intended to create any binding contract, often referred to in Canada as Contract "A".

E. Access to Information Legislation

1. In fulfilling its public service responsibilities, the Authority adopted a policy and procedure (the "**FOIL/AIA Policy**") for responding to requests for information, including requests made pursuant to the New York or Federal *Freedom of Information Law* ("**FOIL**") and the Canadian *Access to Information Act* ("**AIA**"). While the Authority is not subject to either FOIL or the AIA, the Authority does voluntarily respond to requests for information and gives effect to the principle that the public has a right to know.
2. In accordance with the FOIL/AIA Policy, the Authority will make available for public inspection and copy all records except those that the Authority denies access to or portions thereof that:
 - (a) are rendered confidential or privileged or are exempted from disclosure by Federal or state law in the United States or provincial or Federal statutes of Canada;
 - (b) if disclosed, would constitute an unwarranted invasion of personal privacy (including as this concept is given effect in the *Personal Protection Privacy Act* (Canada) and the *Personal Information and Electronic Documents Act* (Canada)) as more particular set out in the FOIL/AIA Policy;
 - (c) if disclosed, would impair present or future contract awards or collective bargaining or negotiations of leases, permits, contracts or other agreements;

- (d) are confidential trade secrets or financial, commercial, scientific or technical information of the Authority or a third party (including a governmental entity) that if disclosed could cause substantial injury to the competitive position of the Authority or such party;
- (e) are compiled for public safety, law enforcement or official investigatory purposes (internal and external) and which, if disclosed, may affect public safety, interfere with proceedings, or deny or prejudice a right to a fair trial or impartial negotiation, or identify a confidential source or disclose confidential information relating to an audit or a civil, criminal, or internal or external disciplinary investigation;
- (f) if disclosed, would endanger the life or safety of any person;
- (g) are in any way related to the security of the Bridge or property associated with federal government functions;
- (h) if disclosed, would jeopardize the Authority's capacity to guarantee the security of its information technology assets, such assets encompassing both electronic information systems and infrastructures;
- (i) are materials of any governmental agency (state, local, municipality, region, public authority) other than statistical or factual tabulations of data, specific instructions given to staff, final approved policies and all external audits where these materials or instructions are not exempted;
- (j) are photographs, microphotographs, videotape or other recorded images that could impact upon personal privacy;
- (k) that contains information that was obtained in confidence from the government of a foreign state or institution thereof, an international organization of states or institution thereof, the government of a province, municipality or region or institutions thereof or an aboriginal government (as defined in Nisga'a Final Agreement Act);
- (l) is subject to a solicitor-client or attorney-client privilege;
- (m) if disclosed, could affect, impact or be expected to prejudice the competitive position of a government institution (which may include the Authority) or specific business entities with which government institutions (which may include the Authority) deals.

3. In submitting any document, information or other record to the Authority, including the Response, each Respondent acknowledges and accepts the FOIL/AIA Policy. Except as expressly set out in this RFP or the FOIL/AIA Policy, all documents, information and other records submitted in response to this RFP will be considered confidential. However, such information or parts thereof may be released pursuant to FOIL/AIA Policy. Respondents are also advised that FOIL/AIA Policy may provide protection for confidential and proprietary business information. Respondents are advised to consult their own legal advisors as to the appropriate way in which confidential or proprietary business information should be marked as such in their Responses.

4. Subject to the provisions of the FOIL/AIA Policy, the Authority will use reasonable efforts to safeguard the confidentiality of any information identified by the Respondent as confidential but the Authority shall not be liable in any way whatsoever to any Respondent or Respondent Team Member if such information is disclosed pursuant to the FOIL/AIA Policy.

F. Confidentiality of Information

Respondents will be required to enter into a confidentiality agreement.

G. No Liability - Information

1. This RFP may not contain all of the information that a Respondent may need in deciding whether to submit a Response. The Authority accepts no responsibility for any person lacking any information.
2. The Authority will not be liable for any information or advice or any errors or omissions that may be contained in this RFP or the data, materials or documents (electronic or otherwise) provided to the Respondents or prospective Respondents in the RFP process or otherwise with respect to the Project.
3. The Authority makes no representations or warranties and there are no representations, warranties or conditions, either express or implied, statutory or otherwise, in fact or in law, with respect to the accuracy or completeness of this RFP or the data, materials or other documents. The Authority will not be responsible for any claim whatsoever arising from a Respondent's or prospective Respondent's reliance on or use of this RFP or any such data, materials or other documents which are provided, delivered, made available or required by the Authority.
4. Each Respondent and prospective Respondent is responsible for obtaining its own independent legal, financial, engineering, architectural, environmental and other technical or professional advice, and making its own investigations with respect to the Project, this RFP, the RFP process and any data, materials or other documents provided, delivered or made available or required by the Authority or its Representatives. Submission of a Response is deemed to be conclusive evidence that the Respondent has made such investigations and has obtained such advice and that the Respondent is willing to assume and does assume all risks affecting the Project, except as otherwise specifically stated in this RFP.

H. No Liability - RFP Process

The Authority does not, by issuing this RFP or by any communication or documentation made or provided in connection with this RFP, incur any duty of care or contractual obligation to any Person.

I. Rights of the Authority

The Authority may at any time, with or without notice:

1. reject and not consider a Response from a Respondent, or disqualify any Respondent where (i) the Respondent or any Respondent Team Member (including any Joint Venture Member if the Respondent is a Joint Venture Respondent) has been disqualified from a procurement process undertaken by the Authority as the result of

any criminal charges related to inappropriate bidding practices or unethical behaviour (ii) there are any outstanding criminal charges related to inappropriate bidding practices or unethical behaviour by a Respondent or a Respondent Team Member or any of their Affiliates in relation to a public or broader public sector tender or procurement in any jurisdiction (iii) there is evidence satisfactory to the Authority that, based on past conduct or behaviour, the Respondent or any or a Respondent Team Member is unsuitable or has conducted themselves improperly or (iv) the Authority determines that the Respondent or any or a Respondent Team Member performance on other contracts is sufficiently poor to jeopardize the completion of the Project;

2. consider, in the evaluation of a Response, (i) any dispute involving a Respondent or Respondent Team Member and (ii) any instances of poor performance of a Respondent or Respondent Team Member, or any other unfavourable experiences with any of them, that the Authority has experienced;
3. amend the scope or details of the Project, or modify, cancel, amend, supplement, clarify or suspend the whole or any part of the Project, this RFP, the RFP process or any or all stages of the Bid process;
4. reissue a Request For Proposals for the Project the same as this RFP or a different request for qualifications document in connection with the Project;
5. reject or disqualify all or any Responses or Respondents; and
6. waive any material or non-material deficiency or failure to comply with the requirements of this RFP.

J. Ethical Behaviour Confirmation

Without limitation of any other rights of the Authority or the requirements of this RFP, in order to ensure the integrity, openness and transparency of the selection process, the Authority may:

1. impose at any time on all Respondents and any Respondent Team Member additional conditions, requirements or measures, with respect to bidding practices or ethical behaviour of a Respondent and any of the members of the Respondent Team; and
2. require that any or all Respondents and/or any Respondent Team Member at any time during the proposal process provide the Authority with copies of its internal policies, processes and controls establishing ethical standards for its bidding practices and evidence of compliance by the Respondent and all Respondent Team Members with such policies, processes and controls.

In the event that any Respondent and/or Respondent Team Member:

3. fails to comply with any requirement prescribed by the Authority pursuant to this Clause H; or
4. complies with the Authority's requirement as prescribed in accordance with this Section, but the Authority determines that any Respondent and/or Respondent Team Member has or may have engaged in inappropriate bidding practices or unethical behaviour, the Authority shall have the right, at any time to reject and not consider a Response from a Respondent.

K. Restriction on Communication between Respondents

A Respondent shall not discuss or communicate, directly or indirectly, with any other Respondent, any information whatsoever regarding the preparation of its own Response or the Response of another Respondent. Each Respondent shall prepare and submit its Response independently and without any connection, knowledge, comparison of information, or arrangement, direct or indirect, with any other Respondent. The Respondent shall ensure that its key individuals and members of Respondent Team and their respective representatives and Affiliates comply with this Clause I. By submitting a Response, a Respondent on its own behalf and as authorized agent of each Respondent Team Member, key individual and their respective representatives and affiliates represents, warrants and confirms to the Authority that its Response has been prepared and submitted without collusion or fraud, or in violation of any applicable law and in fair competition with prospective Respondents, prospective Respondent Teams, and other Respondents.

L. Verification of Information

The Authority may independently verify any information received in or in respect of any Response pursuant to this RFP. The Authority may disqualify any Respondent who's Response:

1. contains any false or misleading information; or
2. fails to disclose any information that would, if disclosed, materially adversely affect the Authority's evaluation of such Respondent's Response.

M. Conflicts of Interest

1. For the purposes of this RFP, the term "conflict of interest" includes any situation or circumstance which is a conflict of interest under the Authority's Ethics Policy or where a Respondent, a Respondent Team Member, their respective Representatives and affiliates and/or a key individual of a Respondent Team Member, has, could be perceived to have or could possibly acquire:
 - contractual or other obligations to the Authority or any the Authority Party that could or could be seen to have been compromised or impaired as a result of its participation in the RFP process or the Project; or
 - knowledge or information (other than information disclosed by the Authority in the normal course of the RFP process) of strategic and/or material relevance to the RFP process or to the Project that is not available to other Respondents and that could or could be seen to give the Respondent an unfair competitive advantage.
 - commitments, relationships, financial interests or involvement in ongoing litigation:
 - that could or could be seen to exercise an improper influence over the objective, unbiased and impartial exercise of the Authority's independent judgment;
 - that could or could be seen to compromise, impair, challenge, be in opposition to or be incompatible with the Project or the effective

performance of the Authority's obligations under this RFP or the Contract; or

- in which the Authority is an adverse party.

In determining conflict of interest, the Authority may consider and have regard to relevant codifications in Canada and the US such as, in the US, 23 CFR 1.33 and 23 CFR 636.116 and, in Canada, the Code of Conduct for Procurement (2014-11-27) of Public Works and Government Services Canada.

2. Each Respondent must use its best efforts to avoid any conflict of interest in relation to the Project, and comply with any requirements prescribed by the Authority to mitigate or resolve any conflict of interest which may arise.
3. Throughout the RFP process, each Respondent shall, and it shall ensure that its Respondent Team Members and their respective representatives and affiliates and key individuals, promptly disclose to the Authority in writing any conflict of interest. At the time of such disclosure, the Respondent shall include any information and documentation that demonstrates appropriate measures have been or will be implemented to mitigate, minimize or eliminate the conflict of interest. The Respondent shall provide such additional information and documentation and implement such additional measures as the Authority may require in connection with the Authority's consideration of the conflict of interest and proposed measures.
4. The Authority may waive any and all conflicts of interest. A waiver must be in writing and may be upon such terms and conditions as the Authority requires to ensure that the conflict of interest has been appropriately managed, mitigated and minimized including requiring the Respondent and/or its Respondent Team Members to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the Authority to manage, mitigate and minimize the impact of such conflict of interest.
5. The Authority may immediately disqualify a Respondent or require a Respondent to remove and/or replace a Respondent Team Member and/or key individual, if, in each case as determined by the Authority, the Respondent fails to disclose a conflict of interest, the Respondent fails to comply with any requirements prescribed by the Authority to mitigate or resolve a conflict of interest, or the conflict of interest issue cannot be mitigated or otherwise resolved.
6. The determination of the Authority as to whether a conflict of interest exists shall be final and binding.

Should any of the above language conflict with the Authority's existing policies, the Authority's policies shall prevail.

N. Request for Clarification - Conflicts

A prospective Respondent or Respondent Team Member or advisor of a Respondent who has any concerns regarding whether a current or prospective employee, advisor or a Respondent Team Member of that Respondent has or may have a conflict of interest, is encouraged to request an advance ruling in accordance with this Section through the following process may, on a confidential basis, request a "clarification from the Authority by submitting an inquiry in accordance with Clause C of Part I of this RFP, and providing all relevant information The

Authority may request additional information. The Authority will not be held liable for any determination on verification issued in relation to conflicts of interest on possible conflicts of interest or possible conflicts of interest.

O. Respondent Team

- 1.** Respondent Team Members, including affiliates of Respondent Team Members, may not be Respondent Team Members of any other Respondent, unless (a) the Authority expressly approves in advance, (b) a Respondent Team Member is removed from one Respondent Team in accordance with this Clause M, or (c) the Respondent is not pre-qualified and joins a Respondent that has been pre-qualified in accordance with this Clause M.
- 2.** If a Respondent wishes to remove, add or otherwise change a Respondent Team Member (including any Joint Venture Member if the Respondent is a Joint Venture Respondent) after the submission of its Response, then it must first obtain the written approval of the Authority, which approval may be granted in the Authority's sole discretion. In making its determination to grant or deny such approval, the Respondent will provide the Authority with such information, documents and other records as the Authority may request, including all information, documents and other records required under this RFP and all agreements and amendments to agreements demonstrating the amended Respondent Team structure.
- 3.** A Change in Control of a Respondent Team Member is deemed to be a change to such Respondent Team Member for the purposes of this Clause M, and requires the approval of the Authority.

RFP for Mechanical Design Services

APPENDIX 1



**BUFFALO AND FORT ERIE
PUBLIC BRIDGE AUTHORITY**

1 Peace Bridge Plaza
Buffalo, New York 14213

**RENOVATION & ADDITIONS TO
COMMERCIAL BUILDING**

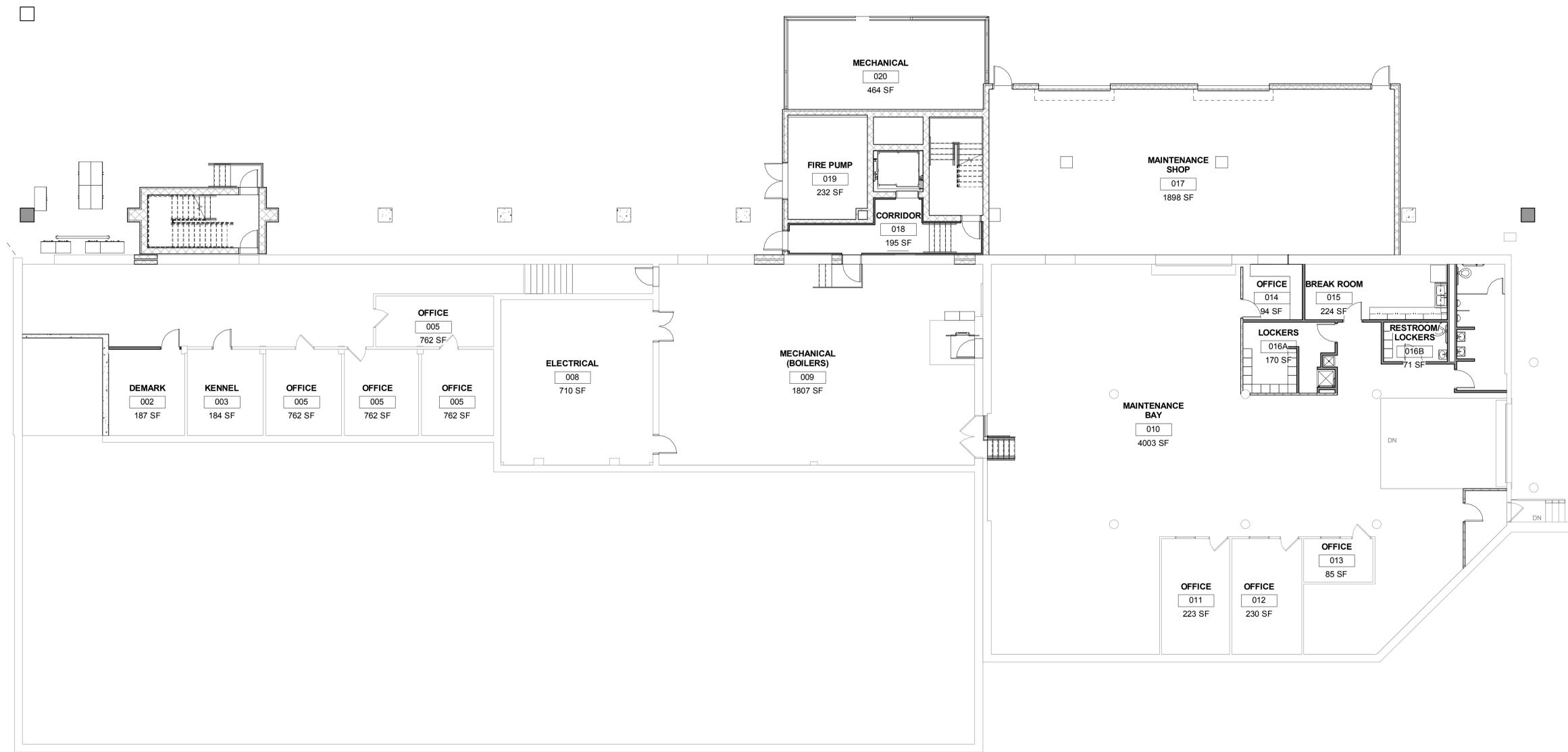
**PROJECT
RECORD
DRAWINGS**



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1 BASEMENT FLOOR AREA PLAN
1/8" = 1'-0"



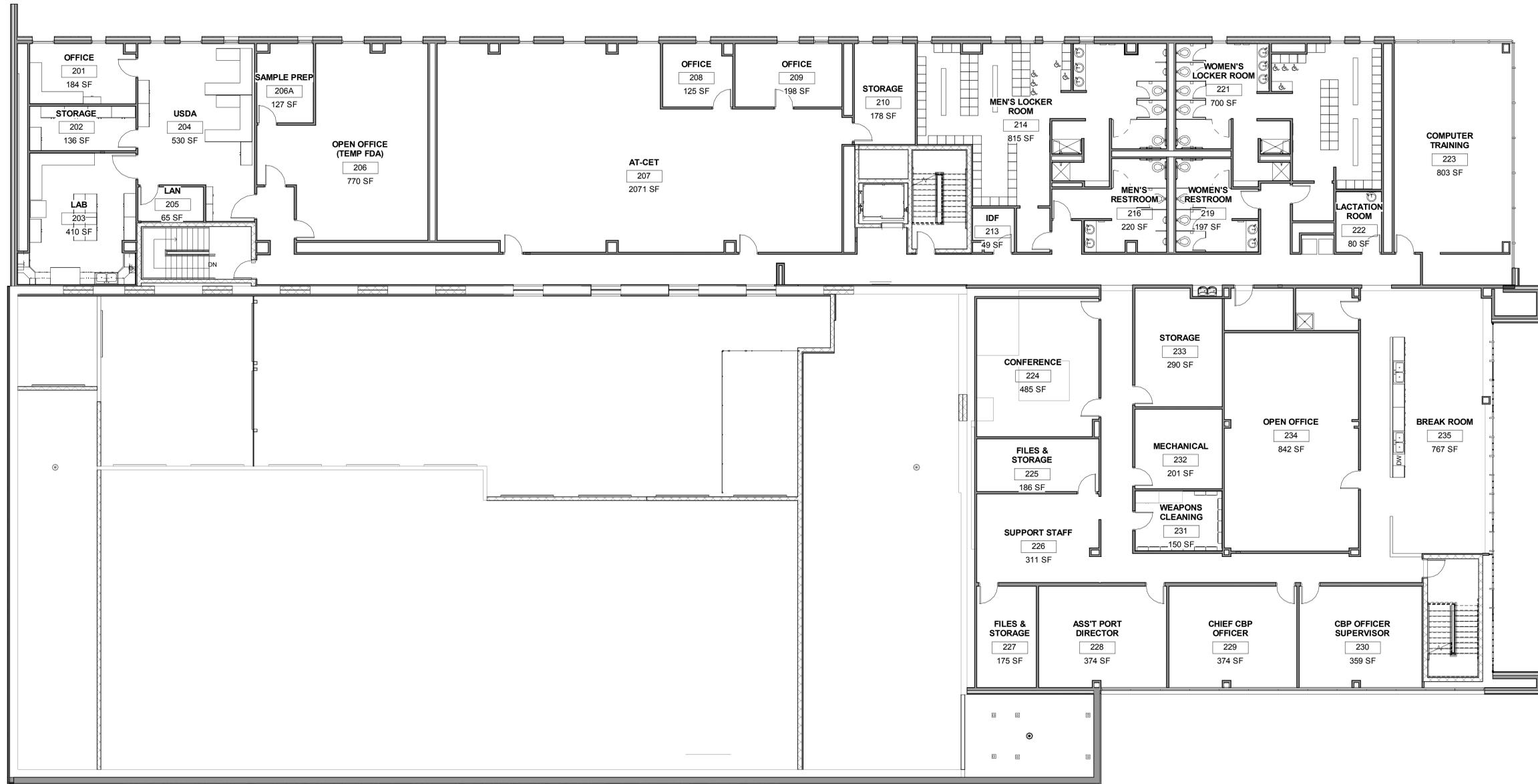
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DWG. TITLE

**BASEMENT FLOOR AREA
PLAN**

DATE: MARCH 9, 2017
SCALE: 1/8" = 1'-0"
DWN: JAP CHK: JRM
PROJ. No: 330911
DWG. No.

AREA



1 SECOND FLOOR PLAN
1/8" = 1'-0"



NO.	BY	REVISIONS	DATE

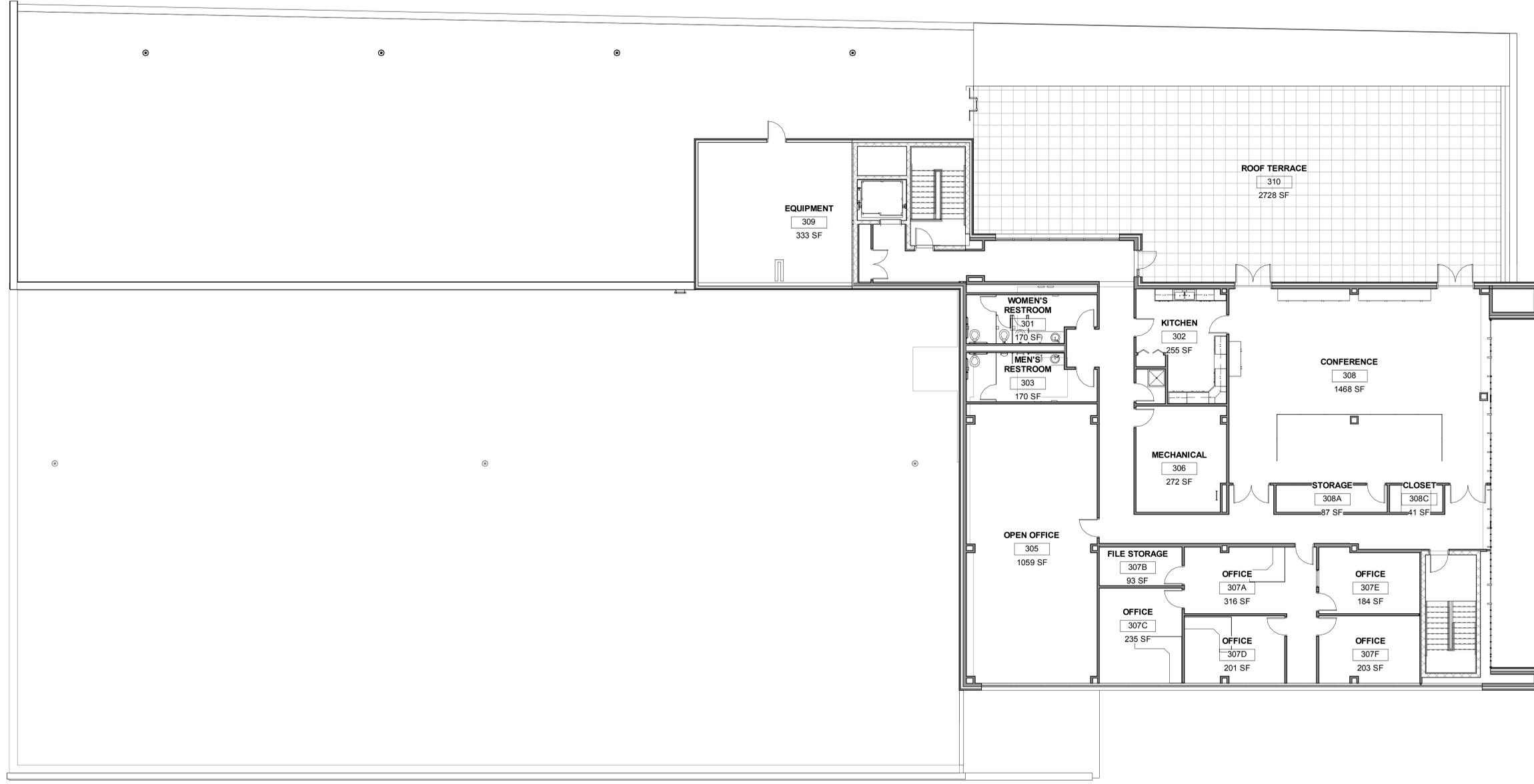
DWG. TITLE

SECOND FLOOR AREA
PLAN

DATE	MARCH 9, 2017
SCALE	1/8" = 1'-0"
DWN	JAP
CHK	JRM
PROJ. No	330911
DWG. No.	

AREA

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1 THIRD FLOOR PLAN
1/8" = 1'-0"



NO.	BY	REVISIONS	DATE

DWG. TITLE
THIRD FLOOR AREA PLAN

DATE MARCH 9, 2017
SCALE 1/8" = 1'-0"
DWN JAP CHK JRM
PROJ. No. 330911
DWG. No.

AREA



**BUFFALO AND FORT ERIE
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1 Peace Bridge Plaza
Buffalo, New York 14213

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NO.	BY	REVISIONS	DATE

DWG. TITLE

**PARTIAL FIRST
FLOOR DUCT
PLAN - PHASE 1**

DATE February 15, 2017

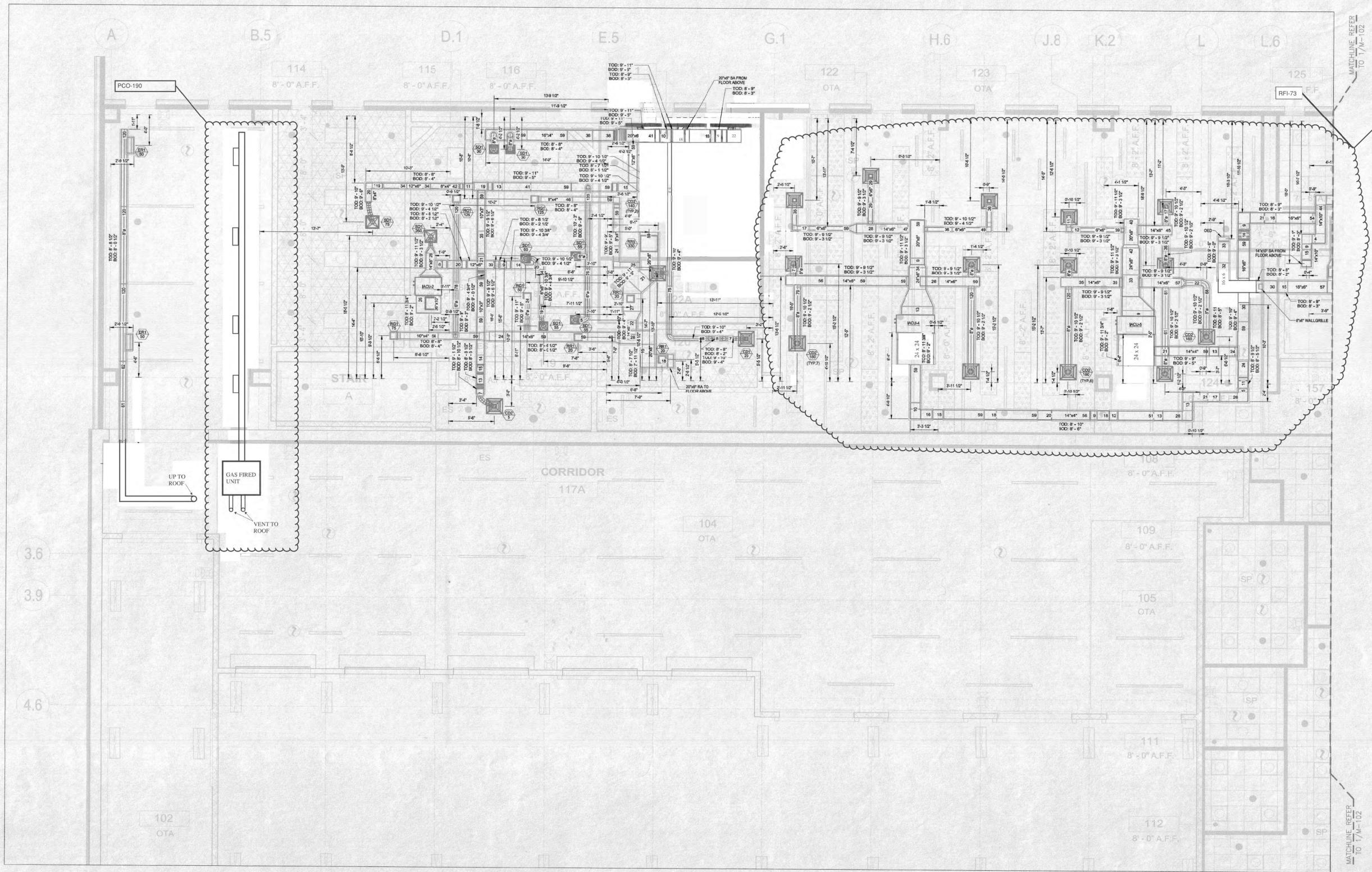
SCALE AS NOTED

DWN. - CHK. -

PROJ. No. 330911

DWG. No.

M-01



MATCHLINE REFER
TO 17A-102

MATCHLINE REFER
TO 17A-102



BUFFALO AND FORT ERIE
PUBLIC BRIDGE AUTHORITY

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Buffalo, New York 14213

RENOVATION & ADDITIONS TO
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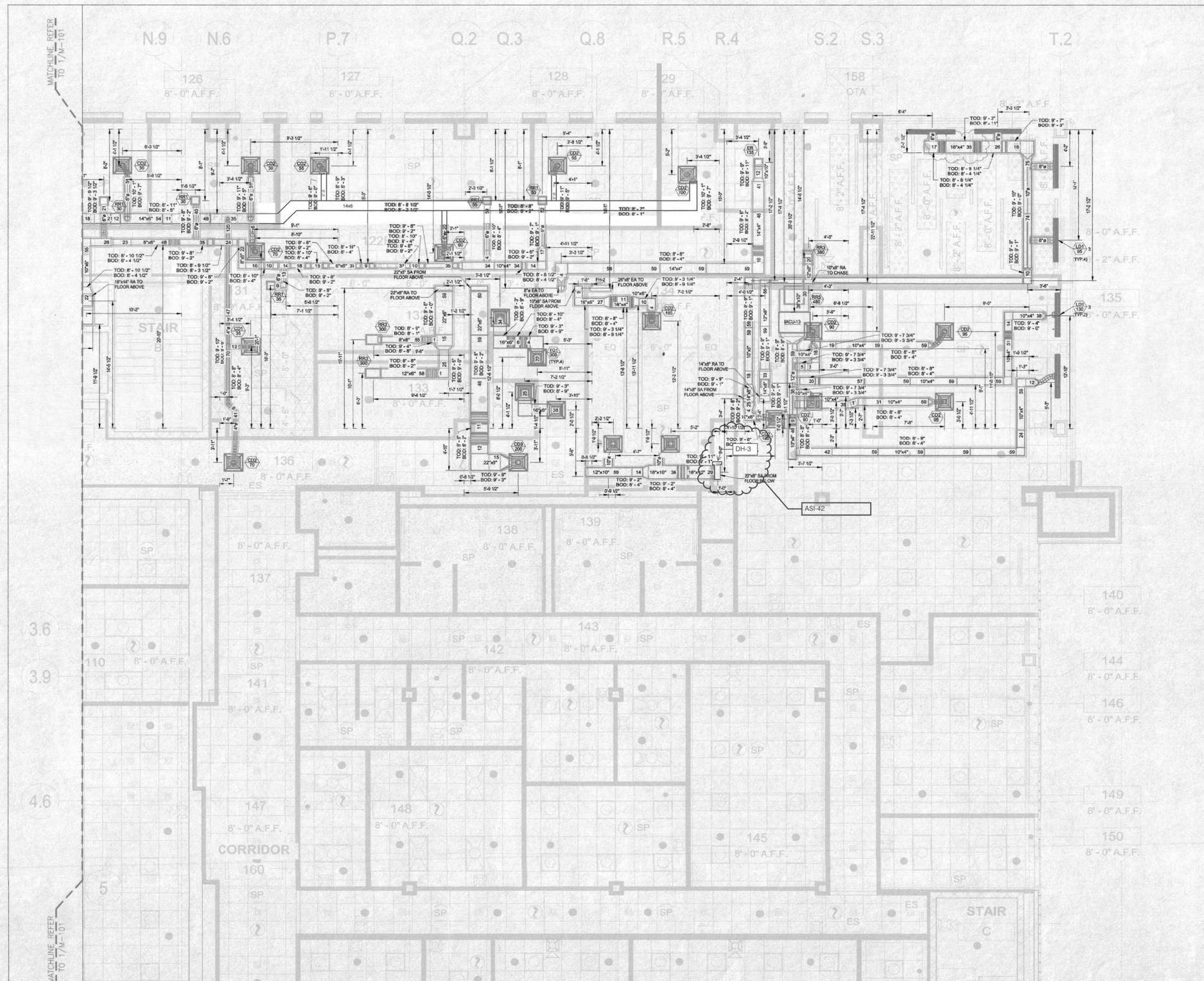
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DWG. No.

M-02





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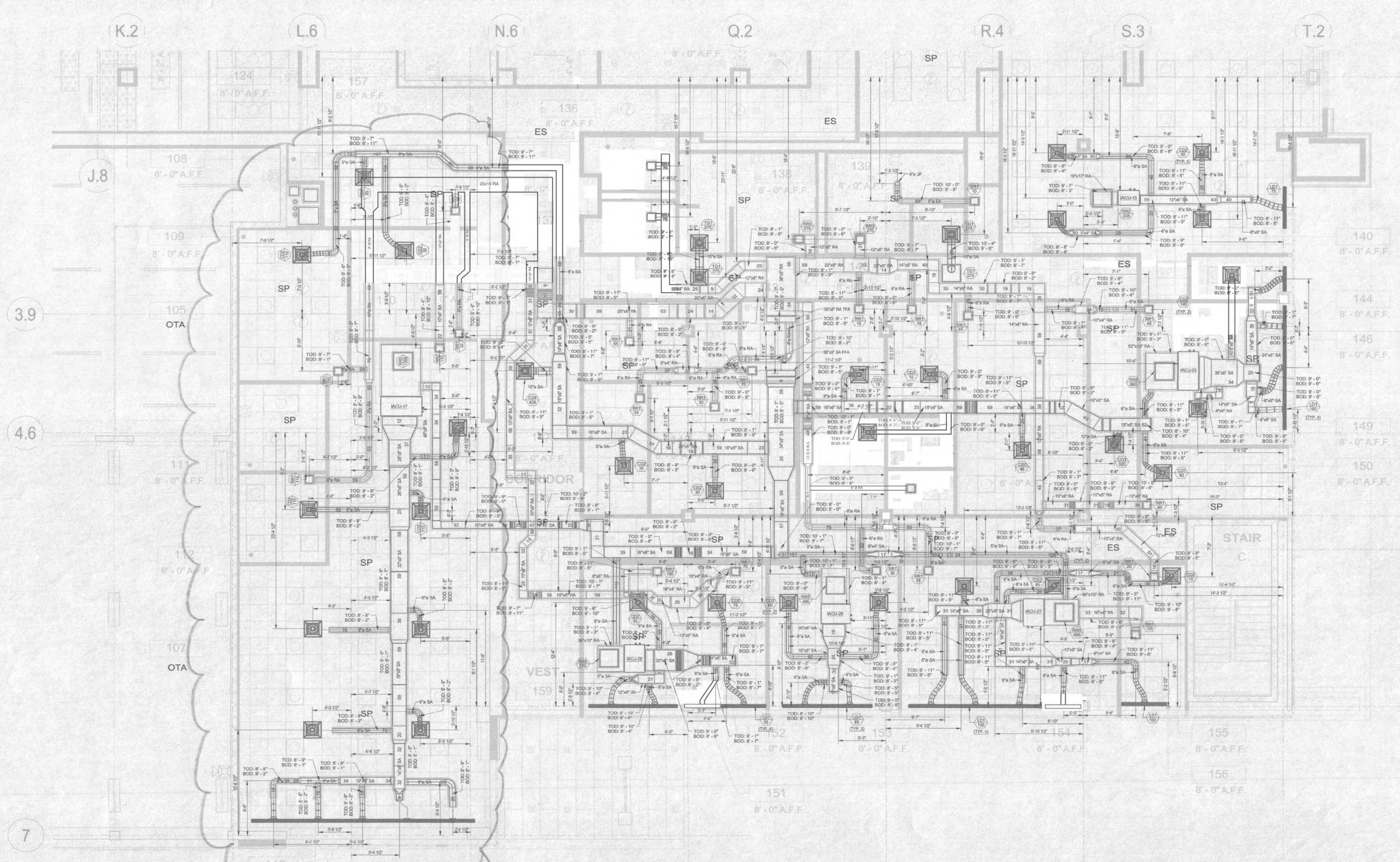
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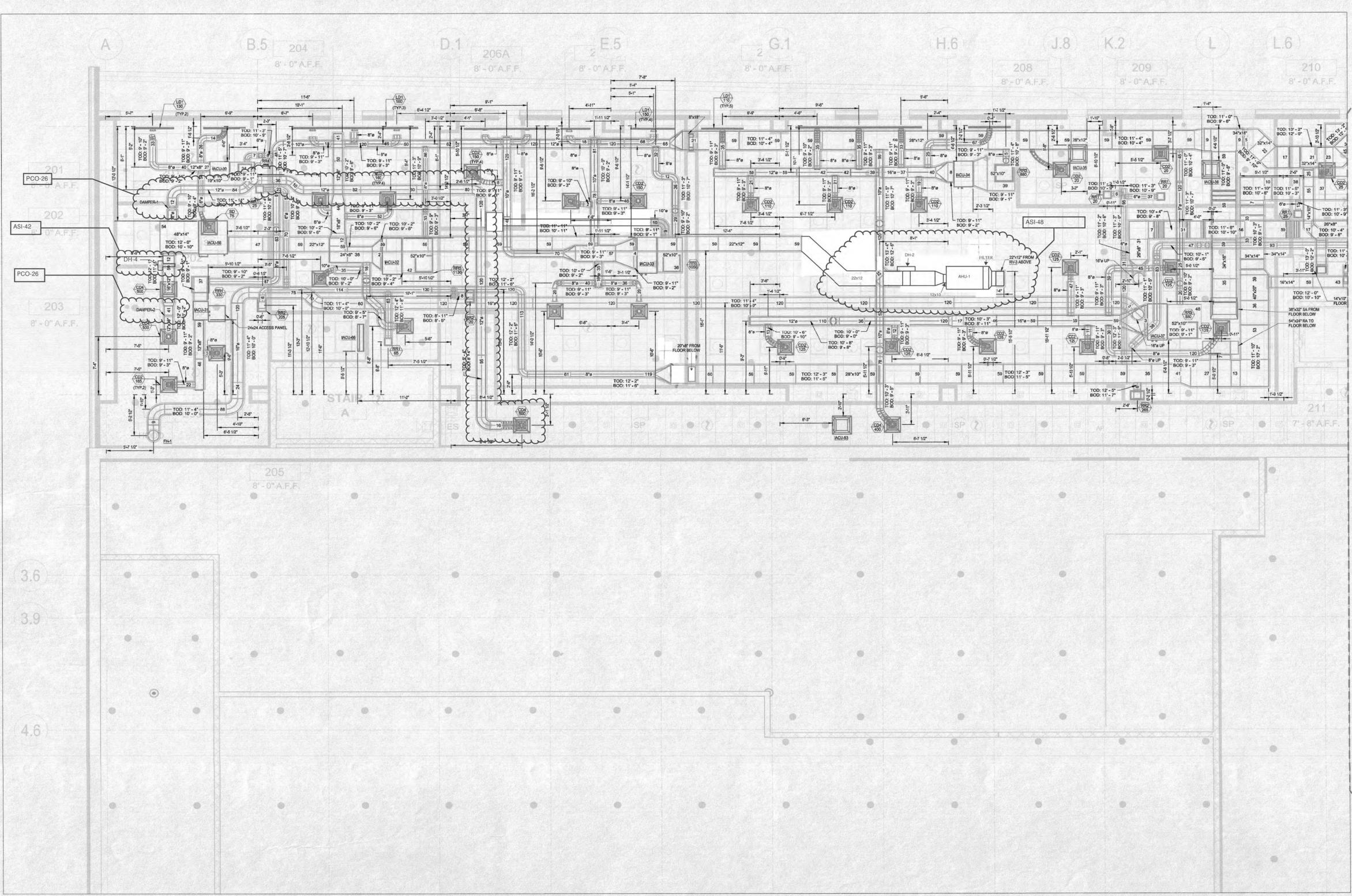
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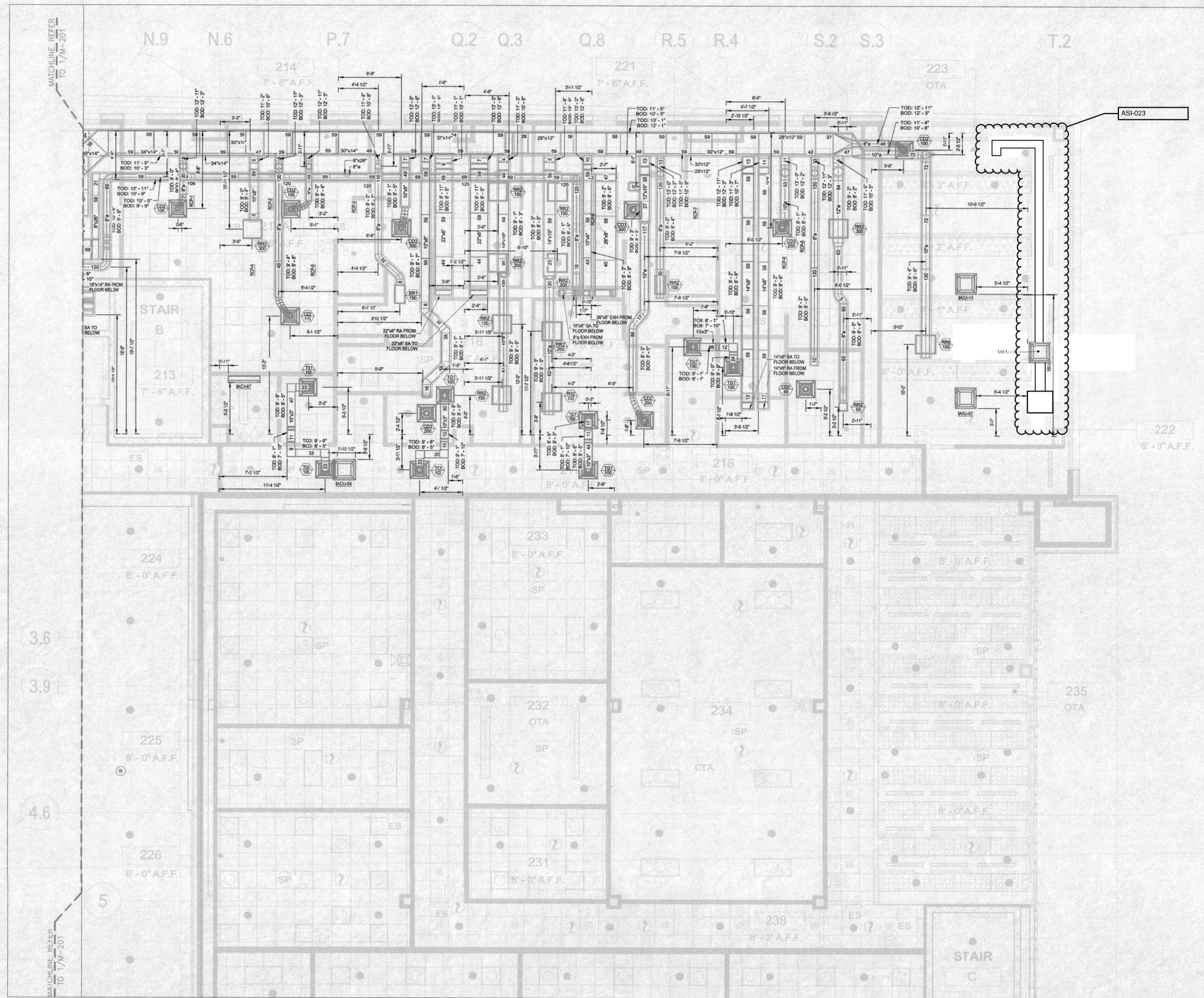
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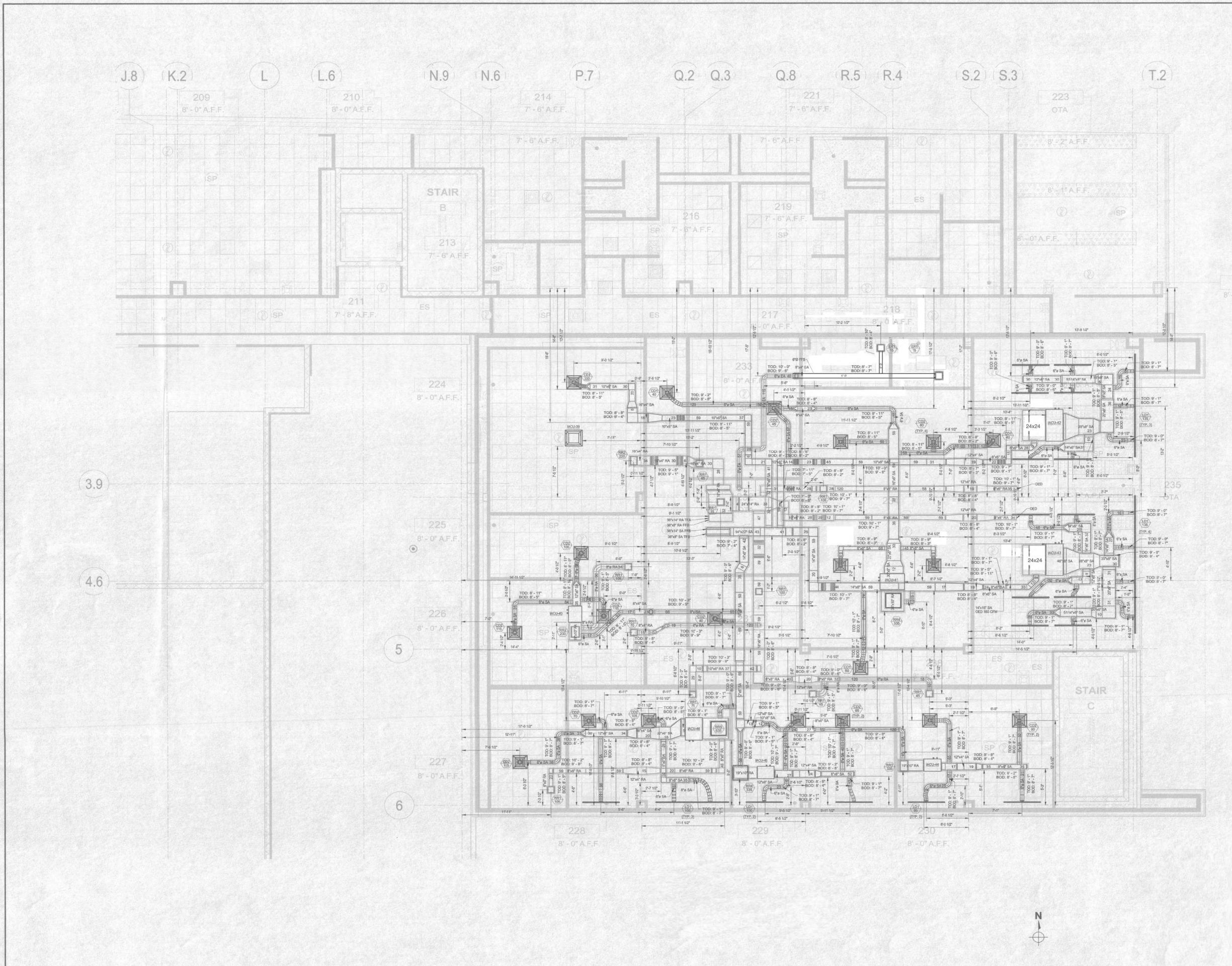
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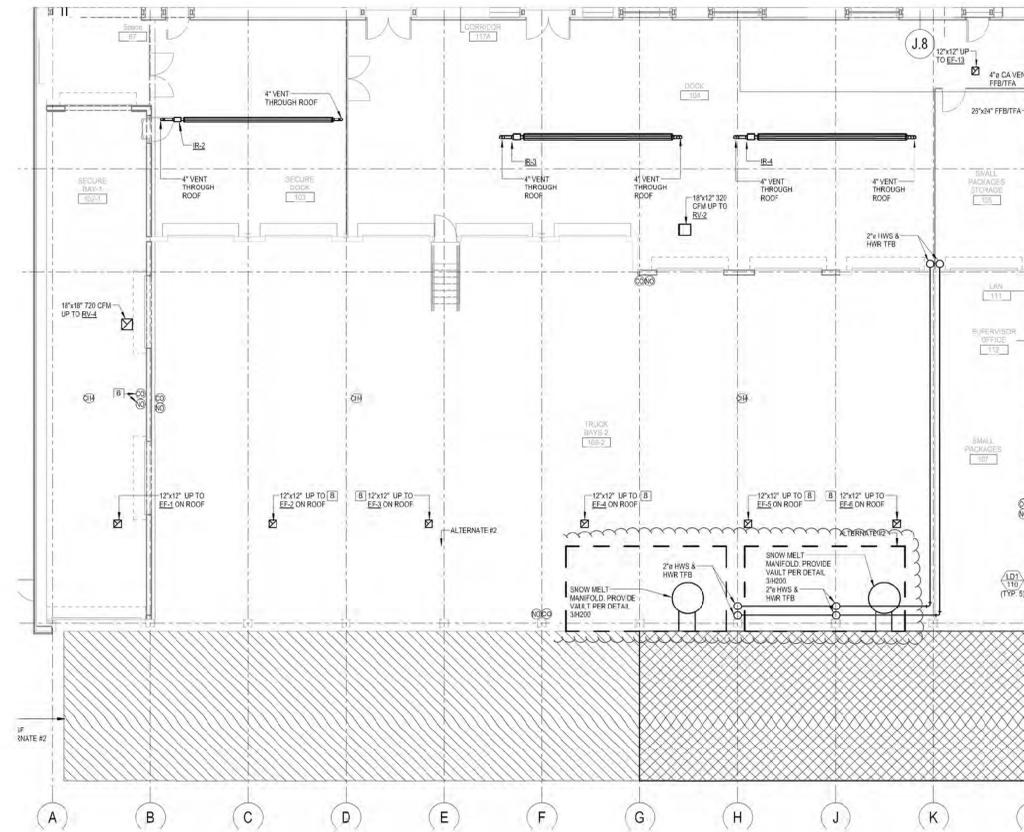
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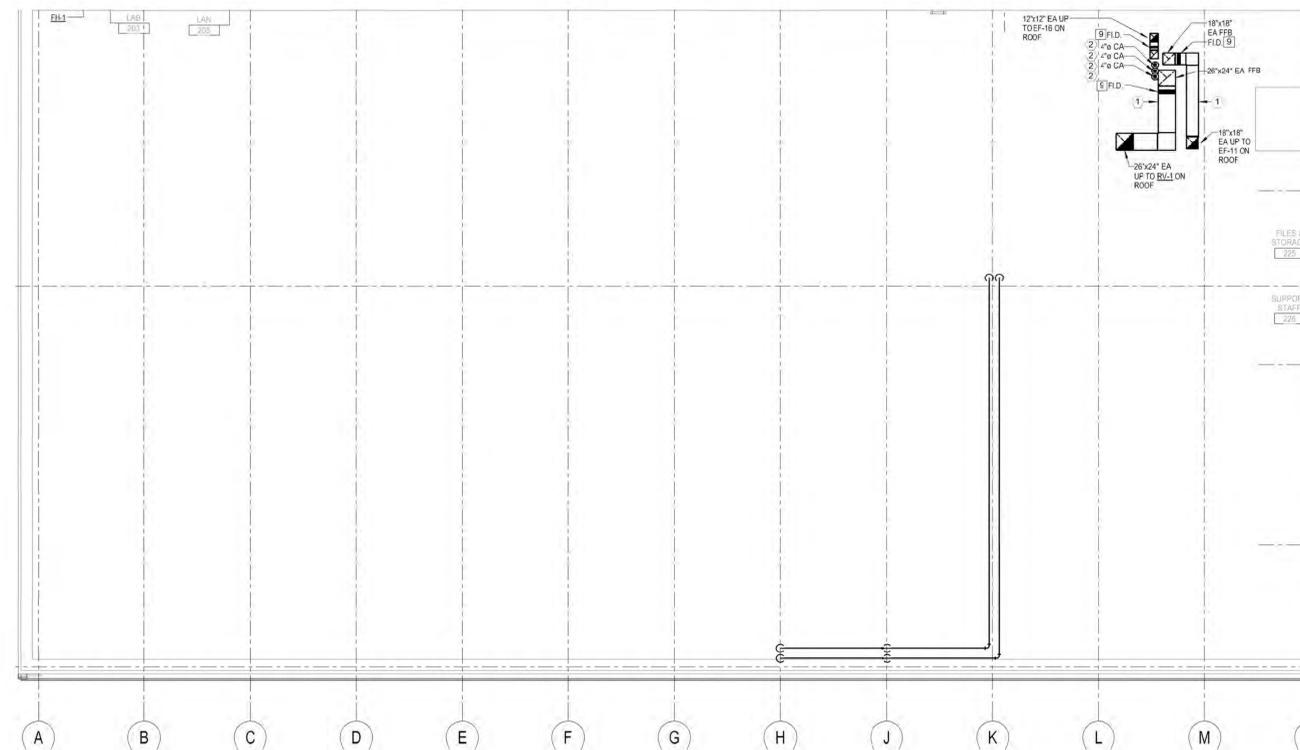


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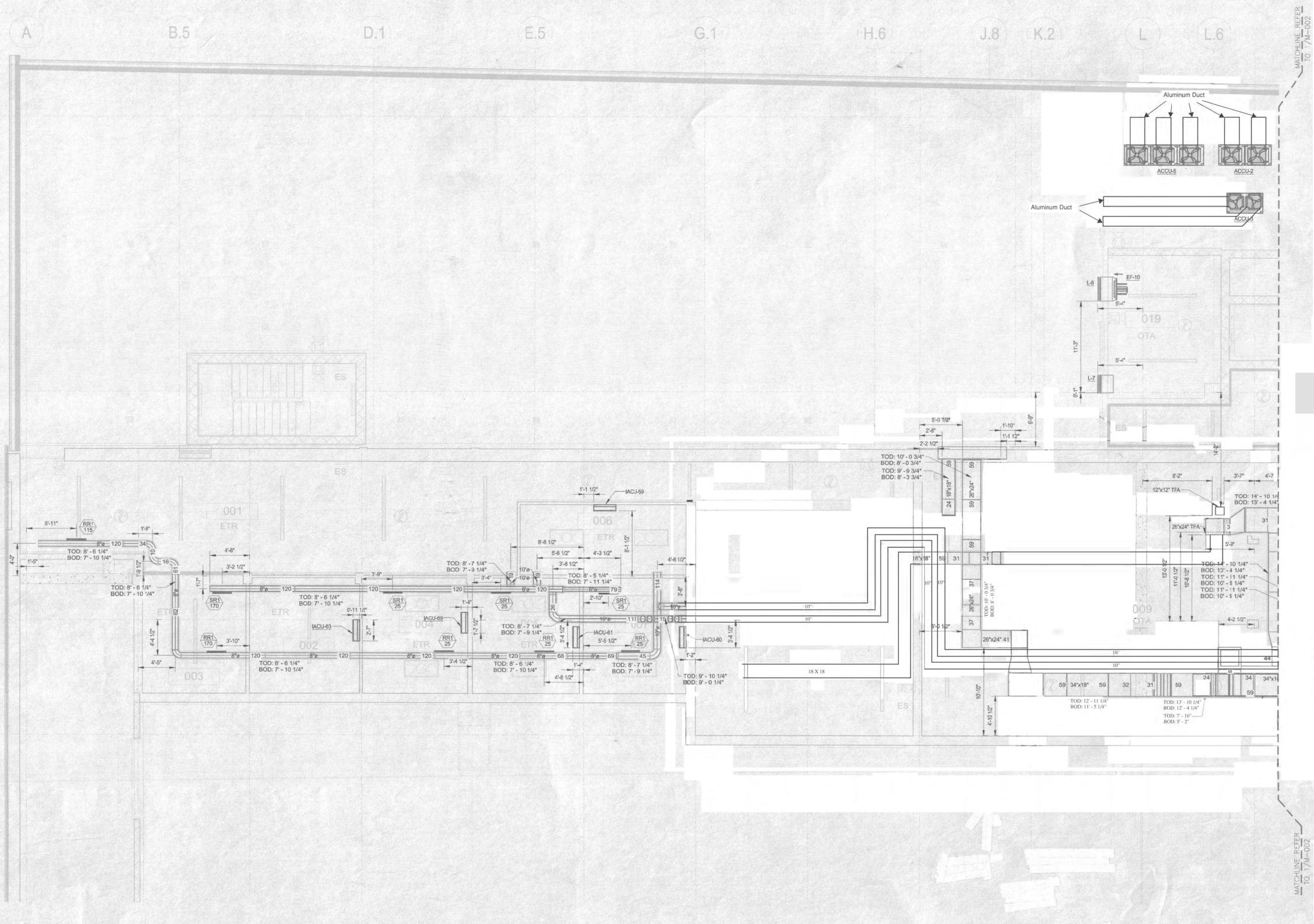
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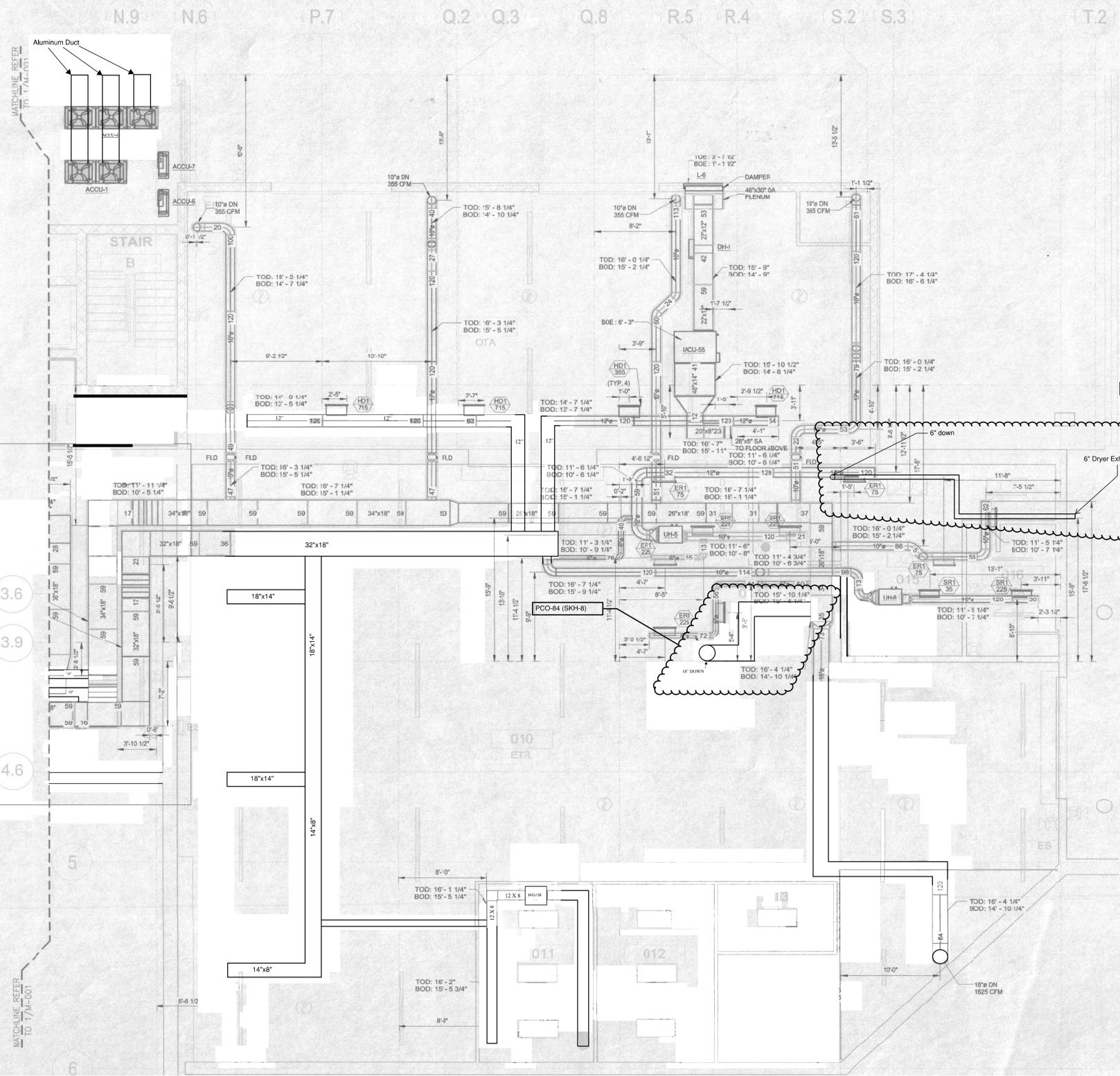
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M-10



SEE SM-BS-03
FOR MECHANICAL
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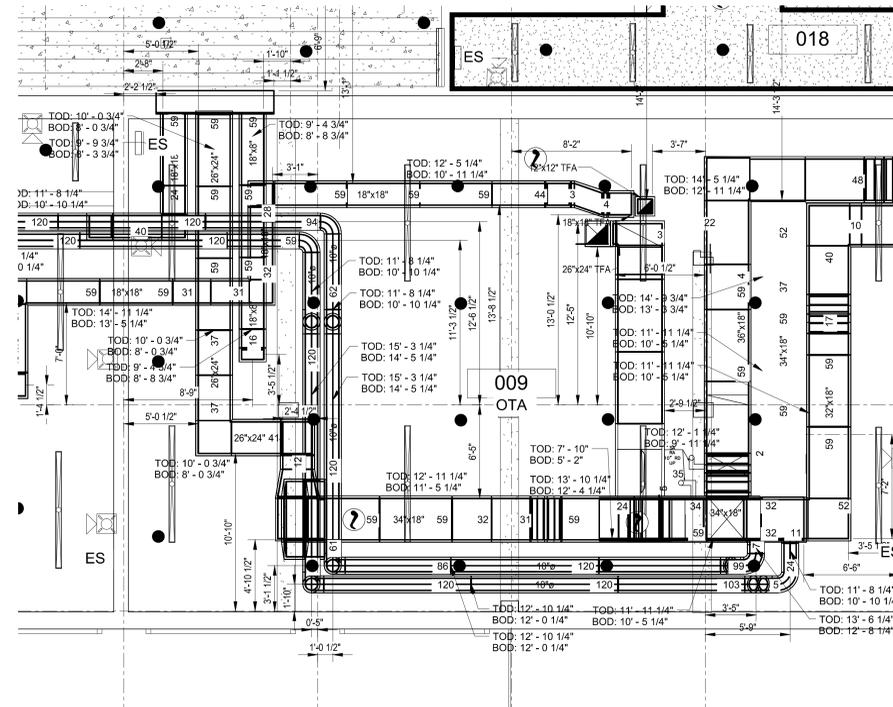
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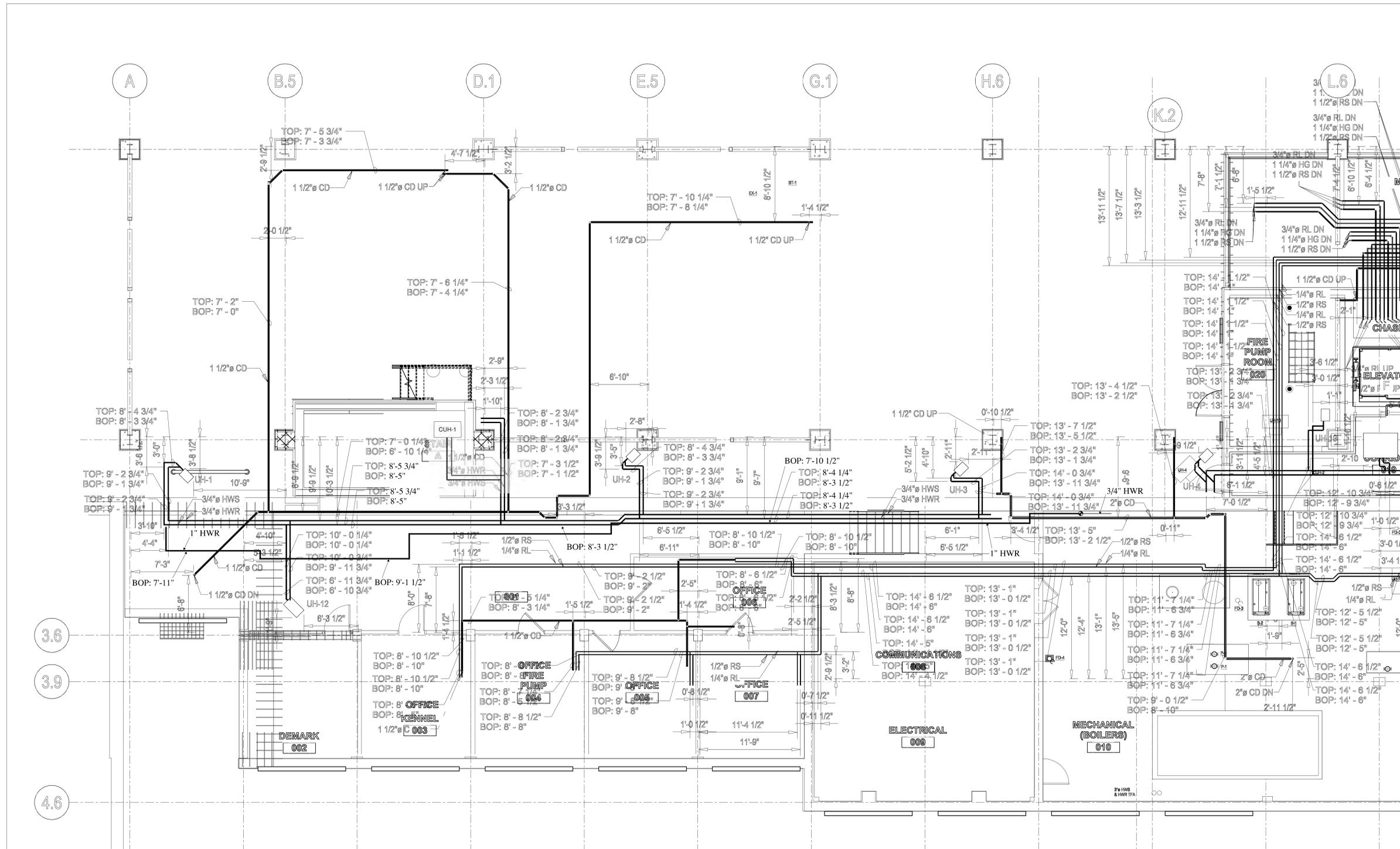
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REFRIGERATION PIPING
PLAN - PHASE 1**

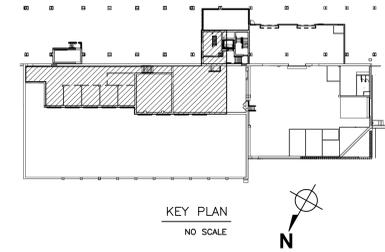
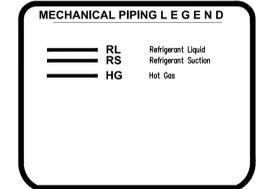
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M-12



Service Abbreviation	Location	Service	Group	Insulation Material	Thickness
CD	Indoor	Condensate	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Indoor	Hot Water	HVAC	Glass Fiber	$\le 1 \frac{1}{2}$-1" thk. 2" & up - 2" thk.
Ref.	Indoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Outdoor	Hot Water	HVAC	Glass Fiber	All Sizes-2" thk.
Ref.	Outdoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.
Ref.	Mechanical Room	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.

1 PARTIAL PLAN
SCALE: 1/4"=1'-0"





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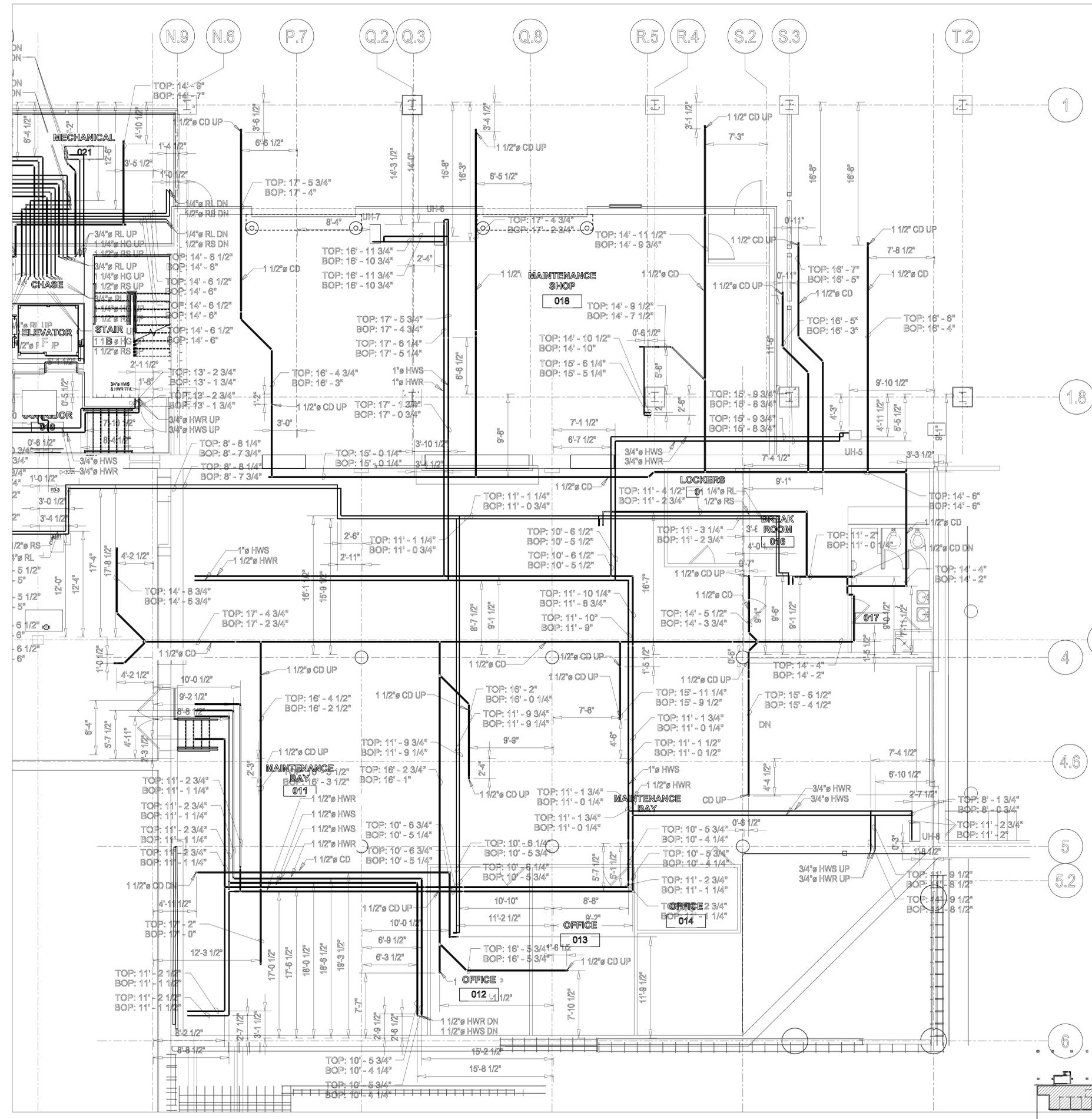
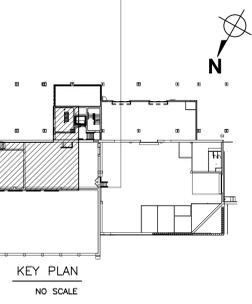
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M-13

MECHANICAL PIPING LEGEND

— RL	Refrigerant Liquid
— RS	Refrigerant Suction
— HG	Hot Gas
— HWS	Hot Water Supply
— HWR	Hot Water Return
— CD	Condensate



PARTIAL PLAN
SCALE: 1/4"=1'-0"

Plumbing Pipe Insulation

Service Abbreviation	Location	Service	Group	Insulation Material	Thickness
CD	Indoor	Condensate	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Indoor	Hot Water	HVAC	Glass Fiber	<1 1/2"-1 1/2" thk. 2" & up-2" thk.
Ref.	Indoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-1 1/2" thk.
HW	Outdoor	Hot Water	HVAC	Glass Fiber	All Sizes-2" thk.
Ref.	Outdoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.
Ref.	Mechanical Room	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.



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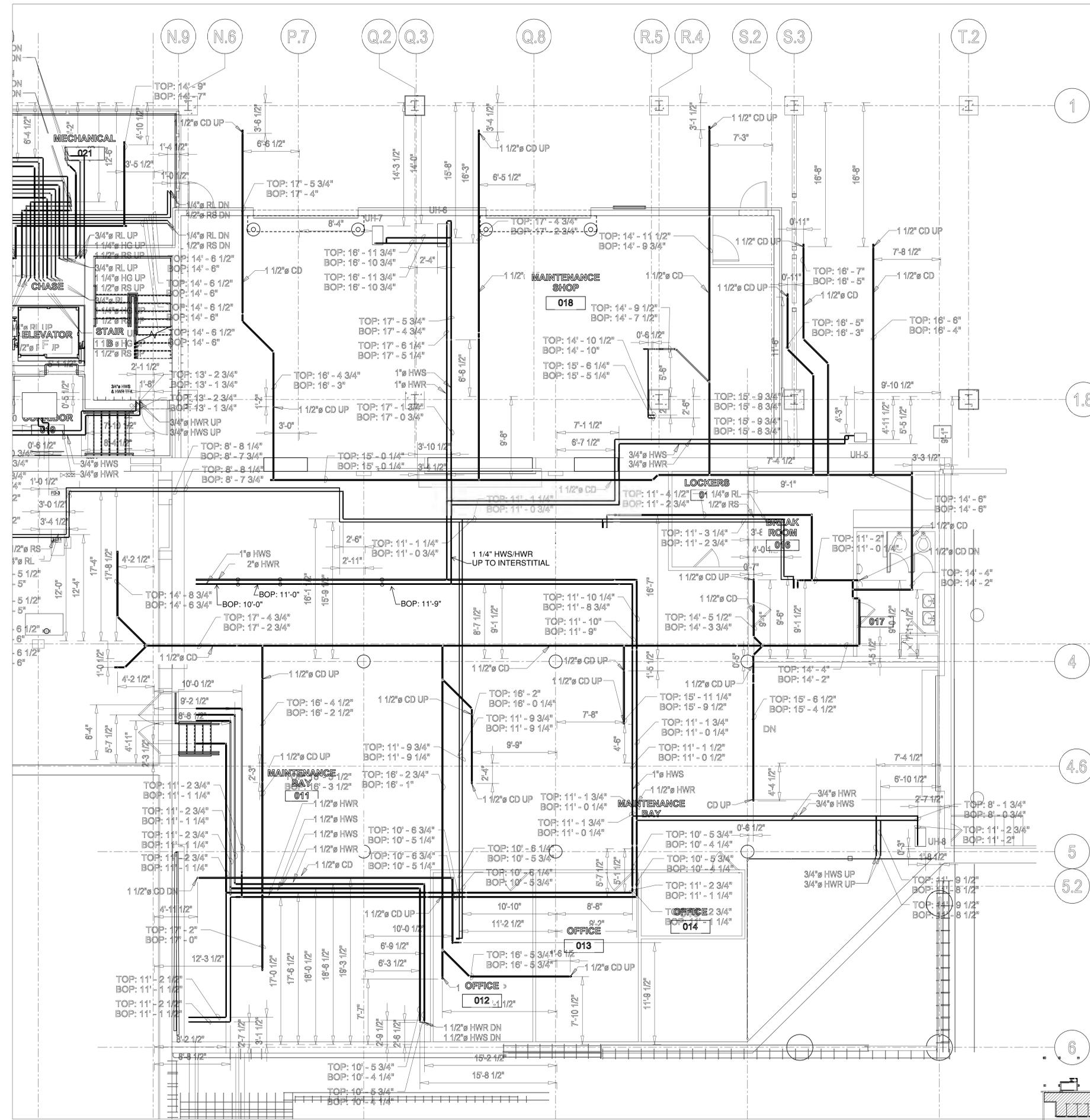
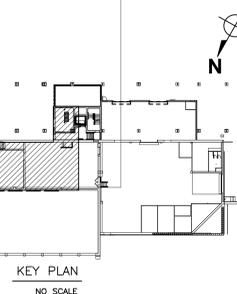
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MECHANICAL PIPING LEGEND	
	RL Refrigerant Liquid
	RS Refrigerant Suction
	HG Hot Gas
	HWS Hot Water Supply
	HWR Hot Water Return
	CD Condensate



PARTIAL PLAN
SCALE: 1/4"=1'-0"

Plumbing Pipe Insulation					
Service Abbreviation	Location	Service	Group	Insulation Material	Thickness
CD	Indoor	Condensate	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Indoor	Hot Water	HVAC	Glass Fiber	<1 1/2"-1 1/2" thk. 2" & up-2" thk.
Ref.	Indoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-1 1/2" thk.
HW	Outdoor	Hot Water	HVAC	Glass Fiber	All Sizes-2" thk.
Ref.	Outdoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.
Ref.	Mechanical Room	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.



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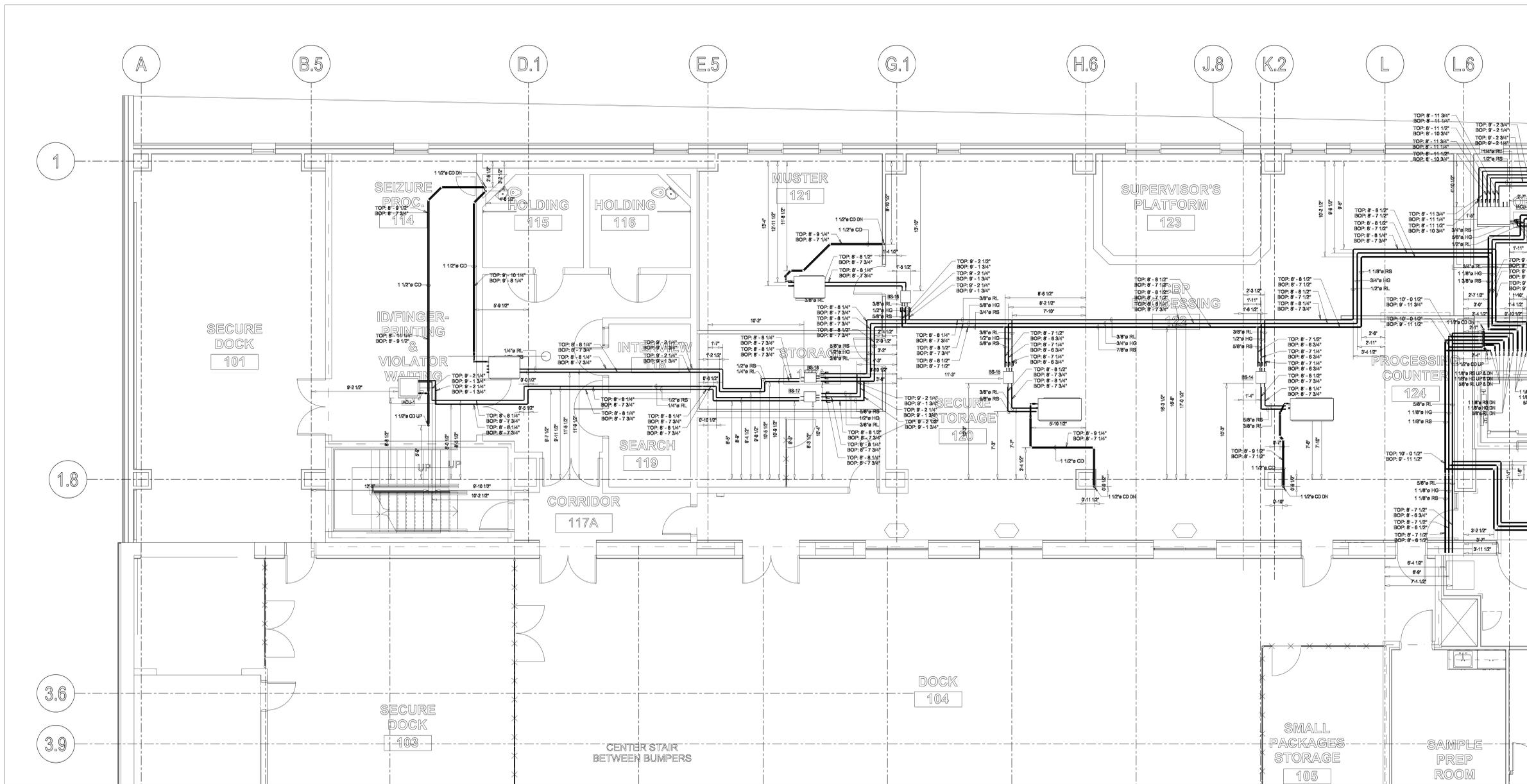
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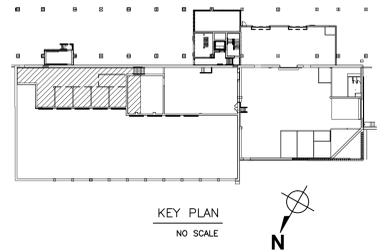
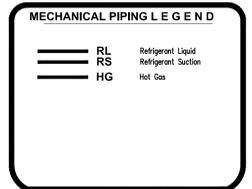
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1 PARTIAL PLAN
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Plumbing Pipe Insulation					
Service Abbreviation	Location	Service	Group	Insulation Material	Thickness
CD	Indoor	Condensate	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Indoor	Hot Water	HVAC	Glass Fiber	<=1 1/2"-1 3/4" thk. 2" & up-2" thk.
Ref.	Indoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-1 1/2" thk.
HW	Outdoor	Hot Water	HVAC	Glass Fiber	All Sizes-2" thk.
Ref.	Outdoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.
Ref.	Mechanical Room	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.





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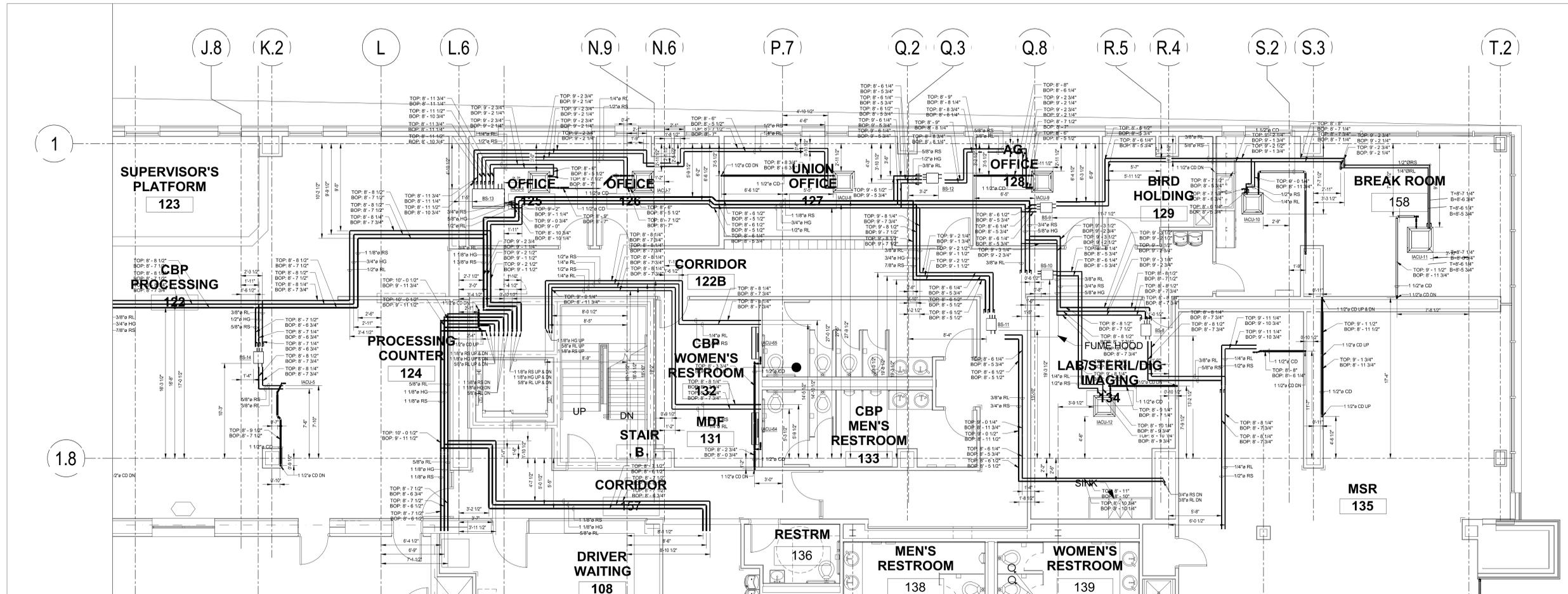
RENOVATION & ADDITIONS TO
COMMERCIAL BUILDING

RECORD
DRAWINGS

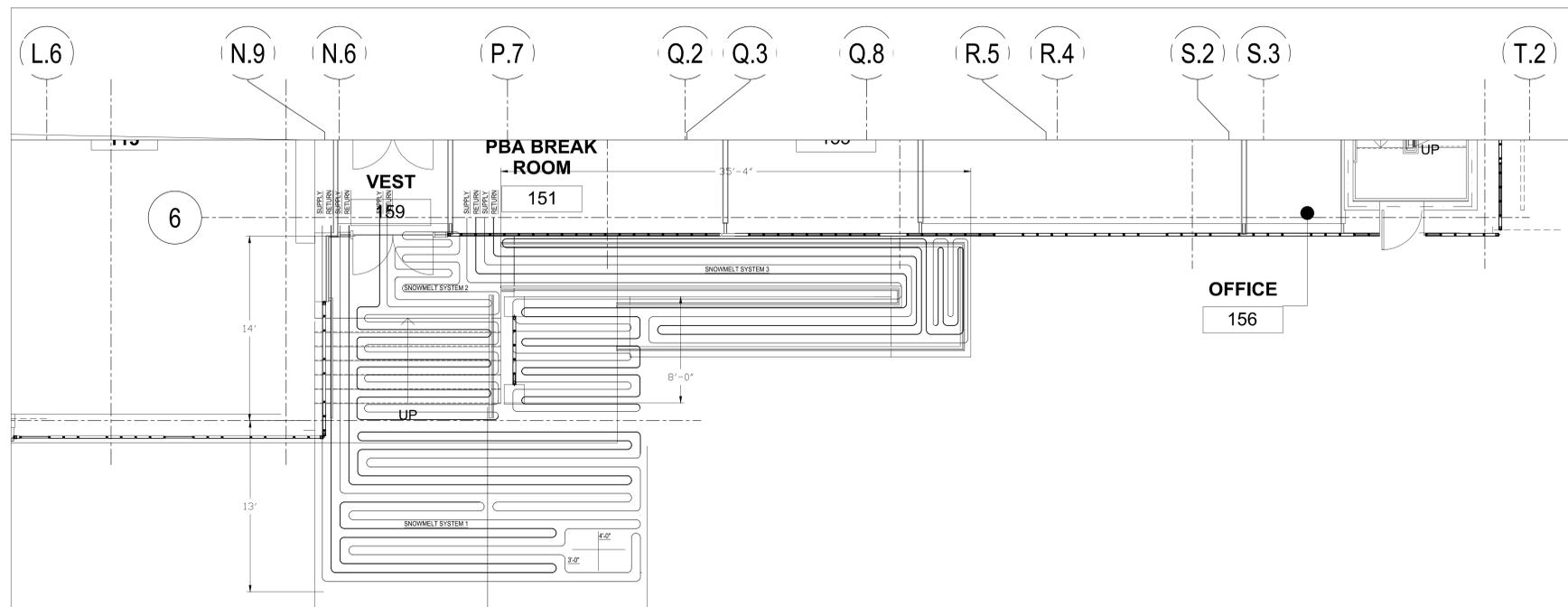


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2 PARTIAL PLAN/SNOW MELT SYSTEM
SCALE: 1/4"=1'-0"

Plumbing Pipe Insulation					
Service Abbreviation	Location	Service	Group	Insulation Material	Thickness
CD	Indoor	Condensate	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Indoor	Hot Water	HVAC	Glass Fiber	<math>\le 1\ 1/2\ 1/2\ 2\ 1/2\ 3\ 1/2\ 4\ 1/2\ 6\ 1/2\ 8\ 1/2\ 10\ 1/2\ 12\ 1/2\ 14\ 1/2\ 16\ 1/2\ 18\ 1/2\ 20\ 1/2\ 22\ 1/2\ 24\ 1/2\ 26\ 1/2\ 28\ 1/2\ 30\ 1/2\ 32\ 1/2\ 34\ 1/2\ 36\ 1/2\ 38\ 1/2\ 40\ 1/2\ 42\ 1/2\ 44\ 1/2\ 46\ 1/2\ 48\ 1/2\ 50\ 1/2\ 52\ 1/2\ 54\ 1/2\ 56\ 1/2\ 58\ 1/2\ 60\ 1/2\ 62\ 1/2\ 64\ 1/2\ 66\ 1/2\ 68\ 1/2\ 70\ 1/2\ 72\ 1/2\ 74\ 1/2\ 76\ 1/2\ 78\ 1/2\ 80\ 1/2\ 82\ 1/2\ 84\ 1/2\ 86\ 1/2\ 88\ 1/2\ 90\ 1/2\ 92\ 1/2\ 94\ 1/2\ 96\ 1/2\ 98\ 1/2\ 100\ 1/2\ 102\ 1/2\ 104\ 1/2\ 106\ 1/2\ 108\ 1/2\ 110\ 1/2\ 112\ 1/2\ 114\ 1/2\ 116\ 1/2\ 118\ 1/2\ 120\ 1/2\ 122\ 1/2\ 124\ 1/2\ 126\ 1/2\ 128\ 1/2\ 130\ 1/2\ 132\ 1/2\ 134\ 1/2\ 136\ 1/2\ 138\ 1/2\ 140\ 1/2\ 142\ 1/2\ 144\ 1/2\ 146\ 1/2\ 148\ 1/2\ 150\ 1/2\ 152\ 1/2\ 154\ 1/2\ 156\ 1/2\ 158\ 1/2\ 160\ 1/2\ 162\ 1/2\ 164\ 1/2\ 166\ 1/2\ 168\ 1/2\ 170\ 1/2\ 172\ 1/2\ 174\ 1/2\ 176\ 1/2\ 178\ 1/2\ 180\ 1/2\ 182\ 1/2\ 184\ 1/2\ 186\ 1/2\ 188\ 1/2\ 190\ 1/2\ 192\ 1/2\ 194\ 1/2\ 196\ 1/2\ 198\ 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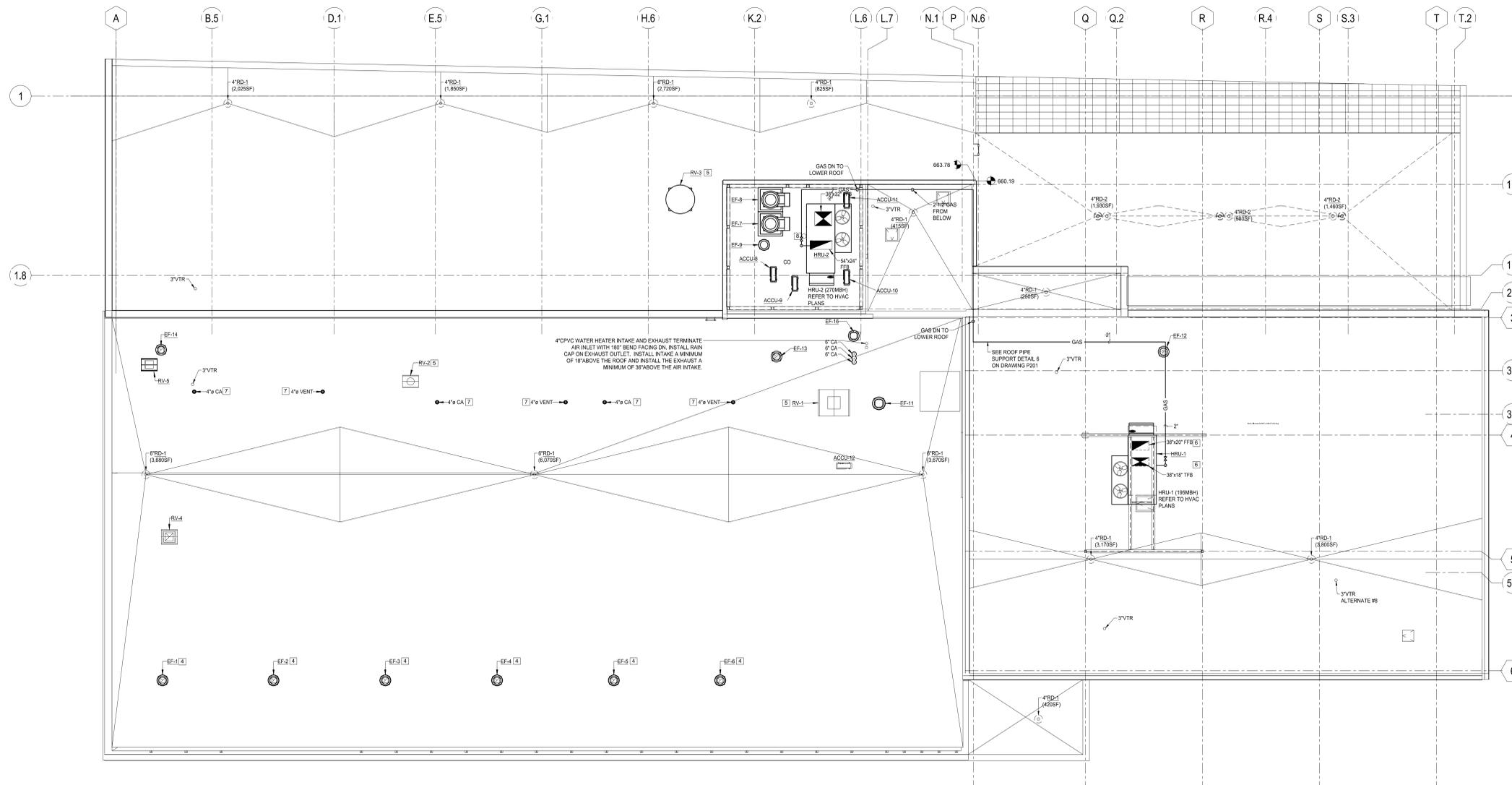


**BUFFALO AND FORT ERIE
PUBLIC BRIDGE AUTHORITY**

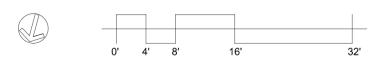
1 Peace Bridge Plaza
Buffalo, New York 14213

**RENOVATION & ADDITIONS TO
COMMERCIAL BUILDING**

Plumbing Pipe Insulation					
Service Abbreviation	Location	Service	Group	Insulation Material	Thickness
CD	Indoor	Condensate	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Indoor	Hot Water	HVAC	Glass Fiber	<=1 1/2"-1 3/4" thk. 2" & up-2" thk.
Ref.	Indoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-1 1/2" thk.
HW	Outdoor	Hot Water	HVAC	Glass Fiber	All Sizes-2" thk.
Ref.	Outdoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.
Ref.	Mechanical Room	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.



Plan
SCALE: 1/8"=1'-0"



MECHANICAL PIPING LEGEND	
COND	Condensate
HWR	Hot Water Return
HWS	Hot Water Supply
GHWR	Glycol Hot Water Return
GHWS	Glycol Hot Water Supply
CW	Cold Water
G	Gas



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NO.	BY	REVISIONS	DATE

DWG. TITLE
ROOF PIPING PLAN

DATE: February 15, 2017
SCALE: AS NOTED
DWN. CHK.
PROJ. No. 330911
DWG. No.

M-17



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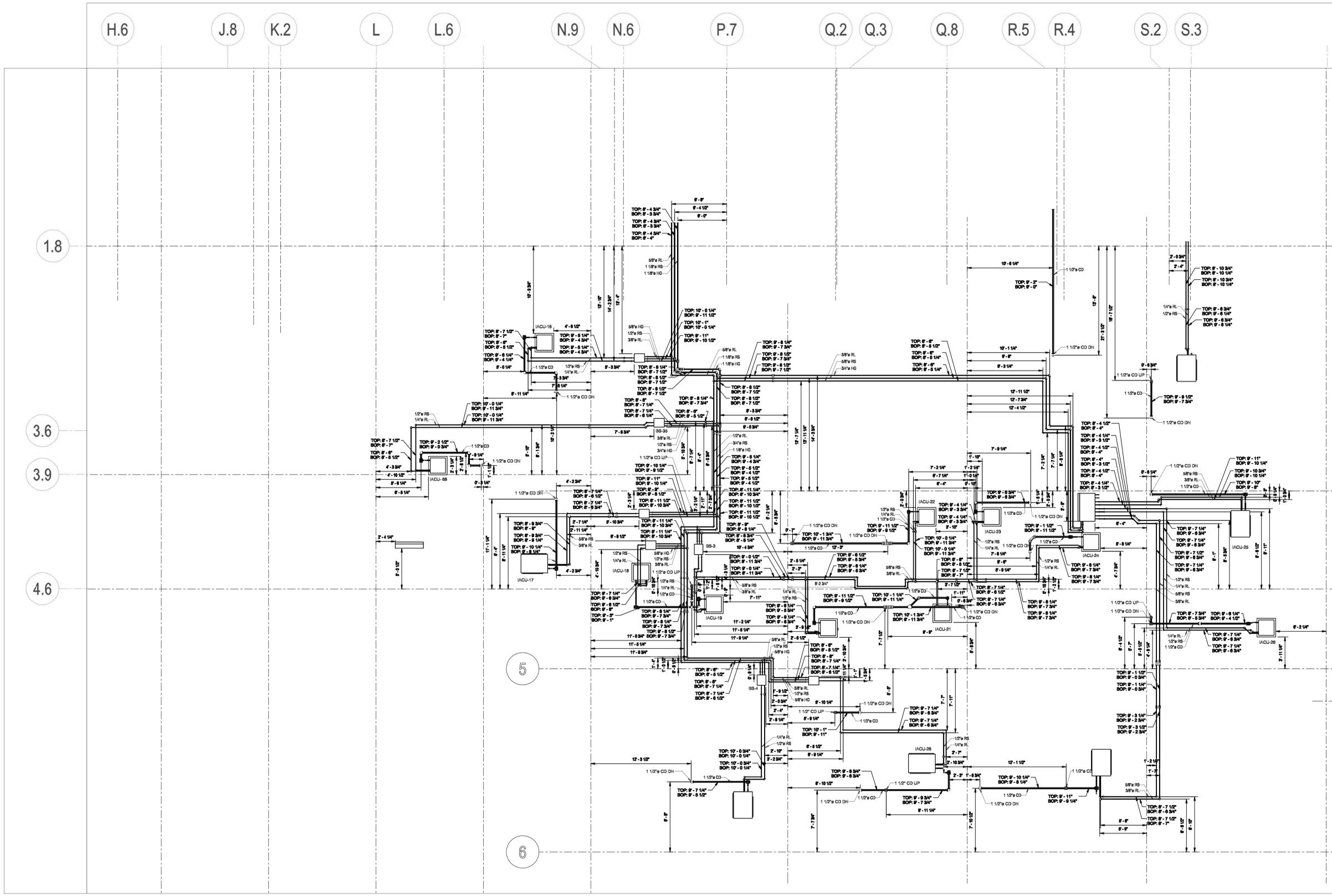
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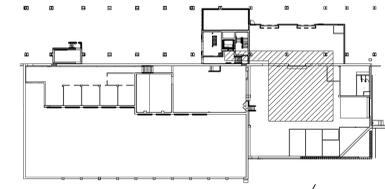
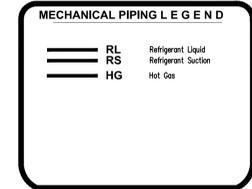
DWG. TITLE
**PARTIAL FIRST FLOOR
REFRIGERATION PIPING
PLAN - PHASE II**

DATE February 15, 2017
SCALE AS NOTED
DWN, CHK
PROJ. No. 330911
DWG. No.

M-18



SE ISOMETRIC
SCALE: 1/4"=1'-0"



KEY PLAN
NO SCALE

Plumbing Pipe Insulation					
Service Abbreviation	Location	Service	Group	Insulation Material	Thickness
CD	Indoor	Condensate	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Indoor	Hot Water	HVAC	Glass Fiber	$\le 1 \frac{1}{2}$-1 1/2" thk. >1 1/2"-2" thk.
Ref.	Indoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-1 1/2" thk.
HW	Outdoor	Hot Water	HVAC	Glass Fiber	All Sizes-2" thk.
Ref.	Outdoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.
Ref.	Mechanical Room	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.



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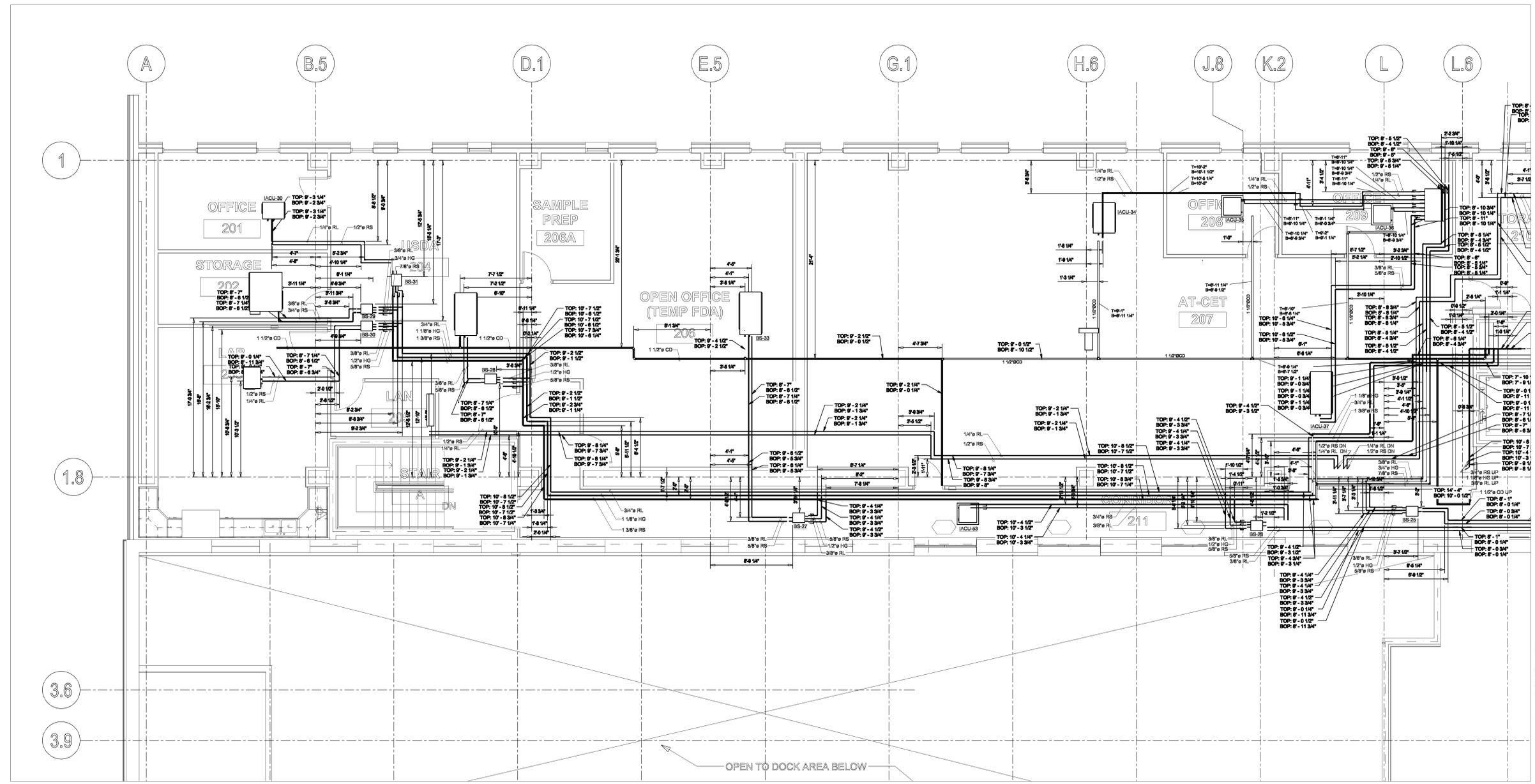
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1 PARTIAL PLAN
SCALE: 1/4"=1'-0"

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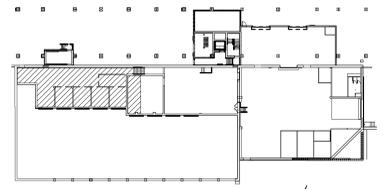
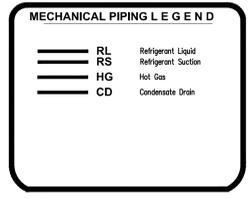
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DWG. TITLE
**PARTIAL SECOND FLOOR
REFRIGERATION PIPING
PLAN - PHASE I**

DATE: February 15, 2017
SCALE: AS NOTED
DWN: - CHK: -
PROJ. No.: 330911
DWG. No.:

M-19

Plumbing Pipe Insulation					
Service Abbreviation	Location	Service	Group	Insulation Material	Thickness
CD	Indoor	Condensate	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Indoor	Hot Water	HVAC	Glass Fiber	<=1 1/2"-1 1/2" thk. 2"cup-2" thk.
Ref.	Indoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-1 1/2" thk.
HW	Outdoor	Hot Water	HVAC	Glass Fiber	All Sizes-2" thk.
Ref.	Outdoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.
Ref.	Mechanical Room	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.



KEY PLAN
NO SCALE



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PLAN - PHASE II**

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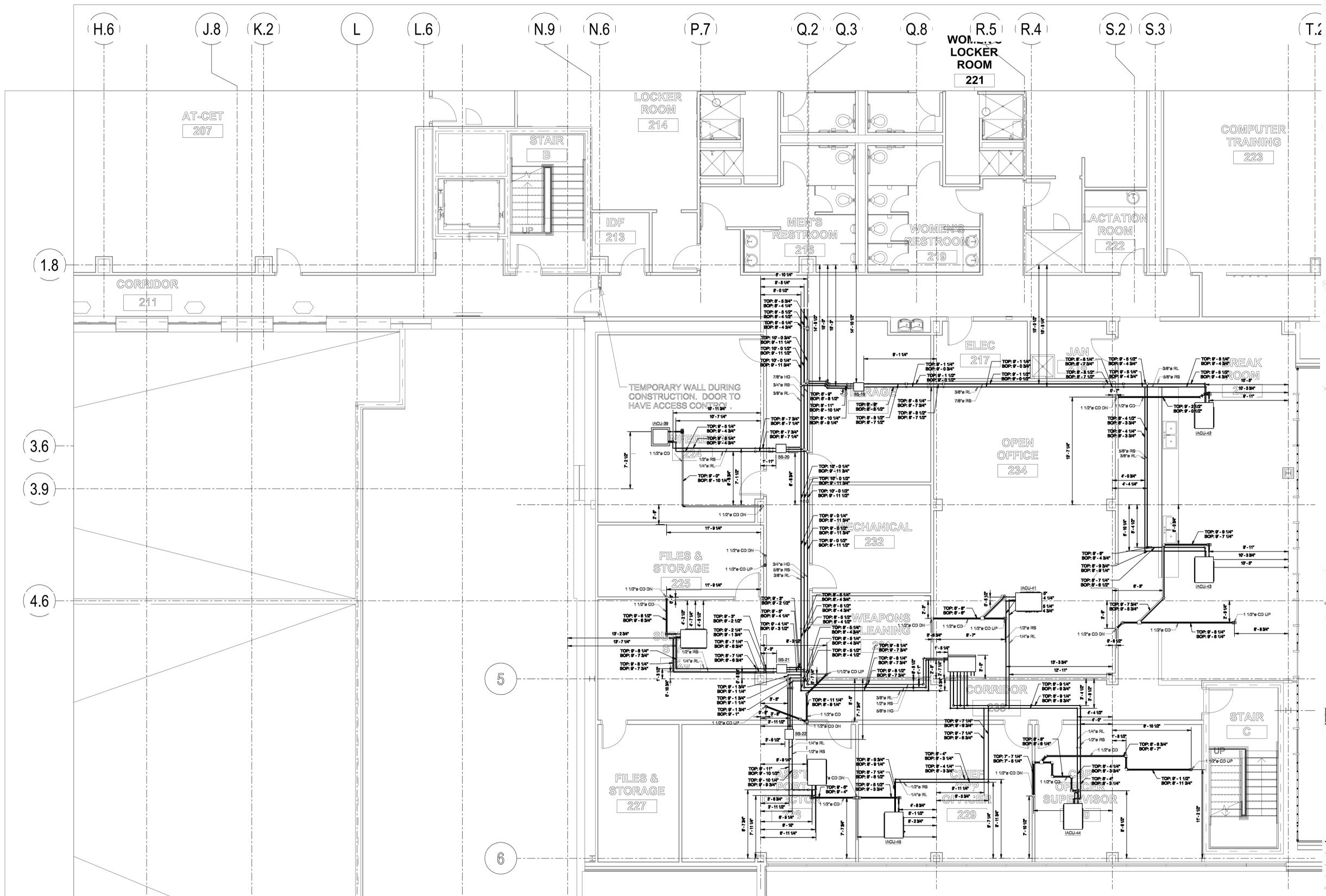
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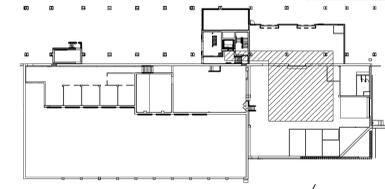
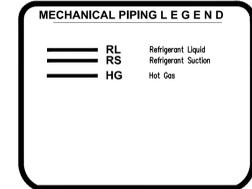
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DWG. No.

M-20



1 SE ISOMETRIC
SCALE: 1/4"=1'-0"



Plumbing Pipe Insulation					
Service Abbreviation	Location	Service	Group	Insulation Material	Thickness
CD	Indoor	Condensate	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Indoor	Hot Water	HVAC	Glass Fiber	$\le 1 \frac{1}{2}$-1 1/2" thk. >1 1/2" & up -2" thk.
Ref.	Indoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-1 1/2" thk.
HW	Outdoor	Hot Water	HVAC	Glass Fiber	All Sizes-2" thk.
Ref.	Outdoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.
Ref.	Mechanical Room	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.

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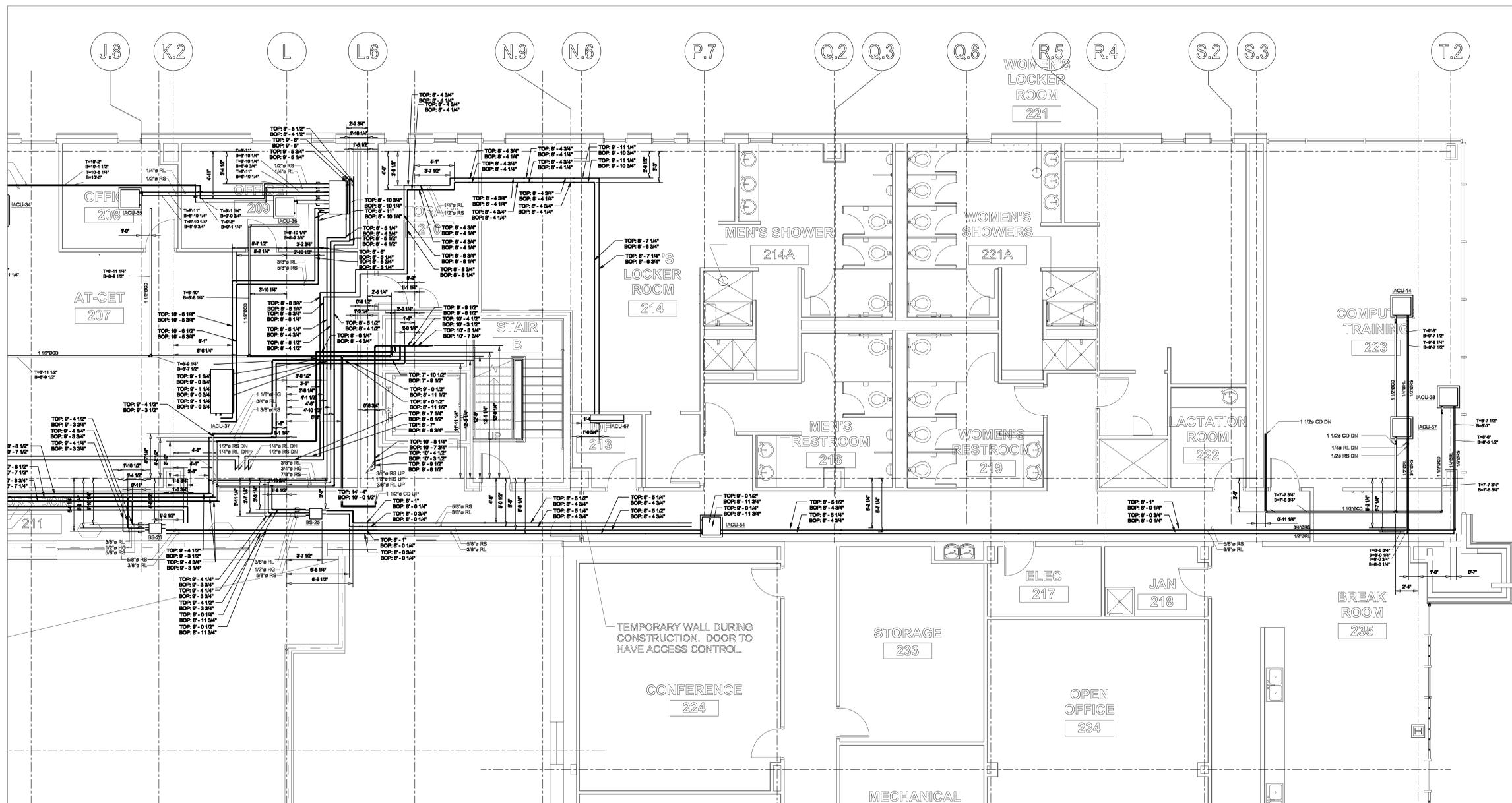
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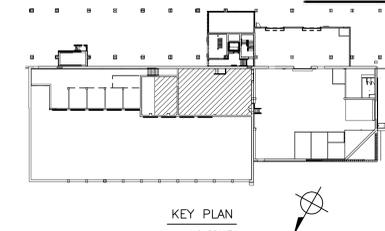
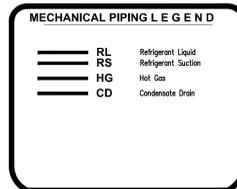
DATE	February 15, 2017
SCALE	AS NOTED
DWN.	DKL
PROJ. No.	330911
DWG. No.	

M-21



1 PARTIAL PLAN
SCALE: 1/4"=1'-0"

Service Abbreviation	Location	Service	Group	Insulation Material	Thickness
CD	Indoor	Condensate	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Indoor	Hot Water	HVAC	Glass Fiber	<=1 1/2"-1 1/2" thk. 2" & up-2" thk.
Ref.	Indoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-1 1/2" thk.
HW	Outdoor	Hot Water	HVAC	Glass Fiber	All Sizes-2" thk.
Ref.	Outdoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.
Ref.	Mechanical Room	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.





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DWG. TITLE
**PARTIAL THIRD FLOOR
REFRIGERATION PIPING
PLAN - PHASE II**

DATE February 15, 2017

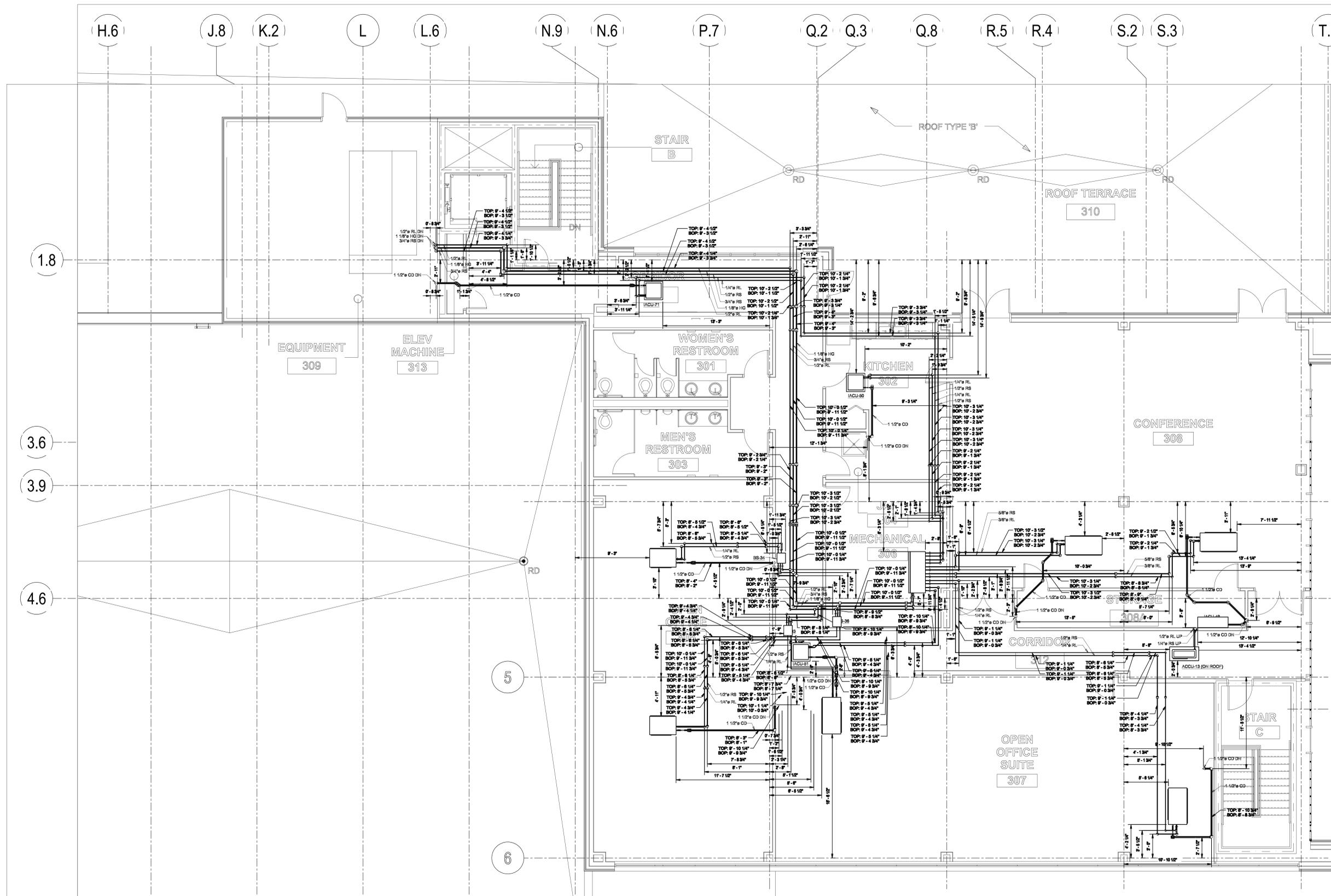
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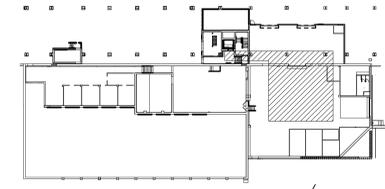
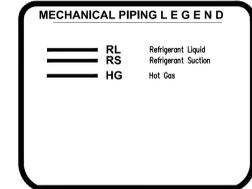
PROJ. No. 330911

DWG. No.

M-22



1 SE ISOMETRIC
SCALE: 1/4"=1'-0"



KEY PLAN
NO SCALE

Service Abbreviation	Location	Service	Group	Insulation Material	Thickness
CD	Indoor	Condensate	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Indoor	Hot Water	HVAC	Glass Fiber	$\le 1 \frac{1}{2}$-1 1/2" thk. >2" & up -2" thk.
Ref.	Indoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-1 1/2" thk.
HW	Outdoor	Hot Water	HVAC	Glass Fiber	All Sizes-2" thk.
Ref.	Outdoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.
Ref.	Mechanical Room	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.



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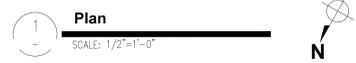
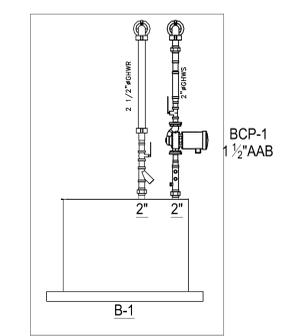
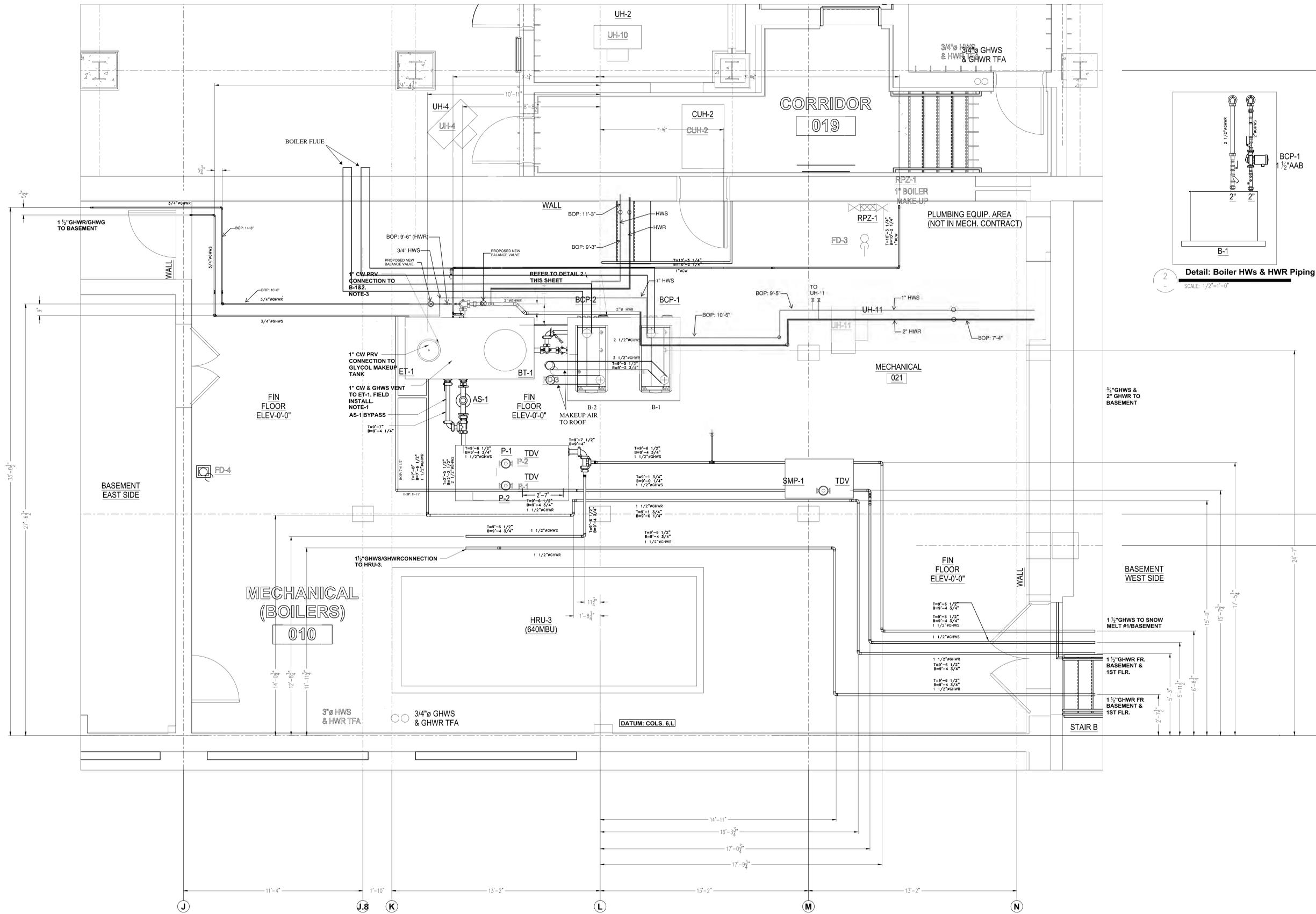
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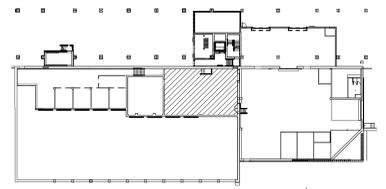
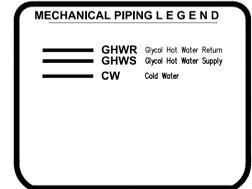
DWG. TITLE
**BASEMENT MECHANICAL
ROOM - PLAN**

DATE February 15, 2017
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PRJ. No. 330911
DWG. No.

M-23

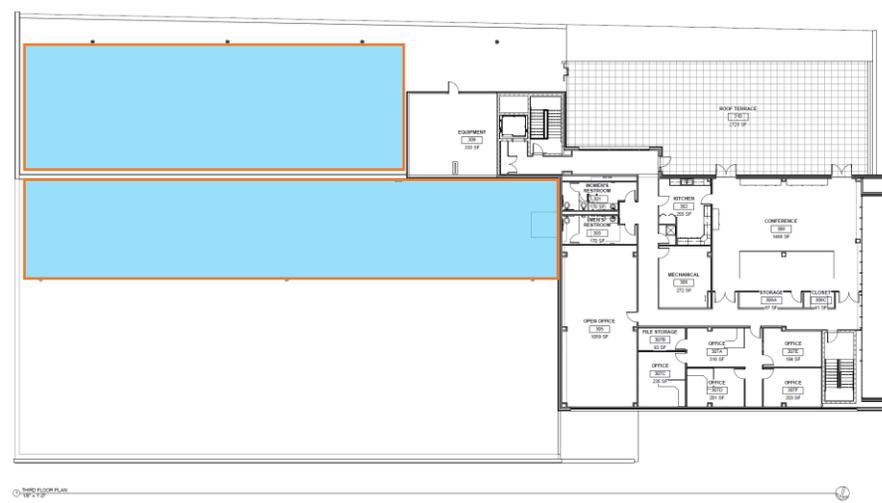
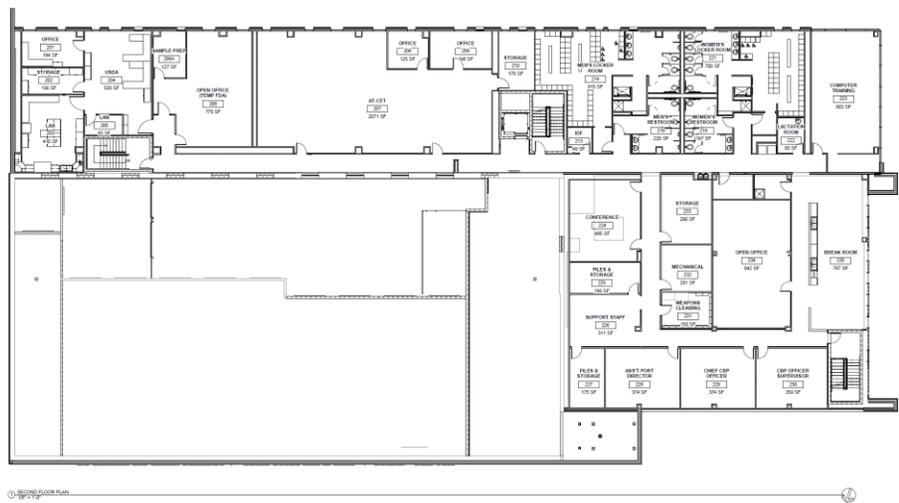
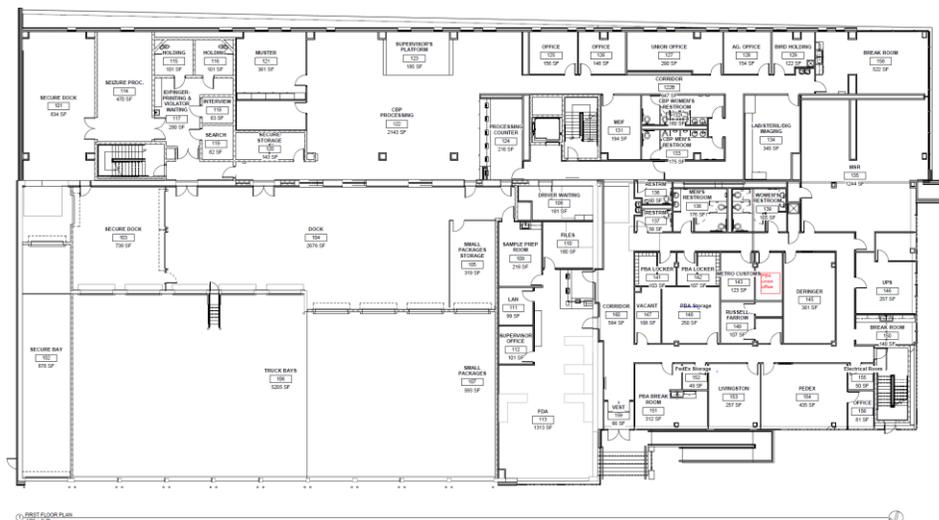
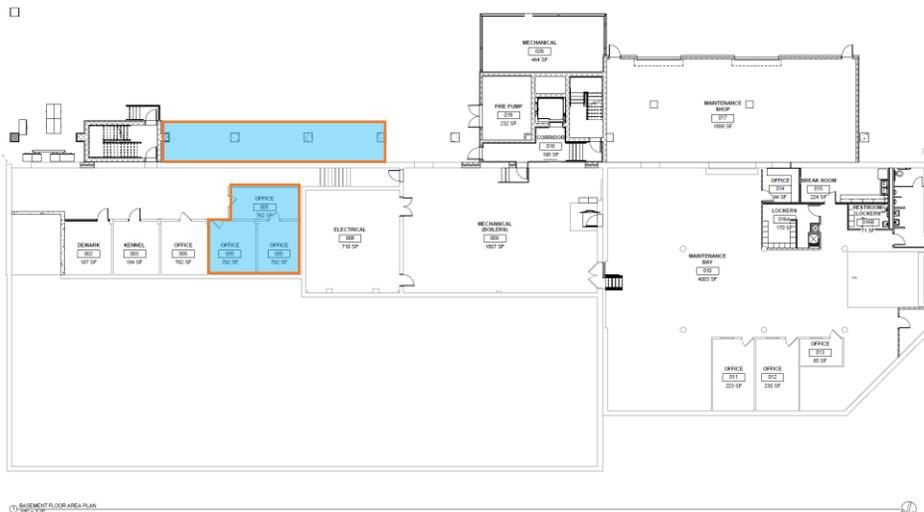


DRAWING NOTES:
 1. REFER TO SPOOL MAPS FOR EACH SERVICE FOR ADDITIONAL INFORMATION FOR PIPING AT MECHANICAL ROOM.
 2. FINISHED FLOOR ELEVATION = 0'0" FOR FABRICATION AND INSTALLATION PURPOSES.
 3. 1" CW PRV VALVE STATION TO BOILERS AND GLYCOL MAKEUP TANK, ON 1" CW LINE. REFER TO CONTRACT DWGS H-201, AND H-400 FOR DETAILS, AND APPLICABLE RFI FOR GMT.



Service Abbreviation	Location	Service	Group	Insulation Material	Thickness
CD	Indoor	Condensate	HVAC	Elastomeric Foam	All Sizes-1" thk.
HW	Indoor	Hot Water	HVAC	Glass Fiber	<=1 1/2"-1 3/4" thk. 2" & up-2" thk.
Ref.	Indoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-1 1/2" thk.
HW	Outdoor	Hot Water	HVAC	Glass Fiber	All Sizes-2" thk.
Ref.	Outdoor	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.
Ref.	Mechanical Room	Refrigeration	HVAC	Elastomeric Foam	All Sizes-2" thk.

Potential Expansion Areas for New HVAC Equipment



Potential options for expansion space identified with blue boxes above.

RFP for Mechanical Design Services

APPENDIX



ARCHITECTS / ENGINEERS

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Buffalo, New York 14202

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F 716 883 4268

TrautmanAssociates.com

Consultants:

Signature & Seal:

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Project: R.F. WILLSON MECH. AND ELEC. UPGRADES

Project Address: 1 PEACE BRIDGE PLAZA, BUFFALO, NEW YORK 14213

Drawing History: # Date Description

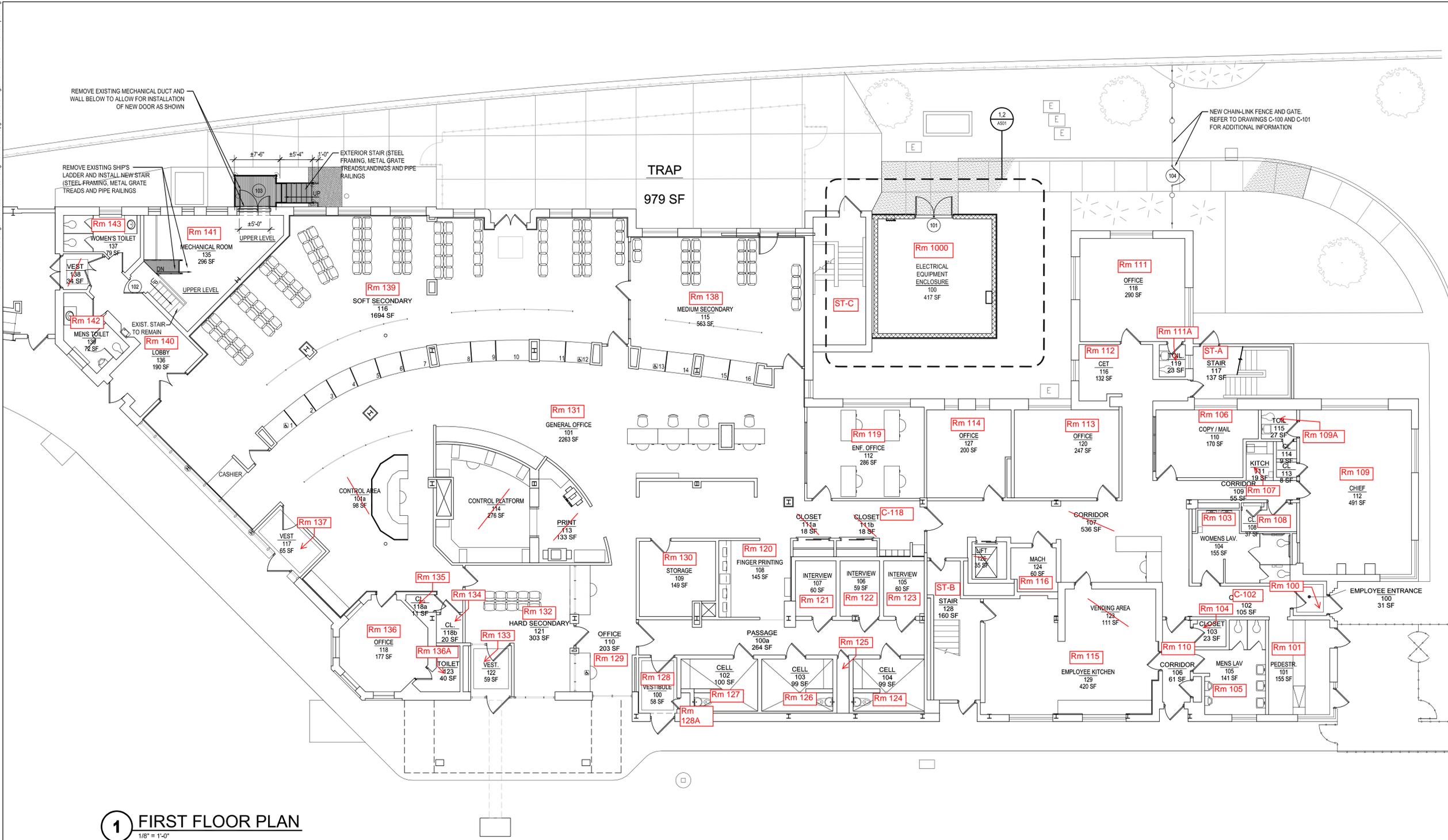
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Date: 05/14/2019
Project Number: 18023
Sheet Title: FIRST FLOOR PLAN

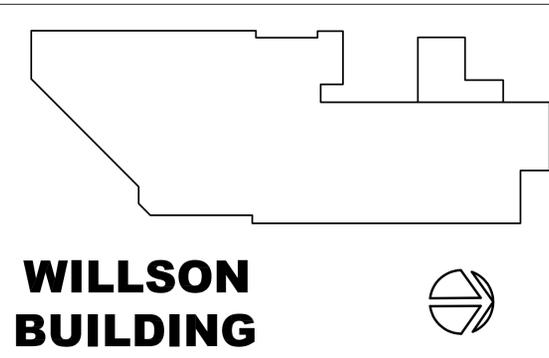
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Monday, March 25, 2019 - 12:04 PM

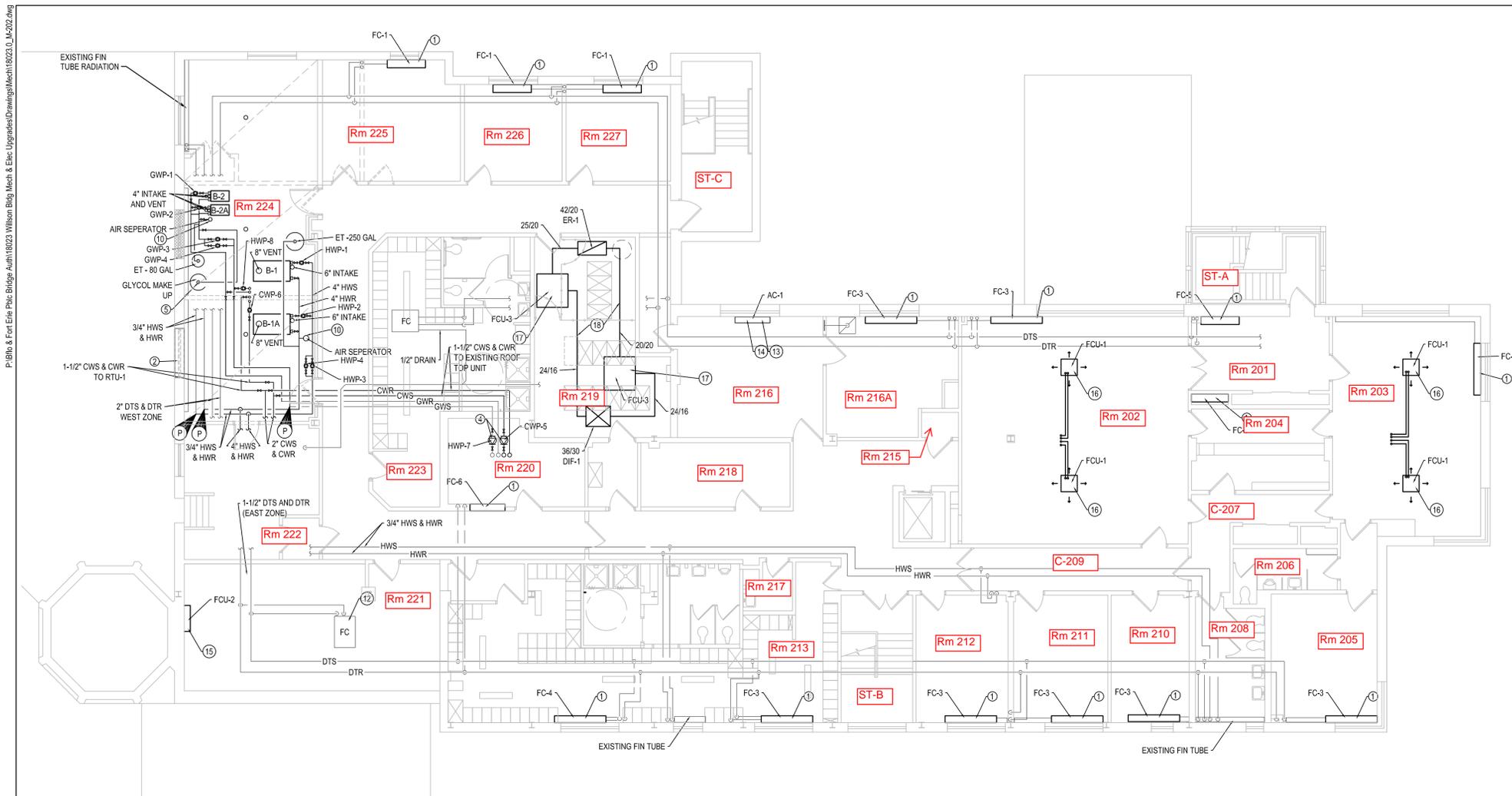


1 FIRST FLOOR PLAN
1/8" = 1'-0"

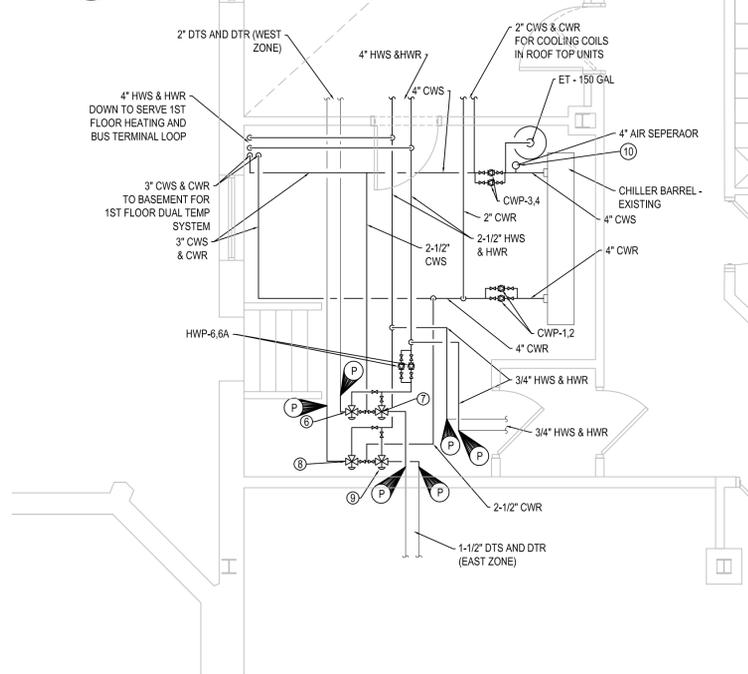


WILLSON BUILDING





1 MECHANICAL SECOND FLOOR PLAN
1/8" = 1'-0"



2 MECHANICAL SECOND FLOOR CHILLER ROOM PLAN
1/4" = 1'-0"

GENERAL MECHANICAL NOTES:

- COORDINATE THE INSTALL OF DUCTWORK AND PIPING WITH ALL TRADES. ENSURE THAT WORK SHOULD BE DONE IN THE RIGHT ORDER.
- CRAWL SPACE IS TIGHT. ENSURE PROPER TRAINING OF PERSONAL THAT WILL CONDUCT WORK IN SPACE.
- BOILER FLUES AND VENTS TO BE COORDINATED WITH ROOF PLAN. RUN VENTS IN CEILING AS REQUIRED TO GET TO SHOWN LOCATIONS ON THE ROOF PLAN.
- SECOND FLOOR DUCTWORK IS ALL EXISTING UNLESS OTHERWISE NOTED.

MECHANICAL DRAWING NOTES:

- NEW FAN COIL UNIT. REFER TO SCHEDULES PAGE FOR INFORMATION. NEW 2-WAY CONTROL VALVE PIPING PACKAGES TO BE PROVIDED WITH THE UNITS. RECONNECT EXISTING PIPING TO THE PIPING PACKAGES AND FEED NEW FAN COIL UNITS. MODIFY PIPE CHASES AS REQUIRED FOR THE NEW SIZE OF THE UNIT.
- 5x6 LOUVER IN WINDOW OPENING. LOUVER TO BE MODULATING OFF OF MOTOR OPERATED DAMPER. DAMPER CONTROLLED BY TEMPERATURE SENSOR IN ROOM. TO OPEN WHEN ROOM GETS ABOVE 75°F.
- 8/8 DUCT FROM EXHAUST FAN 1 ABOVE. LEAVE OPEN ENDED AT CEILING. PROVIDE BIRDINJECT SCREEN ON END OF DUCT.
- COIL PUMP TO BE REPLACED. REFER TO SCHEDULES PAGE FOR PUMP INFORMATION.
- GLYCOL MAKE UP PACKAGE TO BE EQUAL TO WESSELS - GMP-13050. CONTRACTOR MAY SUBMIT EQUAL FOR APPROVAL.
- FEED 3-WAY VALVE WITH 2" HWS AND CWS. TO FEED 2" DUAL TEMP SYSTEM - SECOND FLOOR WEST ZONE.
- FEED 3-WAY VALVE WITH 1-1/2" HWS AND CWS. TO FEED 1-1/2" DUAL TEMP SYSTEM - SECOND FLOOR EAST ZONE.
- FEED 3-WAY VALVE WITH 2" HWR AND CWR. TO FEED 2" DUAL TEMP SYSTEM - SECOND FLOOR WEST ZONE.
- FEED 3-WAY VALVE WITH 1-1/2" HWR AND CWR. TO FEED 1-1/2" DUAL TEMP SYSTEM - SECOND FLOOR EAST ZONE.
- AIR SEPARATOR TO BE PROVIDED WITH AN INTEGRAL AIR/DIRT ELIMINATOR.
- 3816 SUPPLY AND RETURN DUCTWORK FROM RTU-2 ABOVE. COORDINATE INSTALL WITH STRUCTURAL CONTRACTOR AS THESE DUCTS REQUIRE ROOF PENETRATIONS. DUCTWORK TO BE HUNG HIGH TO CEILING.
- FAN COIL UNIT IS EXISTING TO REMAIN. SPLIT SYSTEM UNIT TO BE ADDED TO THE ROOM. MODIFY CONTROL OF THE FAN COIL UNIT TO TURN ON FOR AUXILIARY HEAT. TURN UNIT ON AND RUN WHEN OUTSIDE TEMP IS UNDER 0°F.
- PROVIDE A CONDENSATE PUMP FOR THE UNIT. PUMP TO CONDENSATE LINE FEEDING THE SPLIT SYSTEMS IN THE SPACE. THE EXISTING CONDENSATE LINE IS IN THE CEILING SPACE.
- COORDINATE WALL PATCHING WITH THE GENERAL CONTRACTOR. KEEP AIR INTAKE LOUVER THROUGH THE EXTERIOR WALL FOR NEW UNIT. REFRIGERANT PIPING FROM ROOF. HIDE PIPING AS REQUIRED PER OWNER.
- WALL HUNG, INDOOR FAN COIL UNIT FOR SPLIT SYSTEM. INSTALL ABOVE THE MIRROR ON THE WALL. CONDENSATE PUMP TO BE PROVIDED TO GET CONDENSATE TO CHILLER ROOM. COORDINATE INSTALL WITH ALL CONTRACTORS.
- VRF CEILING CASSETTE. 1 CONTROLLER PER ROOM TO CONTROL BOTH INDOOR UNITS. CONDENSATE PUMP WILL NEED TO BE PROVIDED FOR EACH UNIT. RUN CONDENSATE TO THE COMPUTER ROOM AND CONNECT INTO THE MAIN LINE THERE. COORDINATE NEEDED CEILING REMOVAL WITH ALL TRADES.
- SERVER ROOM COOLING UNIT. HANG UNIT FROM DECK ABOVE. HANG UNIT ABOVE COOLING RACKS. UNITS TO HAVE COMMON SUPPLY DUCTING WITH A SINGLE THERMOSTAT CONTROL. PROVIDE A CONDENSATE PUMP WITH EACH UNIT, AND HANG FROM DECK. RUN CONDENSATE TO PIPE LEFT IN CEILING SPACE. REFRIGERANT PIPING IS FED FROM ROOF ABOVE.
- HANG DUCTWORK TIGHT TO CEILING. CUT HOLES IN CAGE AS NEEDED FOR INSTALL.



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Project: R.F. WILLSON MECH. AND ELEC. UPGRADES

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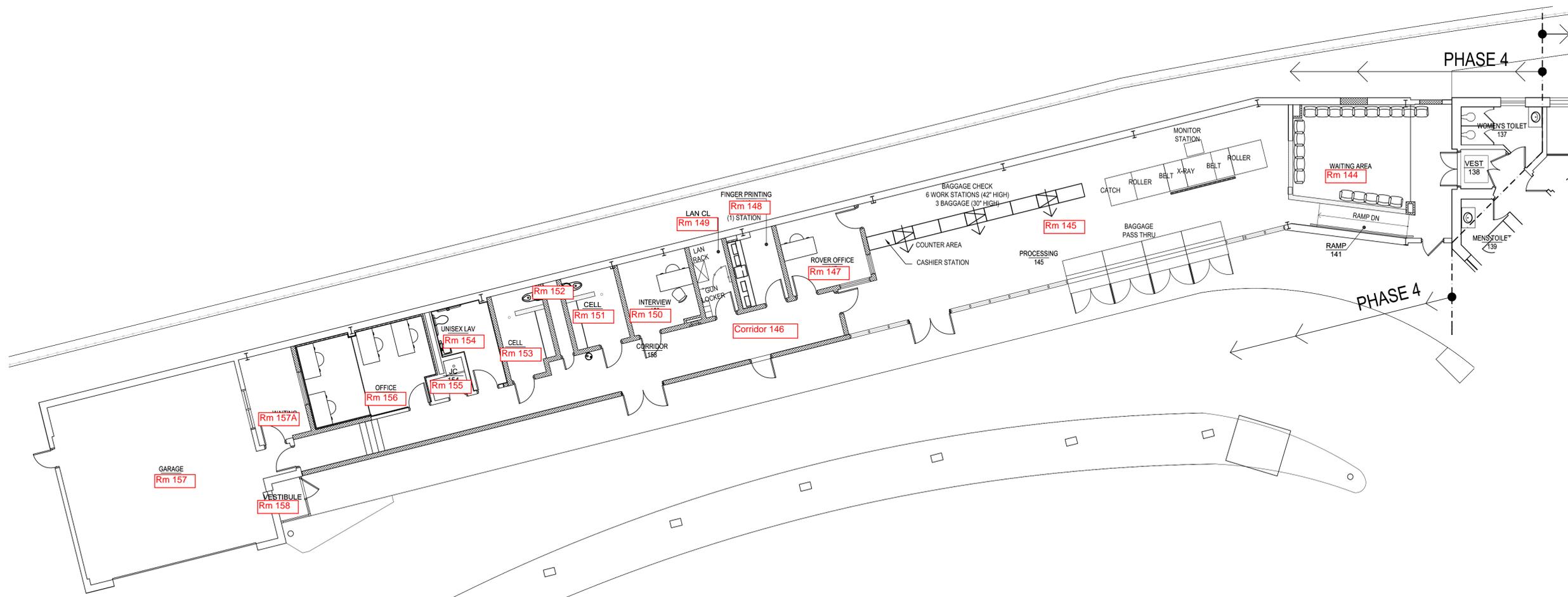
Drawing History:	#	Date	Description

Project Status: **ISSUED FOR CONSTRUCTION**

Date: 05/14/2019
Project Number: 18023
Sheet Title: MECHANICAL 2ND FLOOR PLANS

Sheet Number: **M-202**





1 PHASE 4
PARTIAL FIRST FLOOR PLAN
1/8" = 1'-0"



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Consultants:

- MOD MOTOR OPERATED DAMPER
- NC NORMALLY CLOSED
- NO NORMALLY OPENED
- P SYSTEM PUMP
- PF PROPELLER FAN
- RD RETURN DIFFUSER
- RG RETURN GRILLE
- SHWP SECONDARY HOT WATER PUMP
- SD SUPPLY DIFFUSER
- TC TEMPERATURE CONTROL
- TG TRANSFER GRILLE
- TYP TYPICAL
- UH UNIT HEATER
- VD VOLUME DAMPER
- HWP HOT WATER PUMP
- HWR HOT WATER RETURN
- HWS HOT WATER SUPPLY

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Project: **R.F. WILLSON MECH.
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Drawing History: # Date Description

Project Status: **ISSUED
FOR CONSTRUCTION**

Date: 05/14/2019
Project Number: 18023
Sheet Title: **MECHANICAL LEGEND
& SCHEDULES**

Sheet Number: **M-001**

HVAC SYMBOLS / ABBREVIATIONS LEGEND:

NEW WORK

- CW () CHILLED WATER(S-SUPPLY, R-RETURN)
- HW () HOT WATER(S-SUPPLY, R-RETURN)
- HC () HOT/CHILLED WATER(S-SUPPLY, R-RETURN)
- CD CONDENSATE DRAIN
- RISE
- DROP
- TEE - OUTLET UP
- TEE - OUTLET DOWN
- FLOW - IN DIRECTION OF ARROW
- BALL VALVE
- PUMP (INDICATE USE)
- ROOF VENTILATOR, INTAKE
- ROOF VENTILATOR, EXHAUST
- AIR OUTLET/ INLET SYMBOL
- THREE WAY VALVE
- VALVE
- AD ACCESS DOOR
- AS AIR SEPARATOR
- AV AIR VENT
- CD CONDENSATE DRAIN
- CFM CUBIC FEET PER MINUTE
- CLG CEILING
- CUH CABINET UNIT HEATER
- CWP CHILLED WATER PUMP
- EFX EXHAUST FAN
- EG EXHAUST GRILLE
- ET EXPANSION TANK
- FC FAN COIL
- FD FIRE DAMPER
- GPM GALLONS PER MINUTE

BALANCING VALVE

AIR SEPARATOR

THERMOSTAT

CAP

POINT OF REMOVAL

POINT OF CONNECTION

SUPPLY DIFFUSER (CEILING)

RETURN / EXHAUST GRILLE (CEILING)

DUCT SECTION, POSITIVE PRESSURE

DUCT SECTION, NEGATIVE PRESSURE

DIRECTION OF FLOW

DUCT SIZE

MBH () 1,000 BRITISH THERMAL UNITS (C-COOLING, H-HEATING)

MOD MOTOR OPERATED DAMPER

NC NORMALLY CLOSED

NO NORMALLY OPENED

P SYSTEM PUMP

PF PROPELLER FAN

RD RETURN DIFFUSER

RG RETURN GRILLE

SHWP SECONDARY HOT WATER PUMP

SD SUPPLY DIFFUSER

TC TEMPERATURE CONTROL

TG TRANSFER GRILLE

TYP TYPICAL

UH UNIT HEATER

VD VOLUME DAMPER

HWP HOT WATER PUMP

HWR HOT WATER RETURN

HWS HOT WATER SUPPLY

GENERAL NOTES:

- A. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE SIZE AND GENERAL ARRANGEMENT OF PIPING, DUCTWORK, EQUIPMENT ETC. EXACT LOCATIONS AND ROUTINGS SHALL BE DETERMINED IN THE FIELD BEFORE AND AS THE WORK PROGRESSES. CAREFULLY COORDINATE THE WORK OF THIS TRADE WITH ALL OTHER TRADES.
- B. DRAWING DO NOT INDICATE ALL OFFSETS, CHANGES IN ELEVATION ETC WHICH MAY BE REQUIRED BY ACTUAL FIELD CONDITIONS. THE CONTRACTOR IS TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO INSTALLATION AND MAKE SUCH CHANGES IN PIPING, DUCTWORK, EQUIPMENT LOCATIONS, ETC. AS NECESSARY TO ACCOMMODATE EXISTING CONDITIONS. COORDINATE ALL CHANGES WITH OTHER TRADES, AND ARCHITECT.
- C. ALL CUTTING AND PATCHING OF EXISTING BUILDING COMPONENTS REQUIRED TO ACCOMMODATE THE WORK OF THIS CONTRACT SHALL BE THE RESPONSIBILITY OF THIS TRADE. ALL PATCHING SHALL MATCH EXISTING COMPONENTS AND FINISHES. WORK SHALL BE PERFORMED BY PERSONNEL TRAINED AND REGULAR EMPLOYED FOR SUCH SERVICES.
- D. INSTALL ALL PIPING, DUCTWORK, EQUIPMENT, ETC. TO AVOID INTERFERENCE WITH THE OPERATION AND SERVICING OF ALL NEW AND EXISTING EQUIPMENT. IN GENERAL, DO NOT INSTALL ANYTHING ABOVE OR WITHIN 3 FT IN FRONT OF ELECTRICAL PANELS AND GEAR.
- E. FIRESTOP ALL PIPING PENETRATIONS THRU FLOORS AND WALLS. SEE DETAILS ON LEGEND, SCHEDULES, DETAIL SHEET AND SPECIFICATION DIVISION 7.
- F. THE WORK INCLUDED IN THIS CONTRACT ENCOMPASSES BOTH THE DRAWINGS AND SPECIFICATIONS. WORK INCLUDED ON THE DRAWINGS ONLY, OR IN THE SPECIFICATIONS ONLY, SHALL BE INCORPORATED AS IF INCLUDED IN BOTH SYSTEMS ARE INTENDED TO BE COMPLETE AND FULLY FUNCTIONING. IT IS NOT INTENDED TO SHOW EVERY ITEM OF WORK OR MINOR PIECE OF EQUIPMENT. THE CONTRACTOR SHALL PROVIDE SUCH COMPONENTS, ETC. AS NECESSARY OR REQUIRED FOR A FULLY FUNCTIONING SYSTEM, IN ACCORDANCE WITH THE BEST PROFESSIONAL PRACTICE OF THE TRADE.
- G. EACH PRIME CONTRACTOR IS RESPONSIBLE FOR PROVIDING THEIR OWN FLOOR PENETRATIONS. PRIOR TO MAKING ANY CONCRETE FLOOR SLAB PENETRATIONS EACH CONTRACTOR SHALL SCAN THE SLAB USING A "REBAR LOCATING DEVICE" TO LOCATE EXISTING REINFORCING STEEL, UTILITIES, AND OTHER EMBEDMENTS WITHIN OR BELOW THE SLAB. LOCATION OF ALL PENETRATIONS SHALL BE ADJUSTED TO AVOID DISTURBING OR CUTTING ANY EXISTING SLAB REINFORCING STEEL, UTILITIES, AND OTHER EMBEDMENTS WITHIN OR BELOW THE SLAB. PROVIDE SCAN RESULTS TO THE ARCHITECT/ENGINEER AND OTHER CONTRACTORS.
- H. CONTRACTOR MUST COORDINATE ALL MECHANICAL EQUIPMENT START-UP WITH OWNERS CONTROLS CONTRACTOR (U&S).

FAN COIL UNIT SCHEDULE - CHILLED WATER 42 °F E.W.T./HOT WATER 180°F E.W.T.

UNIT NO.	FC-1	FC-2	FC-3	FC-4	FC-5	FC-6	FC-7	FC-8	FC-9	FC-10	
LOCATION	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	
CFM	338 CFM	449 CFM	664 CFM	756 CFM	356 CFM	617 CFM	836 CFM	979 CFM	321 CFM	979 CFM	
TYPE	FLOOR MOUNTED VERTICAL CABINET	FLOOR MOUNTED VERTICAL CABINET	FLOOR MOUNTED VERTICAL CABINET	FLOOR MOUNTED VERTICAL CABINET	WALL CONCEALED VERTICAL CABINET	WALL CONCEALED VERTICAL CABINET	WALL CONCEALED VERTICAL CABINET	WALL CONCEALED VERTICAL CABINET	SEMI-RECESSED VERTICAL CABINET	FLOOR MOUNTED VERTICAL CABINET	
COOLING COIL	ENT. AIR °F (DB / WB) LVG. AIR °F (DB / WB) L.W.T °F TOTAL MBH GPM PRESS. DROP (FT.)	75 / 63 56.5 / 55.2 58°F 7.24 .9 .5	75 / 63 57.8 / 55.7 58°F 10.81 1.4 1.2	75 / 63 58.6 / 56 58°F 12.45 1.6 .7	75 / 63 55.7 / 55.4 58°F 17.27 2.3 1.40	75 / 63 57.3 / 55.7 58°F 7.24 .9 .5	75 / 63 57.4 / 55.9 58°F 14.38 1.8 2.1	75 / 63 52.9 / 52 58°F 24.75 3.5 3.8	75 / 63 52.4 / 51.5 58°F 29.37 4.8 7.1	75 / 63 56.5 / 55.2 58°F 7.24 .9 .5	75 / 63 52.4 / 51.5 58°F 29.37 4.8 7.1
HEATING COIL	ENT. AIR °F (DB / WB) LVG. AIR °F (DB / WB) L.W.T °F TOTAL MBH GPM PRESS. DROP (FT.)	70 110.2 160°F 14.85 1.0 2.6	70 107.4 160°F 18.28 1.2 4.5	70 127.3 160°F 37.48 1.7 3.4	70 128.0 160°F 44.09 2.3 5.7	70 110.2 160°F 14.85 1.0 2.6	70 112.0 160°F 23.75 1.7 9.1	70 122.7 160°F 47.12 2.0 5.2	70 119.9 160°F 49.27 2.0 2.6	70 110.2 160°F 14.85 1.0 2.6	70 119.9 160°F 49.27 2.0 2.6
MOTOR	MOP HORSEPOWER ELEC. (VOLTS / PH. / HZ) MCA	3.2 1/2 115 / 1 / 60 1.8	3.2 1/2 115 / 1 / 60 1.8	4.6 1/2 115 / 1 / 60 3.5	4.6 1/2 115 / 1 / 60 3.5	3.2 1/2 115 / 1 / 60 1.8	4.6 1/2 115 / 1 / 60 2.4	4.6 1/2 115 / 1 / 60 3.5	4.6 1/2 115 / 1 / 60 1.8	3.2 1/2 115 / 1 / 60 1.8	4.6 1/2 115 / 1 / 60 3.5
MANUFACTURER	PRICE	PRICE	PRICE	PRICE	PRICE	PRICE	PRICE	PRICE	PRICE	PRICE	
MODEL	FCVC104	FCVC106	FCVC110	FCVC110	FCVH104	FCVH108	FCVH112	FCVH112	FCVH104	FCVC112	
REMARKS											
NOTES:											

PUMP SCHEDULE

UNIT NO.	HWP-1.2	HWP-3.4	HWP-5.5A	HWP-6.6A	HWP-7	HWP-8	CWP-1.2	CWP-3.4	CWP-5	CWP-6	GWP-1.2	GWP-3.4
SYSTEM	FOR BOILERS 1,1A	MAIN HOT WATER LOOP	FIRST FLOOR FAN COIL UNITS	SECOND FLOOR FAN COIL UNITS	RTU-1 COIL PUMP	RTU-1 COIL PUMP	MAIN CHILLER PUMP	CHILLED WATER SYSTEM PUMPS	RTU-2 COIL PUMP	RTU-1 COIL PUMP	BOILER PUMPS FOR B-2,2A	GLYCOL SYSTEM PUMPS
SERVICE	BUILDING HEATING	BUILDING HEATING	1ST FLOOR HEATING	2ND FLOOR HEATING	HEATING COIL	HEATING COIL	CHILLED WATER	CHILLED WATER	COOLING COIL	COOLING COIL	GLYCOL WATER SYSTEM	GLYCOL SYSTEM PUMPS
LOCATION	NEW BOILER ROOM	NEW BOILER ROOM	BASEMENT	NEW BOILER ROOM	NEW BOILER ROOM	NEW BOILER ROOM	CHILLER ROOM	CHILLER ROOM	NEW BOILER ROOM	NEW BOILER ROOM	NEW BOILER ROOM	2ND FLOOR STORAGE
PUMP	GPM HEAD (FT.) STYLE	260 20 INLINE	260 60 INLINE	92 46 INLINE	32 50 INLINE	36 10 INLINE	152 30 INLINE	152 60 INLINE	21 10 INLINE	16 10 INLINE	40 40 INLINE	40 30 INLINE
CONNECTIONS	SUCTION DISCHARGE	3" 3"	4" 4"	3" 3"	2-1/2" 2"	2" 2"	4" 4"	4" 4"	2" 2"	1-1/2" 1-1/2"	2" 2"	2" 2"
MOTOR	MCA MOP ELEC. (VOLTS / PH. / HZ) MOTOR STARTER HORSEPOWER	2.75 A -- 115/1/60 YES --	11.0-8.80 A -- 480/3/60 YES 7-1/2	6.18 A -- 115/1/60 YES --	6.18 A -- 115/1/60 YES --	-- 197 W 115/1/60 YES --	6.1 A -- 460/3/60 YES 5-1/2	6.1 A -- 460/3/60 YES 5-1/2	-- 197 W 115/1/60 YES --	-- 197 W 115/1/60 YES --	7.5 A -- 200/1/60 YES 1-1/2"	7.5 A -- 200/1/60 YES 1-1/2"
PIPE VIBRATION ISOLATORS	SUCTION DISCHARGE											
MANUFACTURER	GRUNDFOS	GRUNDFOS	GRUNDFOS	GRUNDFOS	GRUNDFOS	GRUNDFOS	GRUNDFOS	GRUNDFOS	GRUNDFOS	GRUNDFOS	GRUNDFOS	GRUNDFOS
MODEL	MAGNA3 50-150 F	CRE-45-1-1 AN-F-A-E-HOQE	MAGNA3 65-150 F	MAGNA3 65-150 F	UPS 26-99 FC	UPS 26-99 FC	CRE 32-1 AN-G-A-E-HOQE	CRE 32-1 AN-G-A-E-HOQE	UPS 26-99 FC	UPS 26-99 FC	TPE 40-240/2	TPE 40-240/2
SERIES	97924285	96123410	97924679	97924679	52722512	52722512	96432920	96432920	52722512	52722512		
REMARKS	VARIABLE SPEED CONTROLLER	VARIABLE SPEED CONTROLLER	VARIABLE SPEED CONTROLLER	VARIABLE SPEED CONTROLLER	VARIABLE SPEED CONTROLLER	VARIABLE SPEED CONTROLLER	VARIABLE SPEED CONTROLLER	VARIABLE SPEED CONTROLLER	VARIABLE SPEED CONTROLLER	VARIABLE SPEED CONTROLLER	VARIABLE SPEED CONTROLLER	VARIABLE SPEED CONTROLLER
NOTES:												

COMPUTER ROOM AC UNIT SCHEDULE

UNIT NO.	AC-1
LOCATION	COMPUTER ROOM
TYPE	CONSOLE
INDOOR UNIT	CFM COOLING CAPACITY HEIGHT WIDTH LENGTH
DIMENSIONS	1320 33.5 MBH 32" 11-7/8" 64-1/8"
ELECTRICAL	VOLTS/PHASE KW
OPERATING WEIGHT	208 / 1 1
MAKE	WALL 365 LBS LIEBERT
MODEL	DME037E
NOTES:	PAIRED WITH COND-2. FOR THE CBP SERVER ROOM.

BOILER SCHEDULE

UNIT NO.	B-1,1A	B-2,2A
LOCATION	NEW BOILER ROOM	NEW BOILER ROOM
BOILER	INPUT MBH OUTPUT MBH EWT / LWT (°F) TYPE % EFFICIENCY	1250 399 1200 372 180/160 180/160 CONDENSING CONDENSING 96.2% 94.6%
BURNER	TYPE MAX INLET PRESSURE MBH INPUT GFH	GAS GAS 14" W.C. 14" W.C. 1250 399
BLOWER	TYPE ELEC. (V / PH. / HZ) MOTOR STARTER	
DIMENSION	HEIGHT WIDTH LENGTH	78" 30" 54"
CONNECTIONS	SUPPLY RETURN DRAIN FUEL CONN. COMBUSTION AIR	1-1/2" 1-1/2" 1-1/2" 1" 6"
ELECTRICAL	MCA F.L.A.	1.5 A 7 A
MAKE	LOCHINVAR	LOCHINVAR
MODEL	FB-1251	KB-400
REMARKS	FOR MAIN HOT WATER HEATING LOOP	FOR GLYCOL COIL FEED LOOP
NOTES:	PROVIDE AN EXPANSION TANK/WATTS ETSX-40, AND A AIR AND DIRT ELIMINATOR SPIROTHERM VDR150 WITH UNIT	

ROOF TOP UNIT SCHEDULE

UNIT NO.	RTU-1
SERVICE	VENTILATION
LOCATION	1ST FLOOR ROOF
TYPE	ENERGY RECOVERY
AIR PERFORMANCE	SUPPLY CFM EXHAUST CFM MAX. O.A. CFM E.S.P. (IN. W.C.) (SUPPLY/EXHAUST) TOTAL S.P. (IN. W.C.) (SUPPLY / EXHAUST) OPERATING POWER (SUPPLY/EXHAUST) MOTOR SIZE (SUPPLY/EXHAUST)
ELECTRICAL/MOTOR	VOLTS / PHASE / HERTZ MCA (A) MOP (A) SUPPLY MOTOR RPM EXHAUST MOTOR RPM
COOLING COIL	COOLING TYPE ENTERING DRY-BULB/WET-BULB (°F) LEAVING DRY-BULB/WET-BULB (°F) COIL CAPACITY (MBH) E.W.T./L.A.T. (°F) COIL GPM COIL DEPTH COIL FPD (FT. WG.) TOTAL CAPACITY (MBH) FACE VELOCITY ENTERING DRY-BULB (°F) LEAVING DRY-BULB (°F) FLUID TYPE E.W.T. / L.W.T. (°F) FLUID FLOW RATE (GPM) ROWS FIN SPACING FIN TYPE
HEATING COIL	COOLING TYPE ENTERING DRY-BULB/WET-BULB (°F) LEAVING DRY-BULB/WET-BULB (°F) COIL CAPACITY (MBH) E.W.T./L.A.T. (°F) COIL GPM COIL DEPTH COIL FPD (FT. WG.) TOTAL CAPACITY (MBH) FACE VELOCITY ENTERING DRY-BULB (°F) LEAVING DRY-BULB (°F) FLUID TYPE E.W.T. / L.W.T. (°F) FLUID FLOW RATE (GPM) ROWS FIN SPACING FIN TYPE
WEIGHT	TITUS 250-AA 350FL
MANUFACTURER	TITUS
MODEL	250-AA 350FL
REMARKS	
NOTES:	PROVIDE WEATHERHOOD, PROVIDE WITH 120V SERVICE RECEPTACLES AND FACTORY DISCONNECTS

REGISTER / DIFFUSER SCHEDULE

LETTER INDICATION	DIF-1	ER-1
SERVICE	SUPPLY AIR	EXHAUST
TYPE	DUCT MOUNTED	CEILING MOUNTED
FACE	4-WAY	FRONT BLADES
DAMPER	NO	NO
MATERIAL	ALUMINUM	ALUMINUM
MOUNTING	DUCT WALL CEILING FLOOR	X -- -- X
CONSTRUCTION	FRAME CORE FINISH	ALUMINUM ALUMINUM WHITE
PANEL SIZE		
MAKE	TITUS	TITUS
MODEL	250-AA	350FL
ACCESSORIES		
REMARKS		
NOTES:		

UNIT HEATER SCHEDULE

UNIT NO.	UH-1
LOCATION	NEW ELECTRICAL ROOM
TYPE	ELECTRIC
FAN	CFM RPM HP MOTOR CURRENT
DIMENSIONS	HEIGHT WIDTH LENGTH
ELECTRICAL	WATTS MBH
MOUNTING	FLUSH WITH WALL
SHIPPING WEIGHT	115 LBS
FLOW CONFIGURATION	C1 - FRONT IN/TOP OUT
MAKE	REZTOR
MODEL	
REMARKS:	EMC
NOTES:	MANUFACTURERS INDICATED ARE BASIS OF DESIGN. CONTRACTOR MAY SUBMIT EQUAL FOR APPROVAL.

INDOOR SPLIT SYSTEM SCHEDULE

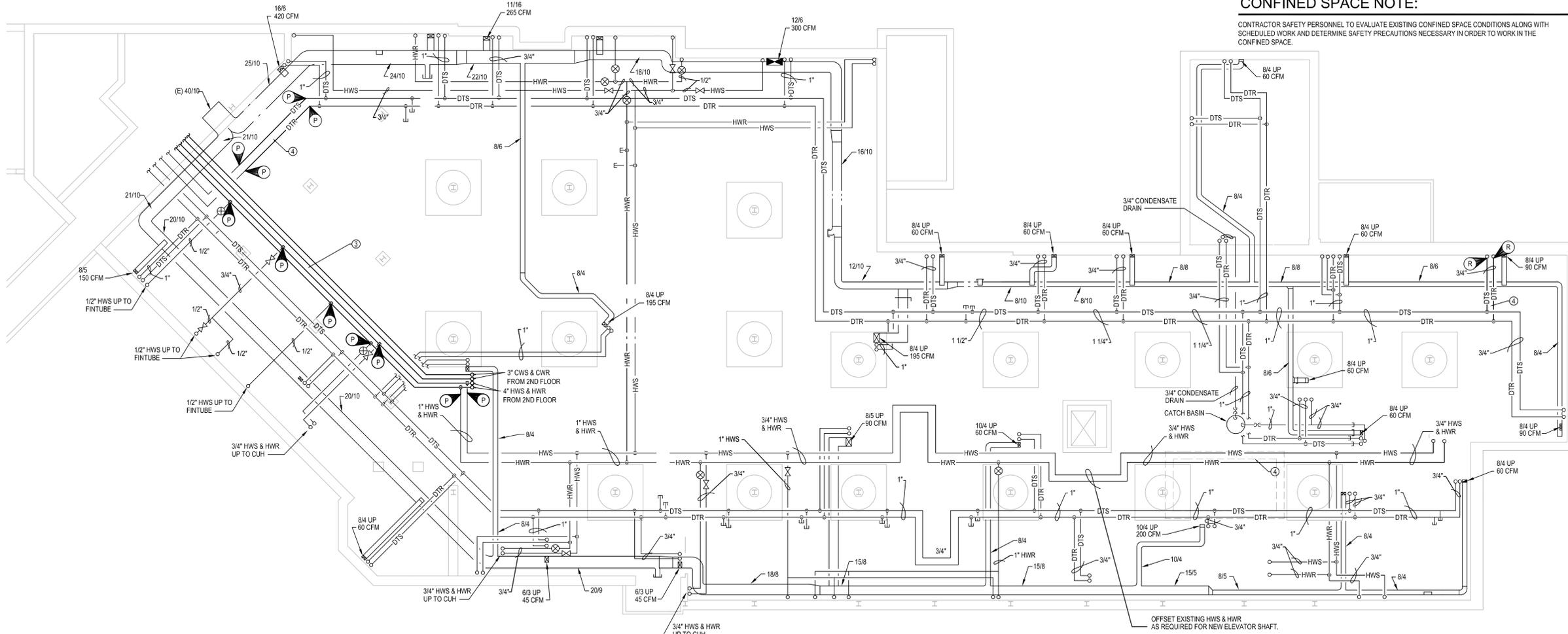
UNIT NO.	FCU-1	FCU-2	FCU-3
NOMINAL COOLING CAPACITY (BTU/H)	15,000	17,000	60,000
NOMINAL HEATING CAPACITY (BTU/H)	18,000	20,300	0
ELECTRICAL	VOLTS / PHASE / HERTZ MCA BLOWER MOTOR (ECM) BLOWER MOTOR OUTPUT	208 / 1 / 60 1 A 0.28 F.L.A. 20 W	208 / 1 / 60 1 A 0.67 F.L.A. 30 W
FIELD DRAINPIPE SIZE	1-1/4"	5/8"	3/4"
AIRFLOW RATE	INDOOR COOLING DRY INDOOR HEATING WET INDOOR HEATING DRY	320 CFM 290 CFM 320 CFM	304 CFM 261 CFM 317 CFM
REFRIGERANT PIPING	LIQUID (INCHES) GAS (INCHES) TYPE	1/4" 3/8" R410A	1/2" 1-1/8" R-410A
NET WEIGHT	LBS(KG)	36 LBS 29 LBS	498 LBS
DIMENSIONS (INCHES)	HEIGHT X WIDTH X DEPTH	22-7/16" X 22-7/16" X 9-7/16"	12-11/16" X 38-7/16" X 9-3/16"
MANUFACTURER	MITSUBISHI	MITSUBISHI	LIEBERT
MODEL	SLZ-KA15NA	MSZ-FH18NA	MT060HE1A0A9H
NOTES:	HYPER HEAT UNIT	HYPER HEAT UNIT	PROVIDE UNIT DISCONNECT, SMOKE SENSOR, HIGH TEMP SENSOR AND FILTER CLOG SWITCH

EXHAUST FAN SCHEDULE

UNIT NO.	EF-1	EF-2
LOCATION	2ND FLOOR ROOF	1ST FLOOR ELECTRICAL ROOM
SERVICE	CHILLER ROOM	ELECTRICAL ROOM
FAN	CFM SP RPM SONES DRIVE	225 .125 1300 3.3 DIRECT
MATERIAL	HOUSING MOTOR	ALUMINUM ALUMINUM
ACCESSORIES	BIRDSCREEN BDD	YES YES
WEIGHT (LBS.)	15 LBS	
MAKE	GREENHECK	GREENHECK
MODEL	G-70	SE1-10-428-P
REMARKS		PROVIDE WALL HOUSING
NOTES:		

CONDENSER SCHEDULE

UNIT NO.	COND-1	COND-2	COND-3	COND-4
NOMINAL COOLING CAPACITY (BTU/H)	60,000 BTU/H	33,900 BTU/H	28,400 BTU/H	21,000 BTU/H
NOMINAL HEATING CAPACITY (BTU/H)	0 BTU/H	28,600 BTU/H	30,000 BTU/H	30,000 BTU/H
ELECTRICAL	VOLTS / PHASE / HERTZ MCA F.L.A. RECOMMENDED BREAKER SIZE	460 / 3 / 60 -- 12.6 A --	460 / 3 / 60 -- 7.1 A --	208 / 1 / 60 22.1 A -- 25 A
REFRIGERANT PIPING	LIQUID (INCHES) GAS (INCHES) MAX TOTAL PIPE HEIGHT DIFFERENCE MAX TOTAL REFRIGERANT PIPE LENGTH TYPE			



GENERAL MECHANICAL NOTES:

- COORDINATE THE INSTALL OF DUCTWORK AND PIPING WITH ALL TRADES. ENSURE THAT WORK SHOULD BE DONE IN THE RIGHT ORDER.
- CRAWL SPACE IS TIGHT. ENSURE PROPER TRAINING OF PERSONAL THAT WILL CONDUCT WORK IN SPACE.
- PROVIDE VOLUME DAMPERS ON ALL DUCT BRANCHES.
- BALANCE DUAL TEMP SYSTEM TO COOLING UNIT GPMS.

MECHANICAL DRAWING NOTES:

- CONNECT INTO EXISTING SUPPLY DUCT IN OLD MECHANICAL ROOM. SUPPLY DUCT SERVES FLOOR IN CRAWL SPACE. DUCT IN CRAWL SPACE TO REMAIN. REFER TO BASEMENT PLAN FOR MORE INFORMATION.
- 2' LONG BY 1" HIGH LOUVER WITH MOTOR OPERATED DAMPER. CONTROL DAMPER OFF OF EXHAUST FAN CONTROL. WHEN EXHAUST FAN TURNS ON, THE DAMPER SHALL OPEN.
- PROPELLER TYPE EXHAUST FAN TO BE INSTALLED HIGH ON WALL. FAN TO BE ON TIME SWITCH. FAN TO ALSO CONTROL LOUVER DAMPER.
- CABINET UNIT HEATER TO BE INSTALLED 8" OFF OF FINISHED FLOOR. CONTROL HEATER ON TEMP SENSOR IN THE ROOM. WHEN THE ROOM GETS BELOW 65°F, HEATER TO TURN ON.
- TRANSFER GRILLE IN WALL. GRILLE TO BE 9" L X 6" H. GRILL TO HAVE AN INTEGRAL FIRE DAMPER FOR THE RATED WALL.
- RETURN DUCT FROM RTU-1 ON SECOND FLOOR ROOF. RETURN DUCTWORK TO RUN IN 1ST FLOOR CEILING. COORDINATE INSTALL WITH GENERAL CONTRACTOR AS THEY WILL NEED TO REMOVE CEILINGS. ENSURE THAT BRIDGE PERSONAL ARE AWARE OF WORK SCHEDULE.
- NEW FAN COIL UNIT. COORDINATE WITH GC TO PATCH WALL AS NECESSARY. PIPING SIZES TO FEED UNIT WILL NOT CHANGE. PIPING IS FED FROM BASEMENT BELOW. MODIFY PIPING FROM BELOW AS REQUIRED. NEW 2 WAY CONTROL VALVE PIPING PACKAGES TO BE PROVIDED WITH THE UNITS.
- MODIFY FIN TUBE AS REQUIRED FOR THE NEW FAN COIL UNIT TO FIT.



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Client: BUFFALO & FORT ERIE PUBLIC BRIDGE AUTHORITY

Project: R.F. WILLSON MECH. AND ELEC. UPGRADES

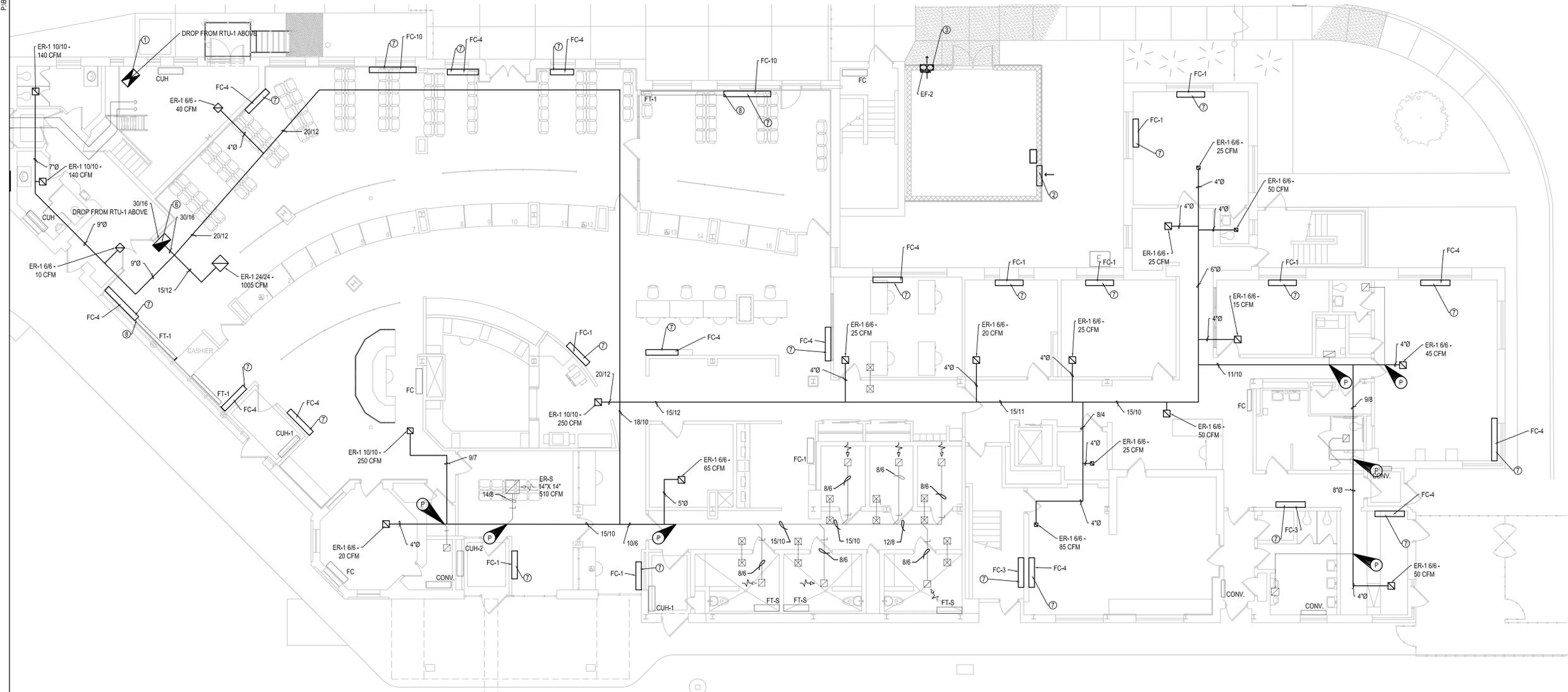
Project Address: 1 PEACE BRIDGE PLAZA, BUFFALO, NEW YORK 14213

Drawing History: # Date Description

Project Status: ISSUED FOR CONSTRUCTION

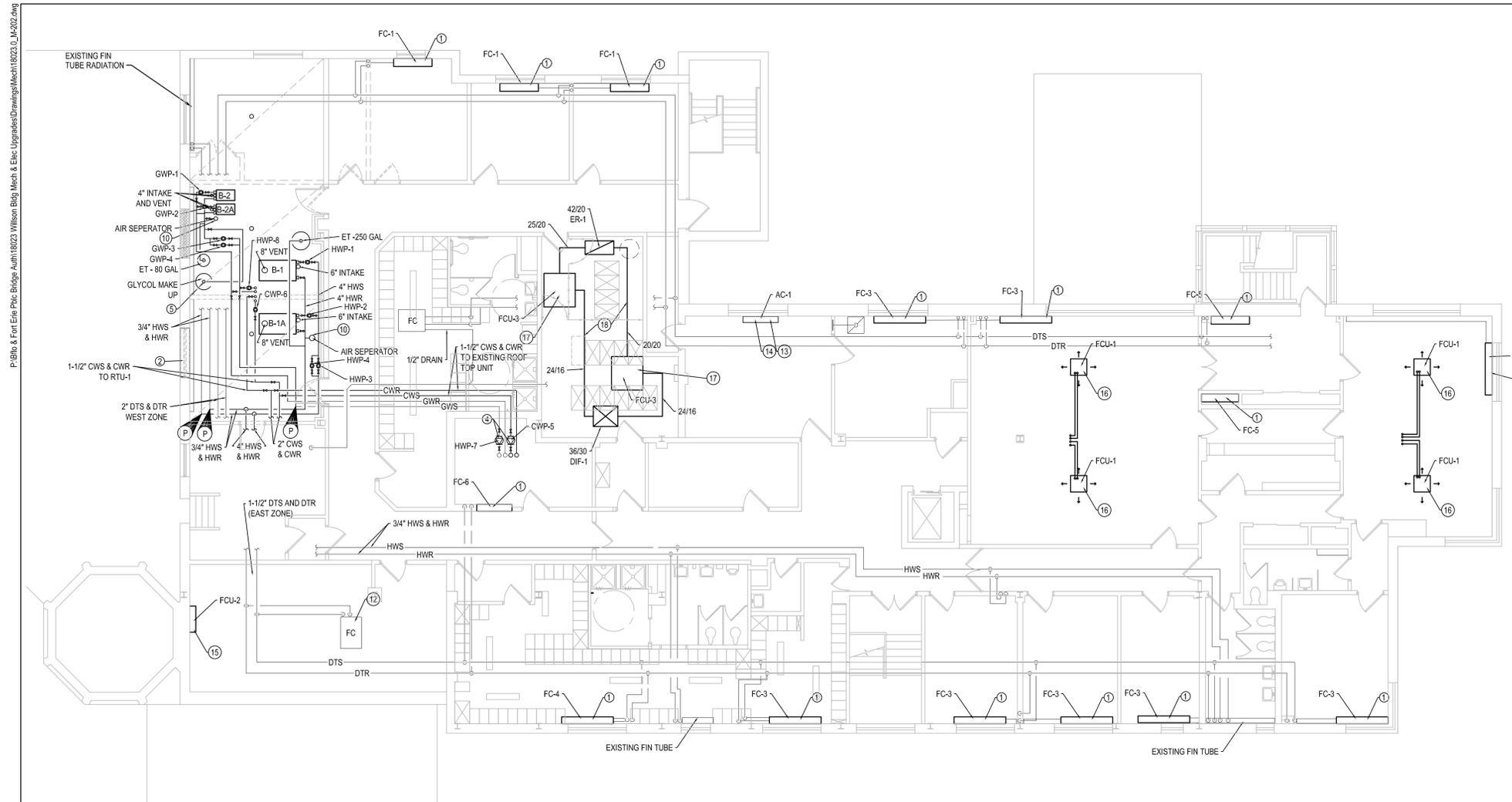
Date: 05/14/2019
Project Number: 18023
Sheet Title: MECHANICAL 1ST FLOOR PLAN

Sheet Number: M-201

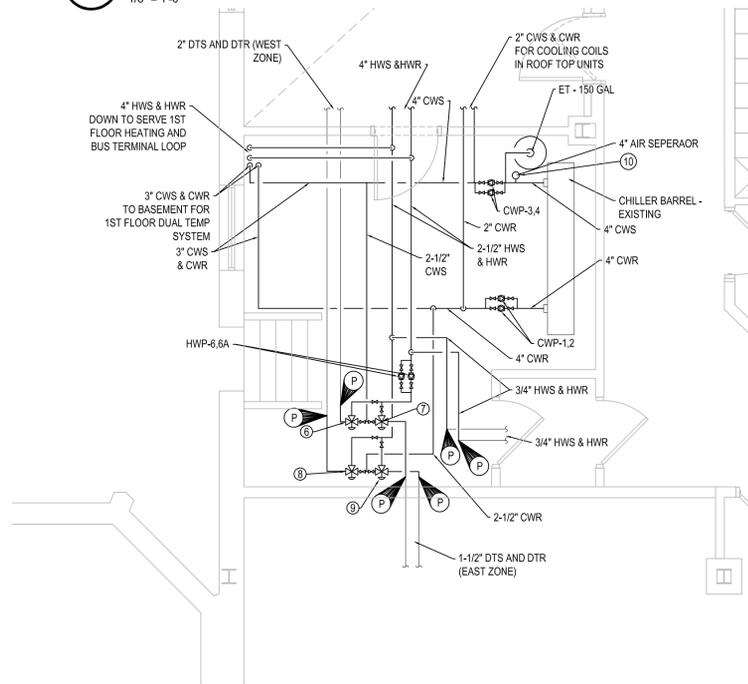


1 MECHANICAL FIRST FLOOR PLAN
1/8" = 1'-0"

WILLSON BUILDING



1 MECHANICAL SECOND FLOOR PLAN
1/8" = 1'-0"



2 MECHANICAL SECOND FLOOR CHILLER ROOM PLAN
1/4" = 1'-0"

GENERAL MECHANICAL NOTES:

- COORDINATE THE INSTALL OF DUCTWORK AND PIPING WITH ALL TRADES. ENSURE THAT WORK SHOULD BE DONE IN THE RIGHT ORDER.
- CRAWL SPACE IS TIGHT. ENSURE PROPER TRAINING OF PERSONAL THAT WILL CONDUCT WORK IN SPACE.
- BOILER FLUES AND VENTS TO BE COORDINATED WITH ROOF PLAN. RUN VENTS IN CEILING AS REQUIRED TO GET TO SHOWN LOCATIONS ON THE ROOF PLAN.
- SECOND FLOOR DUCTWORK IS ALL EXISTING UNLESS OTHERWISE NOTED.

MECHANICAL DRAWING NOTES:

- NEW FAN COIL UNIT. REFER TO SCHEDULES PAGE FOR INFORMATION. NEW 2-WAY CONTROL VALVE PIPING PACKAGES TO BE PROVIDED WITH THE UNITS. RECONNECT EXISTING PIPING TO THE PIPING PACKAGES AND FEED NEW FAN COIL UNITS. MODIFY PIPE CHASES AS REQUIRED FOR THE NEW SIZE OF THE UNIT.
- 5x6 LOUVER IN WINDOW OPENING. LOUVER TO BE MODULATING OFF OF MOTOR OPERATED DAMPER. DAMPER CONTROLLED BY TEMPERATURE SENSOR IN ROOM. TO OPEN WHEN ROOM GETS ABOVE 75°F.
- 8/8 DUCT FROM EXHAUST FAN 1 ABOVE. LEAVE OPEN ENDED AT CEILING. PROVIDE BIRDINJECT SCREEN ON END OF DUCT.
- COIL PUMP TO BE REPLACED. REFER TO SCHEDULES PAGE FOR PUMP INFORMATION.
- GLYCOL MAKE UP PACKAGE TO BE EQUAL TO WESSELS - GMP-13050. CONTRACTOR MAY SUBMIT EQUAL FOR APPROVAL.
- FEED 3-WAY VALVE WITH 2" HWS AND CWS. TO FEED 2" DUAL TEMP SYSTEM - SECOND FLOOR WEST ZONE.
- FEED 3-WAY VALVE WITH 1-1/2" HWS AND CWS. TO FEED 1-1/2" DUAL TEMP SYSTEM - SECOND FLOOR EAST ZONE.
- FEED 3-WAY VALVE WITH 2" HWR AND CWR. TO FEED 2" DUAL TEMP SYSTEM - SECOND FLOOR WEST ZONE.
- FEED 3-WAY VALVE WITH 1-1/2" HWR AND CWR. TO FEED 1-1/2" DUAL TEMP SYSTEM - SECOND FLOOR EAST ZONE.
- AIR SEPARATOR TO BE PROVIDED WITH AN INTEGRAL AIR/DIRT ELIMINATOR.
- 3816 SUPPLY AND RETURN DUCTWORK FROM RTU-2 ABOVE. COORDINATE INSTALL WITH STRUCTURAL CONTRACTOR AS THESE DUCTS REQUIRE ROOF PENETRATIONS. DUCTWORK TO BE HUNG HIGH TO CEILING.
- FAN COIL UNIT IS EXISTING TO REMAIN. SPLIT SYSTEM UNIT TO BE ADDED TO THE ROOM. MODIFY CONTROL OF THE FAN COIL UNIT TO TURN ON FOR AUXILIARY HEAT. TURN UNIT ON AND RUN WHEN OUTSIDE TEMP IS UNDER 0°F.
- PROVIDE A CONDENSATE PUMP FOR THE UNIT. PUMP TO CONDENSATE LINE FEEDING THE SPLIT SYSTEMS IN THE SPACE. THE EXISTING CONDENSATE LINE IS IN THE CEILING SPACE.
- COORDINATE WALL PATCHING WITH THE GENERAL CONTRACTOR. KEEP AIR INTAKE LOUVER THROUGH THE EXTERIOR WALL FOR NEW UNIT. REFRIGERANT PIPING FROM ROOF. HIDE PIPING AS REQUIRED PER OWNER.
- WALL HUNG, INDOOR FAN COIL UNIT FOR SPLIT SYSTEM. INSTALL ABOVE THE MIRROR ON THE WALL. CONDENSATE PUMP TO BE PROVIDED TO GET CONDENSATE TO CHILLER ROOM. COORDINATE INSTALL WITH ALL CONTRACTORS.
- VRF CEILING CASSETTE. 1 CONTROLLER PER ROOM TO CONTROL BOTH INDOOR UNITS. CONDENSATE PUMP WILL NEED TO BE PROVIDED FOR EACH UNIT. RUN CONDENSATE TO THE COMPUTER ROOM AND CONNECT INTO THE MAIN LINE THERE. COORDINATE NEEDED CEILING REMOVAL WITH ALL TRADES.
- SERVER ROOM COOLING UNIT. HANG UNIT FROM DECK ABOVE. HANG UNIT ABOVE COOLING RACKS. UNITS TO HAVE COMMON SUPPLY DUCTING WITH A SINGLE THERMOSTAT CONTROL. PROVIDE A CONDENSATE PUMP WITH EACH UNIT, AND HANG FROM DECK. RUN CONDENSATE TO PIPE LEFT IN CEILING SPACE. REFRIGERANT PIPING IS FED FROM ROOF ABOVE.
- HANG DUCTWORK TIGHT TO CEILING. CUT HOLES IN CAGE AS NEEDED FOR INSTALL.



ARCHITECTS / ENGINEERS

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TrautmanAssociates.com

Consultants:

Signature & Seal:

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Client: BUFFALO & FORT ERIE PUBLIC BRIDGE AUTHORITY

Project: R.F. WILLSON MECH. AND ELEC. UPGRADES

Project Address: 1 PEACE BRIDGE PLAZA, BUFFALO, NEW YORK 14213

Drawing History: # Date Description

Project Status: ISSUED FOR CONSTRUCTION

Date: 05/14/2019
Project Number: 18023
Sheet Title: MECHANICAL 2ND FLOOR PLANS

Sheet Number: M-202

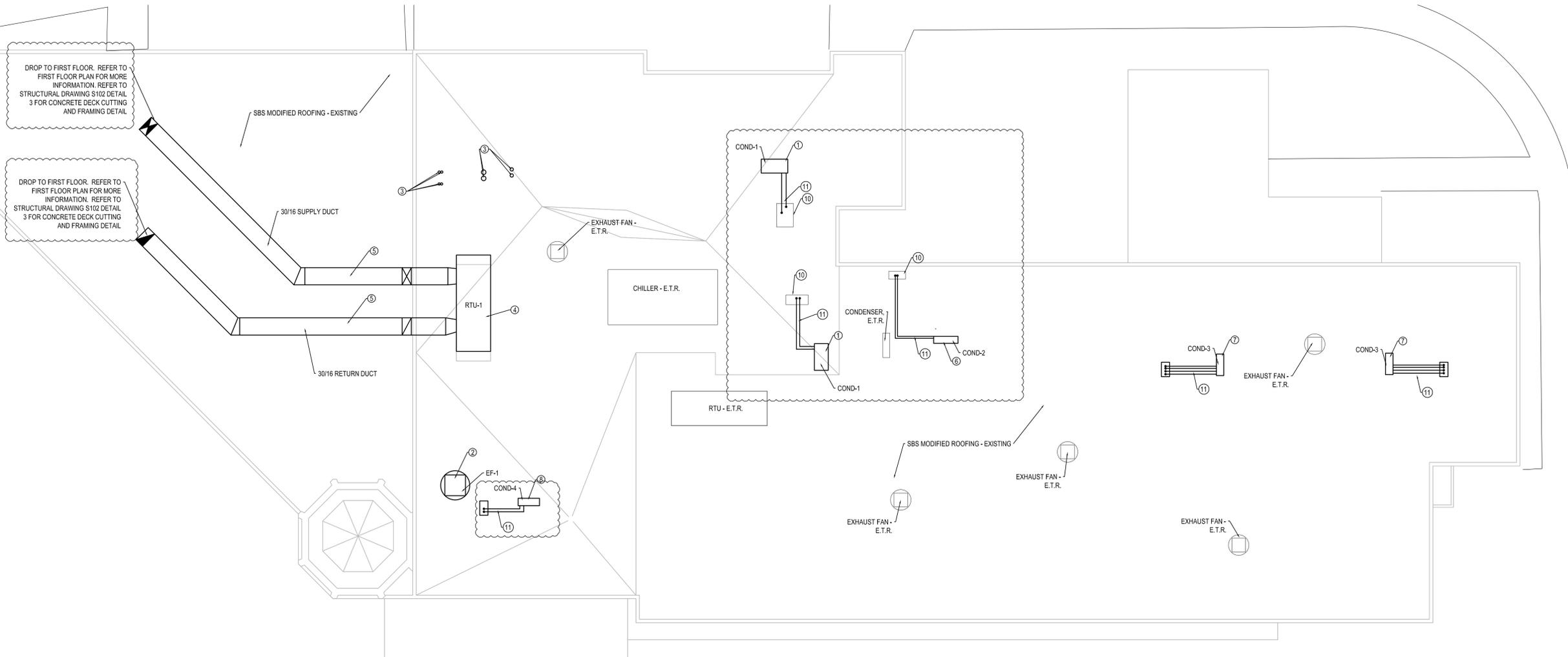


GENERAL MECHANICAL NOTES:

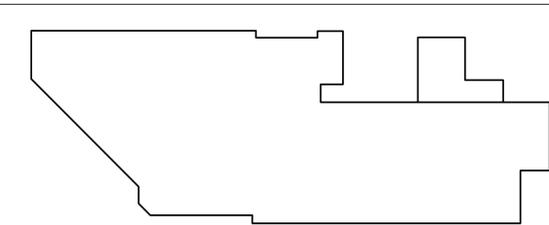
1. ALL COMMON AREA DUCTWORK SHALL HAVE A DIFFUSER OR GRILLE WITH AN INTEGRATED FIRE DAMPER.
2. ALL EXHAUST REGISTERS THAT ARE NOT MARKED ARE TO BE ER-1, SIZE 6"x6" AND 20 CFM.
3. ALL SOUTH WING DUCTWORK TO BE ABOVE CEILING UNLESS OTHERWISE NOTED. REFER TO NOTE 10 FOR DROPS TO EXPOSED DUCTWORK.

MECHANICAL DRAWING NOTES: #

1. REPLACEMENT CONDENSERS FOR THE SERVER ROOM HVAC UNITS. PROVIDE CONDENSER SUPPORT RAILS AS PER THE SPEC. THE RAILS ARE TO MEET THE SEISMIC REQUIREMENTS. COORDINATE INSTALL OF RAILS, PIPING AND UNIT WITH ALL TRADES - RAIL SUPPORT DETAIL ON DRAWING A-401.
2. PROVIDE EXHAUST FAN FOR CHILLER ROOM. ROOF CURB TO BE PROVIDED WITH UNIT, FLASHING TO BE DONE BY C CONTRACTOR. REFER TO STRUCTURAL DRAWING S102 FOR TYPICAL REINFORCEMENT AT OPENING AT METAL ROOF DECK.
3. FLASH INTAKES FROM BOILERS BELOW. COORDINATE LOCATIONS WITH C CONTRACTOR. C CONTRACTOR TO FLASH AROUND THE PENETRATIONS. REFER TO A-402 FOR HOT STACK ROOF DETAIL.
4. ROOF TOP UNIT TO SERVE 1ST FLOOR SUPPLY AND RETURN. REFER TO STRUCTURAL DRAWINGS FOR EXACT LOCATION. DUCTWORK TO RUN ON THE ROOF TO LOCATION SHOWN. 18" HIGH CURB TO BE PROVIDED WITH UNIT. REFER TO A-402 FOR FLASHING DETAIL.
5. EXPOSED DUCTWORK ON ROOF TO BE EQUAL TO PRODUCT THERMOCOAT. REFER TO DUCTWORK SUPPORT DETAIL ON PAGE A-402. INSTALL SUPPORTS PER SIMACNA REQUIREMENTS.
6. CONDENSER TO SERVE THE COMPUTER ROOM COOLING. PROVIDE CONDENSER SUPPORT RAILS AS PER THE SPEC. THE RAILS ARE TO MEET THE SEISMIC REQUIREMENTS. COORDINATE INSTALL OF RAILS, PIPING AND UNIT WITH ALL TRADES.
7. SPLIT SYSTEM TO SERVE MEETING ROOM ON THE SECOND FLOOR BELOW. PROVIDE CONDENSER SUPPORT RAILS FOR EACH UNIT, FOLLOW THE SPEC. COORDINATE INSTALL WILL ALL TRADES.
8. SPLIT SYSTEM TO BE PROVIDED FOR THE
9. PIPE PORTAL TO BE PROVIDED FOR REFRIGERANT PIPING AND ELECTRICAL. REFER TO PAGE A-401 FOR PIPE PORTAL DETAIL. SEAL REFRIGERANT PIPING TO PORTAL FLASHING. ENSURE NO LEAKS.
10. REUSE THE EXISTING PIPE PORTAL FOR COMPUTER ROOM SYSTEM. SEAL PIPING THROUGH PORTAL AND ENSURE THAT THERE ARE NO LEAKS THROUGH.
11. PROVIDE PIPE SUPPORTS AS REQUIRED. PIPE SUPPORT TO BE SECURED TO THE ROOF AND IS TO KEEP PIPING IN PLACE FROM THE UNIT TO THE PORTAL. INSTALL PER SPEC.



1 MECHANICAL ROOF PLAN
1/8" = 1'-0"



WILLSON BUILDING

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Consultants:

Signature & Seal:

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Client: BUFFALO & FORT ERIE PUBLIC BRIDGE AUTHORITY
Project: R.F. WILLSON MECH. AND ELEC. UPGRADES

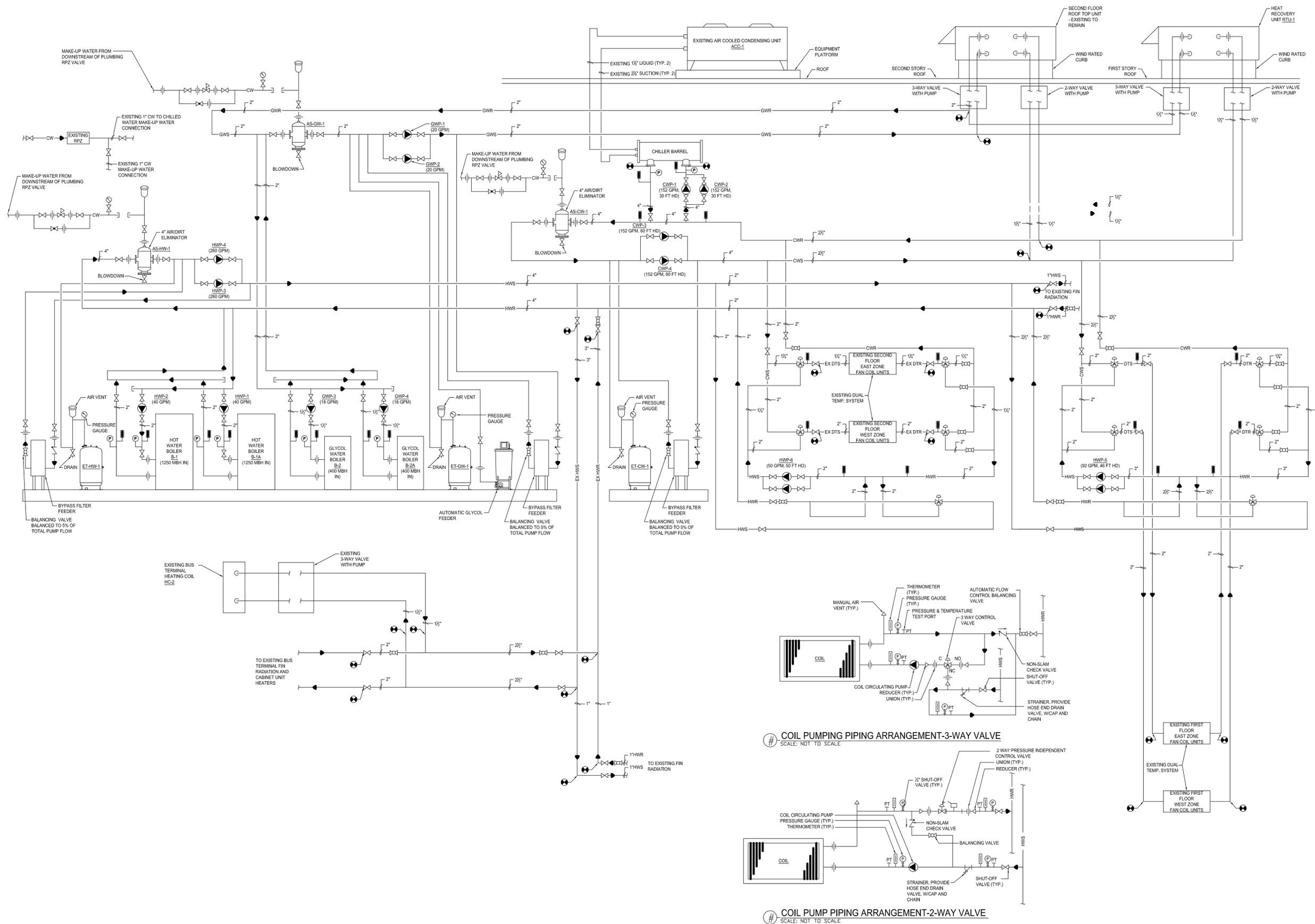
Project Address: 1 PEACE BRIDGE PLAZA, BUFFALO, NEW YORK 14213

Drawing History:	#	Date	Description

Project Status: ISSUED FOR CONSTRUCTION

Date: 05/14/2019
Project Number: 18023
Sheet Title: MECHANICAL ROOF PLAN

Sheet Number: M-203



1 HYDRONIC SYSTEM SCHEMATIC
NTS



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Consultants:

Signature & Seal:

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Client: BUFFALO & FORT ERIE PUBLIC BRIDGE AUTHORITY

Project: R.F. WILLSON MECH. AND ELEC. UPGRADES

Project Address: 1 PEACE BRIDGE PLAZA, BUFFALO, NEW YORK 14213

Drawing History: # Date Description

Project Status: ISSUED FOR CONSTRUCTION

Date: 05/14/2019
Project Number: 18023
Sheet Title: MECHANICAL HYDRONIC SYSTEM SCHEMATIC

Sheet Number: M-300

RFP for Mechanical Design Services

EXHIBIT A

AUTHORITY / CONSULTANT AGREEMENT

THIS AGREEMENT made this ___ day of _____, 20__ by and between the **Buffalo and Fort Erie Public Bridge Authority**, hereinafter called the AUTHORITY, an international compact entity created pursuant to a compact entered into by the State of New York, with the consent of the United States Congress, and by the Government of Canada and _____ hereinafter called the CONSULTANT.

WHEREAS the AUTHORITY desires the CONSULTANT to perform _____ services in connection with the _____ project and;

NOW THEREFORE this Agreement witnesseth that for and in consideration of the mutual covenants contained therein, in pursuance of the provisions of all applicable Federal, Provincial and State statutes together with attachments thereto and supplements thereto, the CONSULTANT and the AUTHORITY agree as follows:

SECTION I: CONTRACTING SERVICES

The CONSULTANT for and in consideration of payments hereinafter specified and agreed to by the AUTHORITY shall perform professional services according to Attachment No. 1, General Scope of Services, appended hereto and made a part hereof.

SECTION II: SERVICES TO BE PERFORMED BY THE AUTHORITY

The AUTHORITY shall provide assistance to the CONSULTANT in progressing in an orderly manner the work set forth herein, as follows:

1. Cooperation in providing access and time periods to enable technical personnel to conduct field investigations in connection with contract implementation.
2. Traffic protection while working on AUTHORITY property.

SECTION III: TIME OF COMPLETION

Upon receipt of an executed contract from the AUTHORITY, the CONSULTANT shall complete all services not later than _____, unless amended by the AUTHORITY in writing.

SECTION IV: COMPENSATION

For contracting services described herein, the AUTHORITY shall pay the CONSULTANT in accordance with the Rates for Professional Fees (Attachment No. 2).

Fees for the above items shall not be exceeded without the prior written approval of the AUTHORITY.

Interim payments for services shall be billed at monthly intervals based on percentage of completion for Lump Sum tasks and actual hours times the hourly rate for hours tasks (where applicable). Format for invoices will be a joint effort with the CONSULTANT and AUTHORITY. The AUTHORITY will review invoices within three (3) working days of receipt. If invoices are found to be correct, in good order and in the proper format, CONSULTANT will be paid within thirty (30) calendar days. In the event an invoice is disputed, the CONSULTANT and AUTHORITY will work to resolve the dispute. If there are portions

of the invoice not in dispute, they will be paid within thirty (30) days after review. Disputed portions will be paid within thirty (30) days of resolution. The CONSULTANT shall have no claim for interest on any disputed amounts that require more than thirty (30) days to resolve. The CONSULTANT agrees to pay all sub-consultants within thirty (30) days of receipt of payment by AUTHORITY.

The CONSULTANT shall not begin work on any items listed in the Attachments without the prior written approval of the AUTHORITY.

SECTION V: TERMINATION OF AGREEMENT

The AUTHORITY may terminate this Agreement upon thirty (30) calendar days written notice upon failure of the CONSULTANT to perform duties specified herein or to comply with the terms hereof or upon abandonment or postponement of the project.

The CONSULTANT may terminate this Agreement upon thirty (30) calendar days written notice upon failure of the AUTHORITY to make payment to the CONSULTANT as herein provided.

SECTION VI: SUBCONTRACT

It is further agreed that the CONSULTANT shall not assign this Agreement or any part thereof, nor any right to any monies to be paid the CONSULTANT hereunder; nor shall any part of the work to be done under the Agreement be sublet, without written consent of the AUTHORITY.

SECTION VII: REGULATIONS, CODES, PERMITS AND PROFESSIONAL LICENSURE

The CONSULTANT agrees to comply with all Federal, State, Regional and Local laws and regulations applicable to the work to be done under this Agreement. Any licenses or permits necessary for the performance of the professional services required under this Agreement shall be obtained by the CONSULTANT. The CONSULTANT shall secure Workmen's Compensation for his employees as required by law.

The CONSULTANT warrants that it and all sub-consultants are licensed to practice their respective professional disciplines in the State of New York.

SECTION VIII: INDEPENDENT CONTRACTOR

The CONSULTANT shall be deemed an independent contractor for all purposes of this Agreement and is not authorized to incur expenses or create any liability or indebtedness on behalf of the AUTHORITY.

SECTION IX: WORK PRODUCT OWNERSHIP

All original detailed survey information, survey notes (copies), data, calculations, drawings, reports, supervision records, and similar "work products" made hereunder shall be and remain the property of the AUTHORITY.

SECTION X: ADDITIONAL ASSIGNMENTS

In addition to the scope defined in this Agreement it is the AUTHORITY's intent to utilize the CONSULTANT for additional assignments to be determined by the AUTHORITY throughout the term of this Agreement.

The AUTHORITY and CONSULTANT will negotiate compensation for each additional assignment. Once agreed upon the AUTHORITY and the CONSULTANT shall execute a Supplemental Agreement describing the additional work and providing for the compensation to be paid therefore.

SECTION XI: EXTRA WORK

No extra work beyond the scope of this Agreement shall be performed by the CONSULTANT unless the AUTHORITY, IN WRITING, specifically directs such work to be performed. In the event such extra work is authorized, the AUTHORITY and the CONSULTANT shall execute a Supplemental Agreement describing the extra work and providing for the compensation to be paid therefore. Upon a written request by the AUTHORITY, the CONSULTANT will continue working during negotiations for said Supplemental Agreement.

SECTION XII: DISPUTES

All questions or disputes respecting any matter pertaining to this Agreement or arising from this Agreement or any part hereof or any breach of said Agreement shall be decided as follows:

(a) If the dispute or matter concerns an amount in controversy (or an alleged amount in controversy) having a value, in the aggregate, of \$75,000 or more, the venue for such dispute shall be the United States District Court for the Western District of New York.

(b) If the dispute or matter concerns an amount in controversy (or an alleged amount in controversy) whose value, in the aggregate, is less than \$75,000, the exclusive remedy of the parties shall be to submit the matter to binding arbitration in Buffalo, New York in accordance with the then current Commercial Arbitration Rules of the American Arbitration Association. Notice of a demand for arbitration hereunder by any party hereto shall be given in writing to all other parties hereto which or who shall be involved in any such controversy, claim or cause of action and to the American Arbitration Association. Within five (5) days after any such demand for arbitration shall have been given by any party hereto, the AUTHORITY shall select one arbitrator, and CONSULTANT shall select one arbitrator. The two arbitrators so selected shall select a third arbitrator within fifteen (15) days after their selection and such third arbitrator shall have not less than ten (10) years' experience in the practice of commercial/business law. The forgoing three arbitrators shall constitute the panel of arbitrators that shall hear and decide the matter (the "Panel"). The Panel shall be authorized to compel discovery prior to any arbitration proceeding. The parties agree that the power of the Panel to compel discovery and award damages shall be the same as the power of a judge in a civil proceeding in New York Supreme Court. The decision of the Panel shall be final and binding on the issue or issues submitted to arbitration. The award rendered by the arbitrators shall be final and binding and judgment may be entered thereon in accordance with applicable law in any State court sitting in New York. The parties agree that the Panel may order injunctive relief and specific performance and that such orders of the Panel shall be binding upon the parties.

To the extent not prohibited by applicable law which cannot be waived, each of the parties hereto hereby waives, and covenants that it will not assert (whether as plaintiff, defendant or otherwise), any right to trial by jury in any forum in respect of any issue, claim, demand, action, or cause of action arising out of or based upon this Agreement or the subject matter hereof whether now existing or hereafter arising and whether in contract or tort or otherwise. Either party may file an original counterpart or a copy of this section with any court as written evidence of the consent of both parties hereto to the waiver of its rights to trial by jury.

SECTION XIII: INSURANCE

The CONSULTANT shall provide the following coverages and limits:

1. The CONSULTANT shall procure and maintain at its own expense, and without expense to the AUTHORITY, until final acceptance by the AUTHORITY of the work covered by the Contract, insurance for liability for damages imposed by Law, of the kinds and in the amount hereinafter provided with insurance companies authorized to do such business in the State of New York covering all operations under the Contract, whether performed by him or by a Sub-consultant.
2. Cancellation Notice: Each insurance policy and certificate of insurance shall contain a provision providing that it shall not be cancelled or changed by the CONSULTANT or Insurance Company without thirty (30) calendar days of written notice to the AUTHORITY of intention to cancel or change.
3. Indemnification: It is expressly understood that the CONSULTANT shall indemnify and save harmless the AUTHORITY from claims, suits, actions, damages and costs of every name and description resulting from the negligent performance of the services of the CONSULTANT under this Agreement and such indemnity shall not be limited by reasons of enumeration of any insurance coverage herein provided. Negligent performance of service within the meaning of this Article, shall include, in addition to negligence founded upon tort, negligence based upon the CONSULTANT'S failure to meet professional standards and resulting in obvious or patent errors in the progression of his work. Nothing in this Article or in this Agreement shall create or give to third parties any claim or right of action against the CONSULTANT or the AUTHORITY beyond such as may legally exist irrespective of this Article or this Agreement.

Such obligation does not extend to those suits, actions, damages and cost of every name which arise out of the sole negligence of the AUTHORITY, its agents or employees relative to the construction, alteration, repairs or maintenance of a building, structure, appurtenances and appliances including moving, demolition and excavating connected therewith.

4. Professional Liability: The CONSULTANT and any sub-consultants shall maintain professional liability insurance (also known as Errors and Omissions Insurance) in the amount of \$2,000,000 minimum.
5. Comprehensive General Liability: The CONSULTANT shall procure and maintain until final acceptance and at its own expense, comprehensive general liability to include:
 - i. Contractor's Liability;
 - ii. Contractor's Protective Liability;
 - iii. Completed Operations Liability;
 - iv. Contractual Liability.

The limits of such insurance shall be not less than:

\$1,000,000 combined single limit, each occurrence;
\$2,000,000 aggregate.

6. Automobile: The CONSULTANT shall procure and maintain until final acceptance and at its own expense, automobile liability and property damage insurance, covering the use, in connection with the work, of all owned, non-owned and hired vehicles required by the vehicle and traffic law of the

State of New York to bear license plates. The coverage under such policy shall not be less than the following limits:

\$1,000,000 combined single limit;
bodily injury and property damage.

7. Workers Compensation: The CONSULTANT shall procure and maintain, until final acceptance and at its own expense, Workers Compensation and Employers Liability Insurance, covering the obligations of the CONSULTANT in accordance with Workers Compensation and Employers Liability Insurance Law, covering all operations under the Contract, whether performed by it or its Sub-consultants or Suppliers.
8. Umbrella: Excess liability coverage for each of the above with a limit of \$2,000,000 each occurrence and \$2,000,000 aggregate.

The CONSULTANT will provide Certificates of Insurance prior to commencing work. The Insurance policies must clearly include the Buffalo and Fort Erie Public Bridge Authority, its Board and AUTHORITY employees as additional insured. The CONSULTANT will be required to maintain all coverages throughout the schedule of the Project. The cost of all insurances is the responsibility of the CONSULTANT.

SECTION XIV: APPLICABLE LAW

This contract, shall be governed by the law of the United States of America, as applicable to an international compact entity.

SECTION XV: MISCELLANEOUS

The section titles are for convenience only and shall not be construed to affect the meanings of the sections titled.

SECTION XVI: ATTACHMENTS

Included as part of this AGREEMENT are the following:

- | | |
|-------|--------------------------------------|
| No. 1 | General Scope of Service |
| No. 2 | Rates for Professional Services |
| No. 3 | Conflict of Interest Form |
| No. 4 | Equal Employment Opportunity Program |
| No. 5 | Certificates of Insurance |

IN WITNESS WHEREOF, the parties hereunder have caused this Agreement to be executed as of the day and year first above written.

(SEAL)

**BUFFALO AND FORT ERIE
PUBLIC BRIDGE AUTHORITY**

BY: _____
General Manager

In Presence of:

BY: _____

(SEAL)

CONSULTANT

BY: _____

In Presence of:

BY: _____

No. 1 GENERAL SCOPE OF SERVICES

No. 2 RATES FOR PROFESSIONAL SERVICES

No. 3 CONFLICT OF INTEREST FORM

CONSULTANT represents and warrants to the AUTHORITY that neither the CONSULTANT nor any shareholder, director or employee of the consultant is related to, affiliated with or interested in any subcontractor or sub-consultant that may be employed by the CONSULTANT, nor is the CONSULTANT or any of the CONSULTANT's shareholders, directors or employees related to, affiliated with or interested in, any director or employee of the AUTHORITY. CONSULTANT represents and warrants that it has no knowledge of any fact or circumstance that would constitute a conflict of interest or the appearance of a conflict of interest in its performance of the services included within the proposal.

No. 4 EQUAL EMPLOYMENT OPPORTUNITY PROGRAM

The Authority's enabling legislation, in Chapter 149, § 9-a and -b of Unconsolidated Laws of the State of New York, includes certain requirements for all contracts for design, construction, services and materials, of whatever nature. These requirements do not apply to contracts to be performed outside the State of New York. These requirements include the following provisions.

1. The Equal Employment Opportunity and Affirmative Action Clause, as set forth by the Department of Labor, 41 C.F.R. Section 60-1.4(a) is hereby incorporated by reference herein insofar as it is required by such regulations and unless exempted by applicable statutes, rules, regulations or orders. The contractor and subcontractor also agree, unless exempted, to incorporate by reference and abide by Executive Order 11246.

This contractor and subcontractor shall abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals on the basis of protected veteran status or disability and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status or disability.

NATIONAL LABOR RELATIONS ACT NOTICE

Executive Order 13496 requires that non-exempt Federal contractors provide notice to their employees of their rights under the National Labor Relations Act and post a notice prescribed by the Secretary of Labor.

https://www.dol.gov/olms/regs/compliance/EmployeeRightsPoster2page_Final.pdf

NLRA notice is also required to be included in all non-exempt contracts, subcontracts and purchase orders which can be done by citing to 29 C.F.R. Part 471, Appendix A to Subpart A.

2. At the request of the Authority, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding and which is involved in the performance of the contract with the Authority to furnish a written statement that such employment agency, labor union or representative **shall abide by the requirements of 41 CFR 60-14.(a), 60-300.5(a) and 60-741.5(a)**, Executive Order 11246, and Executive Order 13496.
3. The Contractor will state, in all solicitations or advertisements for employees placed by or on behalf of the Contractor in the performance of the contract with the Authority, that all qualified applicants will be afforded **equal employment** opportunity in compliance with **the requirements of 41 CFR 60-14.(a), 60-300.5(a) and 60-741.5(a) and will include all required language as prescribed by the statute.**
4. The Contractor will include the above provisions in section 1 of this section in every subcontract or purchase order in such a manner that such provisions will be binding upon each subcontractor or vendor as to its work in connection with the contract with the Authority.

5. The Authority may establish procedures and guidelines to ensure that contractors and subcontractors undertake programs of affirmative action and **equal employment** opportunity as required by this section. Such procedures may require after notice in a bid solicitation, the submission of an affirmative action program prior to the award of any contract, or at any time thereafter, and may require the submission of compliance reports relating to the operation and implementation of any affirmative action program adopted hereunder. The Authority may take appropriate action including contractual sanctions for non-compliance to effectuate the provisions of this section and shall be responsible for monitoring compliance with this section.

Minority and Women-Owned Business Enterprise Program

- A. Minority and women-owned business enterprises shall be given the opportunity for meaningful participation. The Authority requires that the Contractor establish measures and procedures to secure meaningful participation and identify those contracts and items of work for which minority and women-owned business enterprises may best bid to actively and affirmatively promote and assist their participation in the projects, so as to facilitate the award of a fair share of contracts to such enterprises. For purposes hereof, minority business enterprise shall mean any business enterprise which is at least fifty-one per centum owned by, or in the case of a publicly owned business, at least fifty-one per centum of the stock of which is owned by citizens or permanent resident aliens who are Black, Hispanic, Asian or American Indian, Pacific Islander or Alaskan natives and such ownership interest is real, substantial and continuing and have the authority to independently control the day-to-day business decisions of the entity; and women-owned business enterprise shall mean any business enterprise which is at least fifty-one per centum owned by, or in the case of a publicly owned business, at least fifty-one per centum of the stock of which is owned by citizens or permanent resident aliens who are women, and such ownership interest is real, substantial and continuing and have the authority to independently control the day-to-day business decisions of the entity. The provisions of this paragraph shall not be construed to limit the ability of any minority or women-owned business enterprise to bid on any contract.
- B. In the implementation of this section, the Authority shall consider compliance by any contractor with the requirements of any federal, state, or local law concerning minority and women-owned business enterprises, which may effectuate the requirements of this section. If the Authority determines that by virtue of the imposition of the requirements of any such law, in respect to project contracts, the provisions thereof duplicate or conflict with this section, the Authority may waive the applicability of this section to the extent of such duplication or conflict.
- C. Nothing in this section shall be deemed to require that overall state and federal requirements for participation of minority and women-owned business enterprises in the project be applied without regard to local circumstances to all projects or in all communities or any contract to be performed in Canada.
- D. In order to implement the requirements and objectives of this section, the Authority shall establish procedures to monitor the contractors' compliance with provisions hereof, provide assistance in obtaining minority and women-owned business enterprises to perform contracts proposed to be awarded, and take other appropriate measures to improve the access of minority and women-owned business enterprises to these contracts.

No. 5 CERTIFICATES OF INSURANCE