



**Mobile Airport  
Authority**

**REQUEST FOR PROPOSALS (RFP)**

**RFP No. 2023-014**

**Assessment and Design Services for  
HVAC Systems at Airbus Engineering**

**Date Posted: September 11, 2023**

**Proposal Due: October 04, 2023**

Rita L. Barren, Procurement Officer

[rbarren@mobairport.com](mailto:rbarren@mobairport.com)

09/11/2023

# Table of Contents

<b>I.</b>	<b>GENERAL INFORMATION:</b> .....	<b>3</b>
<b>II.</b>	<b>CONTACT FOR QUESTIONS</b> .....	<b>4</b>
<b>III.</b>	<b>PROPOSAL SUBMITTALS</b> .....	<b>4</b>
<b>IV.</b>	<b>PROJECT DESCRIPTION &amp; OVERVIEW:</b> .....	<b>4</b>
<b>V.</b>	<b>PURPOSE OF RFP</b> .....	<b>4</b>
<b>VI.</b>	<b>SCHEDULE OF EVENTS</b> .....	<b>5</b>
<b>VII.</b>	<b>SCOPE OF SERVICES</b> .....	<b>5</b>
<b>VIII.</b>	<b>PROPOSAL FORMAT GUIDELINES</b> .....	<b>8</b>
<b>IX.</b>	<b>PROCESS FOR SUBMITTING PROPOSALS</b> .....	<b>11</b>
<b>X.</b>	<b>EVALUATION CRITERIA</b> .....	<b>12</b>
<b>XI.</b>	<b>EVALUATION OF PROPOSALS AND SELECTION PROCESS</b> .....	<b>14</b>
<b>XII.</b>	<b>TERMS AND CONDITIONS</b> .....	<b>15</b>
<b>XIII.</b>	<b>OTHER REQUIREMENTS</b> .....	<b>16</b>
<b>XIV.</b>	<b>INSURANCE REQUIREMENTS</b> .....	<b>17</b>
<b>XV.</b>	<b>DISCLOSURES</b> .....	<b>18</b>
<b>XVI.</b>	<b>CONE OF SILENCE</b> .....	<b>19</b>
<b>XVII.</b>	<b>ATTACHMENTS</b> .....	<b>20</b>

Attachment A - MEP As-Built Drawings

Attachment B - Pricing Proposal Form

Attachment C - Vendor Data Form

Attachment D - Signature & Acknowledgement Affidavit Form

Attachment E - Non-Collusion Affidavit

Attachment F - Insurance Requirements

Attachment G - Sample Contract

**REQUEST FOR PROPOSALS**  
**RFP No. 2023-014**  
**Assessment and Design Services for HVAC Systems**  
**at Airbus Engineering**

The Mobile Airport Authority (hereinafter referred to as the "MAA") is requesting proposals from a qualified public entity or private firm, to establish a contract for Assessment and Design Services for HVAC Systems at Airbus Engineering.

It shall be the responsibility of the proposer to deliver his proposal to MAA's office by the announced time. Delivery Location: Mobile Airport Authority ("MAA"), 1891 9th Street, Mobile, Alabama 36615.

The Proposals shall be to the attention of Rita Barren, Procurement Officer in a sealed envelope identified on the outside with the Proposer's Business Name, License #, Proposer Identity - Request for Proposals for Assessment and Design Services for HVAC Systems at Airbus Engineering and the due date. Proposals will be publicly opened.

The Request for Proposals (RFP No. 2023-014) may be downloaded from MAA's website at <https://www.mobileairportauthority.com/downtown/rfp/> .

**I. GENERAL INFORMATION:**

Sealed proposals shall be received by the MAA to wit: Mobile Airport Authority ("MAA"), 1891 9th Street, Mobile, Alabama 36615, on or before the hour of 2:00 p.m. on **October 04, 2023**. Any RFP received after this closing time will be returned unopened.

**A Pre-Proposal Meeting will be held on September 21, 2023 @ 2:00 p.m.** at 1891 9th Street, Mobile, Alabama 36615 to discuss the Description of Work. Site walkthrough will immediately follow. Attendance of the pre-proposal meeting is non mandatory.

Any oral response given at the Pre-Proposal Conference that is not confirmed in the written summary, or by a subsequent addendum shall not be official or binding on the MAA. Only written responses shall be official and all other forms of communication with any officer, employee, or agent of the MAA shall not be binding on the MAA. RFP Proposers, their consultants, sub-consultants, or other parties representing the proposed team for this solicitation may not contact any Mobile Airport Authority Employee, Selection Committee member, or Architect, with the exception of the Procurement Officer, as identified in this RFP, concerning this Project from the date of this advertisement until after the date of selection.

## II. **CONTACT FOR QUESTIONS**

In order to ensure a fair and objective RFP evaluation, all questions for clarification related to this RFP shall be made in writing. All questions must be submitted in writing via E-mail prior to **5:00 pm on September 26, 2023.**

Emailed to: [russell@mobairport.com](mailto:russell@mobairport.com)

Such clarification will be submitted to all known responding firms simultaneously. Answers to questions will also be posted on MAA's website, as well as any Addenda at [www.mobileairportauthority.com](http://www.mobileairportauthority.com). Vendors are responsible for checking Mobile Airport Authority website for any addendum.

## III. **PROPOSAL SUBMITTALS**

All proposal submittals should be in a **sealed** envelope and the sealed envelope shall be marked as follows:

Mobile Airport Authority  
**ATTN: Rita L. Barren, Procurement Officer**  
**(SEALED BID) - Deadline: October 04, 2023 @ 2:00 pm**  
Project Name: **Assessment and Design Services for HVAC Systems**  
**at Airbus Engineering**  
**RFP No. 2023-014 / Proposer's Name & License #**

Further details are included in the MAA's Request for Qualifications package. MAA reserves the right to reject all submissions and to waive any informalities.

## IV. **PROJECT DESCRIPTION & OVERVIEW:**

The project consists of the complete assessment and recommendation for the existing HVAC system at Airbus Engineering located at 1801 S. Broad Street Mobile, AL 36615.

## V. **PURPOSE OF RFP**

The purpose for this Request for Qualifications ("RFP") is to solicit statements of qualifications and proposals from interested and qualified Consultants to establish a contract for the assessment, reporting, and recommendations regarding the existing HVAC systems at Airbus Engineering for the Mobile Airport Authority (MAA).

Selection of the Consultant will be a Best Value selection based on the Criteria Evaluation and Scoring addressed in Section XII of this RFP. Best Value means the responsible offeror whose proposal is the most advantageous to MAA.

## **VI. SCHEDULE OF EVENTS**

This request for proposal will be governed by the following schedule:

Release of RFP	September 11, 2023
Pre-Proposal Meeting (Non-Mandatory)	September 21, 2023, at 2:00 p.m.
Deadline for Written Questions	September 26, 2023, by 5:00 p.m.
Responses to Questions Posted on Web	September 28, 2023, by 5:00 p.m.
Proposals are Due	October 04, 2023, at 2:00 p.m.
Interview (if held)	The Week of October 9, 2023
Board Approval of Contract	October 25, 2023 (Tentative)

*\*All dates are subject to change at the discretion of MAA*

## **VII. SCOPE OF SERVICES**

The Mobile Airport Authority is soliciting proposals from qualified professional mechanical engineering firms to provide: (1) an assessment of the existing Heating, Ventilation and Air Conditioning (HVAC) system in the Airbus Engineering building and provide HVAC improvement recommendations; (2) HVAC improvement recommendations and preparation of plans, specifications and estimates for improvements to the HVAC system. The existing MEP set of as-builts drawings for the Airbus Engineering building are attached as **Attachment A**.

The scope of services is meant to provide the proposers with an outline of the anticipated services required for this project. The detailed scope of services will be contained in the executed Contract Agreement. The work to be performed by the Consultant will include all services required for the completion of this project. The scope of work will be in a single, not to exceed, contract.

Proposals should address the ability of the bidder to comply with the requirements contained in the scope of work. The Consultant shall identify a detailed scope in the proposal as part of their understanding and approach to the project.

### **A. Existing HVAC System Assessment**

The Consultant shall conduct a thorough assessment of the existing HVAC system for the purpose of identifying system deficiencies and recommending solutions. Existing As-builts, equipment manuals, specifications etc. will be utilized and provided by MAA staff. The assessment should determine whether or not the existing HVAC system provides adequate cooling, heating, air movement and temperature control, and thermal comfort in accordance with Alabama state building ventilation requirements, Title 24, ASHRAE, ADA and all other applicable codes and regulations. Troubleshooting the system

for deficiencies will be arranged with MAA staff to minimize disruption to the Airbus Engineering staff.

The identification of HVAC system deficiencies shall be comprehensive in nature and should consider, at a minimum: current system performance, maintenance requirements (including a review of records of past attempts to improve the system), operations efficiency (including costs of operation), remaining system operational life, inadequate design, and any other deficiencies observed.

The Assessment findings will be written in a draft report and submitted to Mobile Airport Authority at a meeting for discussion and comments. **Five (5) copies** will be provided to the Procurement Officer, and it will also be made available in electronic form (Microsoft Word). Comments will be incorporated, and the final Assessment findings will be presented to the President, as five (5) final copies and in Word electronic format as well. Upon acceptance by President, approval will be given to begin the following task:

**B. Proposed HVAC System Improvements Recommendations**

The consultant shall prepare a report outlining recommendations for HVAC system improvements, including modifying the existing equipment as an option. Two (2) additional alternatives (assumed for Fee proposal purposes) shall be proposed in the report, including a schematic drawing of each, listing the proposed system and cost estimates (design, installation and Operation and Maintenance costs). The proposed solutions shall be based on the consultant's professional expertise and experience and shall take into consideration numerous factors including existing HVAC performance, installation cost, operational and maintenance costs, efficiency, system operational life, and input from MAA staff. A cost benefit analysis of keeping the existing HVAC system and installing a new one shall also be prepared.

The Recommendations Report findings will be written in a draft report and submitted to the MAA at a meeting for discussion and comment. Three (3) copies will be provided to the Procurement Office, and it will also be made available in electronic form (Microsoft Word). Comments will be incorporated, and the final Recommendation Report will be presented to the MAA, as three (3) final copies and in Word electronic format as well. The final report will be wet stamped and signed by a professional Mechanical Engineer licensed in the State of Alabama.

**C. Plans, Specifications and Estimates**

This task is applicable to improvements only:

Upon review of the recommendations report as described in the previous task ("Proposed HVAC System Improvements Recommendations"), the MAA shall provide approval to proceed with this task. This task shall include comprehensive engineering/HVAC design services for the development all necessary bidding documents including plans, specifications and estimates (PS&E) to be used for the construction of the improvements and should therefore be complete in detail and contain all necessary information. Drawings shall conform to standard professional practice and applicable rules, codes and regulations (local, state and federal).

MAA intends to bid this part of the scope out for construction; therefore, the proposal must include services related to the bidding phase (i.e., response to RFIs) and shall also include at minimum 4 site visits during construction.

Three (3) sets of the PS&E set shall be submitted for review. After final approval, eight (8) complete sets of bidding documents shall be provided and one final approved set in an electronic format.

#### **D. Project Administration**

- 1. Kick-off Meeting:** Upon receipt of a written Notice to Proceed/Purchase Order from MAA, consultant shall conduct a kick-off meeting with MAA to review the scope of the project, develop a project schedule, and confirm deliverables. The project schedule shall include each task and subtasks, milestones, critical path designation and a schedule for progress meetings.
- 2. Project Milestone:** Consultant shall prepare a project execution schedule with major milestones to MAA for approval. Consultant shall prepare regular progress reports and meeting Agendas and Minutes for MAA staff each month. Assume that monthly meetings will occur during the project (maximum of 3 months) of the project and include this in the Schedule and Fee Schedule:
  - A. Schedule and conduct a Pre-Construction Meeting with the successful bidder.
  - B. Schedule and conduct bi-weekly jobsite construction progress meetings to enhance communication and reduce likelihood of problems.

- C. Conduct Project Close-Out Meeting to review warranty limitations and responsibilities of interested parties with Mobile Airport Authority staff.

**E. Additional Services**

Consultant is encouraged to identify any additional work that is not specified in this Scope of Work that would be, in its opinion, necessary to complete the project as defined herein. Consultant may propose additional services that in its opinion will improve the efficiency and quality of the project. If identified, the additional work or services must be included in the proposal but separated out as an additional task in the Consultant's Fee Schedule.

## **VIII. PROPOSAL FORMAT GUIDELINES**

Interested entities or contractors are to provide MAA with a thorough proposal using the following guidelines:

Proposal should be typed and should contain no more than **20 typed pages** using a **12-point font size**, including **transmittal letter** and **resumes of key people**, but excluding Index/Table of Contents, tables, charts, and graphic exhibits. Each proposal will adhere to the following order and content of sections. Proposal should be straightforward, concise and provide "layman" explanations of technical terms that are used. Emphasis should be concentrated on conforming to the RFP instructions, responding to the RFP requirements, and on providing a complete and clear description of the offer. Proposals which appear unrealistic in terms of technical commitments, lack of technical competence or are indicative of failure to comprehend the complexity and risk of this contract may be rejected. The following proposal sections are to be included in the Proposer's response:

**A. Vendor Data Form and Cover Letter**

Complete **Attachment C**, "Vendor Data Form" and attach this form to the cover letter. A cover letter, not to exceed three pages in length, should summarize key elements of the proposal. An individual authorized to bind the consultant must sign the letter. The letter must stipulate that the proposal price will be valid for a period of at least **180 days**. Indicate the address and telephone number of the contractor's office located nearest to Mobile, Alabama and the office from which the project will be managed.

**B. Background and Project Summary Section**

The Background and Project Summary Section should describe your understanding of MAA, the work to be done, and the objectives to be accomplished. Refer to Scope of Work of this RFP.



**C. Methodology Section**

Provide a detailed description of the approach and methodology to be used to accomplish the Scope of Work of this RFP. The Methodology Section should include:

1. An implementation plan that describes in detail (i) the methods, including controls by which your firm or entity manages projects of the type sought by this RFP; (ii) methodology for soliciting and documenting views of internal and external stakeholders; (iii) and any other project management or implementation strategies or techniques that the respondent intends to employ in carrying out the work.
2. Detailed description of efforts your firm or entity will undertake to achieve client satisfaction and to satisfy the requirements of the "Scope of Work" section.
3. Detailed project schedule, identifying all tasks and deliverables to be performed, durations for each task, and overall time of completion, including a complete transition plan. Include your plan to deal with fluctuation in service needs and any associated price adjustments.
4. Detailed description of specific tasks you will require from MAA staff. Explain what the respective roles of MAA staff and your staff would be to complete the tasks specified in the Scope of Work.
5. Proposers are encouraged to provide additional innovative and/or creative approaches for providing the service that will maximize efficient, cost-effective operations or increased performance capabilities. In addition, MAA will consider proposals that offer alternative service delivery means and methods for the services desired.

**D. Staffing**

Provide a list of individuals who will be working on this project and indicate the functions that each will perform and anticipated hours of service of each individual. Include a resume for each designated individual. Upon award and during the contract period, if the contractor chooses to assign different personnel to the project, the Contractor must submit their names and qualifications including information listed above to MAA for approval before they begin work.

**E. Qualifications**

The information requested in this section should describe the qualifications of the firm or entity, key staff and sub-contractors performing projects within the past five years that are similar in size and scope to demonstrate competence to perform these services. Information shall include:

Names of key staff that participated in named projects and their specific responsibilities with respect to this scope of work.

A summary of your firm's or entity's demonstrated capability, including the length of time that your firm has provided the services being requested in this Request for Proposal.

For private Proposers, provide at least three references that received similar services from your firm. MAA reserves the right to contact any of the organizations or individuals listed. Information provided shall include:

- o Client Name
- o Project Description
- o Project start and end dates
- o Client project manager name, telephone number, and e-mail address.

Any public entity which submits a proposal should describe in detail how it currently performs services like those identified in the scope of work within its or other jurisdictions, including photographs, written policies of services provided. If you have performed these services under contract for another public entity, please provide references for those entities as set forth above for private Proposers.

**F. Financial Capacity**

Provide the Proposer's latest audited financial statement or other pertinent information such as internal unaudited financial statements and financial references to allow MAA to reasonably formulate a determination about the financial capacity of the Proposer. Describe any administrative proceedings, claims, lawsuits, or other exposures pending against the Proposer.

**G. Fee Proposal**

All Proposers are required to use the form in **Attachment B** to be submitted with their proposal. Pricing instructions should be clearly defined to ensure fees proposed can be compared and evaluated. Proposals shall be valid for a minimum of 180 days following submission.

**H. Disclosure**

Please disclose any and all past or current business and personal relationships with any current MAA staff, official, or family member of any current MAA staff, official, or family member. Any past or current business relationship may not disqualify the firm from consideration.

**I. Sample Agreement**

The firm selected by MAA will be required to execute an Agreement for Services (Agreement) with MAA. The form of the Agreement is enclosed as **Attachment G** but may be modified to suit the specific services and needs of MAA. If a Proposer has any exceptions or conditions to the Agreement, these must be submitted for consideration with the proposal. Otherwise, the Proposer will be deemed to have accepted the form of Agreement.

**J. Checklist of Forms to Accompany Proposal**

As a convenience to Proposers, following is a list of the forms, included as attachments to this RFP, which should be included with proposals:

**Attachment B - Pricing Proposal Form**

**Attachment C - Vendor Data Form**

**Attachment D - Signature & Acknowledgement Affidavit Form**

**Attachment E - Non-Collusion Affidavit**

**IX. PROCESS FOR SUBMITTING PROPOSALS****A. Content of Proposal**

The proposal must be submitted using the format as indicated in the proposal format guidelines.

**B. Preparation of Proposal**

Each proposal shall be prepared simply and economically, avoiding the use of elaborate promotional material beyond those sufficient to provide a complete, accurate and reliable presentation.

**C. Number of Proposals**

Submit one original, five (5) hard copies plus **one disk copy** of flash drive of your proposal in sufficient detail to allow for thorough evaluation and comparative analysis. In the event of a conflict between the original and any hard copy or disk copy, the original shall control.

**D. Submission of Proposals**

Complete written proposals must be submitted in sealed envelopes marked and received no later than 2:00 p.m. (local time) on October 04, 2023, to the address below. Proposals will not be accepted after this deadline. Faxed or e-mailed proposals will not be accepted.

**Mobile Airport Authority**  
**ATTN:** Rita L. Barren, Procurement Officer  
**(SEALED BID) - Deadline: October 04, 2023 @ 2:00 pm**  
Project Name: **Assessment and Design Services for HVAC Systems**  
**at Airbus Engineering**  
**RFP No. 2023-014 / Proposer's Name & License #**

**E. Inquiries**

Questions about this RFP must be directed in writing, via e-mail to: Russell Stallings, Project Manager at [russell@mobairport.com](mailto:russell@mobairport.com). MAA reserves the right to amend or supplement this RFP prior to the proposal due date. All amendments, responses to questions received, and additional information will be posted to MAA's Web Site; Proposers should check this web page daily for new information. MAA will endeavor to answer all written questions timely received no later than September 26, 2023. MAA reserves the right not to answer all questions.

From the date that this RFP is issued until a firm or entity is selected and the selection is announced, firms or public entities are not allowed to communicate outside the process set forth in this RFP with any MAA employee other than the contracting officer listed above regarding this RFP. MAA reserves the right to reject any proposal for violation of this provision. No questions other than written will be accepted, and no response other than written will be binding upon MAA.

**F. Conditions for Proposal Acceptance**

This RFP does not commit MAA to award a contract or to pay any costs incurred for any services. MAA, at its sole discretion, reserves the right to accept or reject any or all proposals received as a result of this RFP, to negotiate with any qualified source(s), or to cancel this RFP in part or in its entirety. MAA may waive any irregularity in any proposal. All proposals will become the property of MAA. If any proprietary information is contained in the proposal, it should be clearly identified.

**X. EVALUATION CRITERIA**

MAA's evaluation and selection process will be conducted in accordance with its procedures. In accordance with the procedures, the lowest responsible bidder will be determined based on evaluation of qualitative factors in addition to price. At all times during the evaluation process, the following criteria will be used.

	<b>Criteria Description</b>	<b>Max Point</b>
<b>Qualifications of Entity &amp; Key Personnel</b>	Includes ability to provide the requested scope of services, the Proposer's financial capacity, recent experience conducting work of similar scope, complexity, and magnitude for other public agencies of similar size, references.	<b>15</b>
<b>Approach to Providing the Requested Scope of Services</b>	Includes an understanding of the RFP and of the project's scope of services, knowledge of applicable laws and regulations related to the scope of services.	<b>10</b>
<b>Price Proposal</b>	Proposals will be evaluated on the basis of the Total Estimated Annual Price submitted in Appendix D.	<b>50</b>
<b>Innovative and/or Creative Approaches</b>	Innovative and/or creative approaches to providing the services that provide additional efficiencies or increased performance capabilities.	<b>10</b>
<b>Relevant Experience</b>	Relevant Experience with Comparable Projects of Similar Size.	<b>10</b>
<b>References</b>		<b>5</b>
	<b>Total Points:</b>	<b>100</b>

The final contract for these Services shall be awarded only after negotiations with the selected firm to establish a fair and reasonable price. MAA actively encourages submission of proposals from disadvantaged business enterprises and companies owned by Native Americans, minorities, women, immigrants, and veterans. MAA does not discriminate on the basis of race, color, religion, creed, sex, sexual orientation, gender identity, age, ancestry, national origin, disability, or veteran status in consideration of this award. Equal Opportunity Employer.

RFP submissions that have not been received in the required format and quantity by the aforementioned deadline date and time will be rejected. Additionally, failure to submit all of the information stipulated per Section V – Format of Responses, shall result in the submission being considered non-responsive and may result in the RFP submission being rejected. Unless otherwise stated or required by the instructions, all attachments and/or embellishments other than those required in the RFP shall be excluded.

The MAA President or their designees shall make the final selection. The selection of any professional services will be subject to negotiation of fair and reasonable compensation.

## **XI. EVALUATION OF PROPOSALS AND SELECTION PROCESS**

In accordance with its Policy, MAA's will adhere to the following procedures in evaluating proposals. An Evaluation/Selection Committee (Committee), which will include members of MAA's staff and possibly one or more outside experts, will screen and review all proposals according to the weighted criteria set forth above. While price is one basic factor for an award, it is not the sole consideration.

### **A. Responsiveness Screening**

Proposals will first be screened to ensure responsiveness to the RFP. MAA may reject as non-responsive any proposal that does not include the documents required to be submitted by this RFP. At any time during the evaluation process, MAA reserves the right to request clarifications or additional information from any or all Proposers regarding their proposals.

### **B. Initial Proposal**

Review The Committee will initially review and score all responsive written proposals based upon the Evaluation Criteria set forth above. The Committee may also contact the Proposer's references. Proposals that receive the highest evaluation scores may be invited to the next stage of the evaluation process. MAA may reject any proposal in which a Proposer's approach, qualifications, or price is not considered acceptable by MAA. An unacceptable proposal is one that would have to be substantially rewritten to make it acceptable. MAA may conclude the evaluation process at this point and recommend an award to the lowest responsible bidder. Alternatively, MAA may elect to negotiate directly with one or more Proposers to obtain the best result for MAA prior to making a recommendation or selection.

### **C. Interviews, Reference Checks, Revised Proposals, Discussions**

Following the initial screening and review of proposals, the Proposers included in this stage of the evaluation process may be invited to participate in an oral interview. Interviews, if held, are tentatively scheduled for the week of October 9, 2023, and will be conducted at Mobile Airport Authority's Administrative Bldg., 1891 9th St., Mobile, AL 36615. This date is subject to change. The individual(s) from Proposer's firm or entity that will be directly responsible for carrying out the contract, if awarded, should be present at the oral interview. The oral interview may, but is not required to, use a written question/answer format for the purpose of clarifying the intent of any portions of the proposal.

In addition to conducting an oral interview, MAA may during this stage of the evaluation process also contact and evaluate the Proposer's references,

contact any Proposer to clarify any response or request revised or additional information, contact any current users of a Proposer's services, solicit information from any available source concerning any aspect of a proposal, and seek and review any other information deemed pertinent to the evaluation process.

Following conclusion of this stage of the evaluation process, the Committee will again rank all Proposers according to the evaluation criteria set forth above. The Committee may conclude the evaluation process at this point, and make a recommendation for an award, or it may request Best and Final Offers from Proposers. MAA may accept the proposal or negotiate the terms and conditions of the agreement with the highest ranked firm, which shall be determined to be the lowest responsible bidder. MAA may recommend an award without Best and Final Offers, so Proposers should include their best proposal with their initial submission.

Recommendation for the award is contingent upon the successful negotiation of final contract terms. Negotiations shall be confidential and not subject to disclosure to competing Proposers unless an agreement is reached. If contract negotiations cannot be concluded successfully within a time period determined by MAA, MAA may terminate negotiations and commence negotiations with the next highest scoring Proposer or withdraw the RFP.

## **XII. TERMS AND CONDITIONS**

The following terms and conditions apply to all proposals:

1. MAA reserves the right to reject any and all proposals submitted; to select one or more responding parties; to void this RFP and the review process and/or terminate negotiations at any time; to select separate responding parties for various components of the scope of services; and to select a final party/parties from among the proposals received in response to this RFP. Additionally, any and all RFP project elements, requirements and schedules are subject to change and modification. MAA also reserves the unqualified right to modify, suspend, or terminate at its sole discretion any and all aspects of this RFP process, to obtain further information from any and all responding parties, and to waive any defects as to form or content of the RFP or any responses by any party.
2. This RFP does not commit MAA to award a contract, defray any costs incurred in the preparation of a response to this RFP, or contract for any services. All submitted responses to this RFP become the property of MAA as public records. All proposals may be subject to public review, on

- request, unless exempted as discussed elsewhere in this RFP.
3. By accepting this RFP and/or submitting a proposal in response thereto, each responding party agrees for itself, its successors and assigns, to hold MAA and its agents, directors, consultants, attorneys, officers, and employees harmless from and against any and all claims and demands of whatever nature or type, which any such responding company, its representatives, agents, consultants, successors or assigns may have against any of them as a result of issuing this RFP, revising this RFP, conducting the selection process and subsequent negotiations, making a final recommendation, selecting a responding party/parties or negotiating or executing an agreement incorporating the commitments of the selected responding party.
  4. By submitting responses, each responding party acknowledges having read this RFP in its entirety and agrees to all terms and conditions set out in this RFP.
  5. Responses shall be open and valid for a period of ninety (90) days from the due date of this RFP.

### **XIII. OTHER REQUIREMENTS**

The Consultant shall not unlawfully discriminate against any employee, applicant for employment, or subconsultant because of race, color, age, religion, ancestry, sex, national origin, local custom, or sexual orientation. Furthermore, the Consultant shall be able to produce at any time its documented policy on ensuring that each employee has the right to work in a professional atmosphere that promotes equal employment opportunities and prohibits unlawful discriminatory practices, including harassment and prejudice.

All contracts involving the Owner and Consultant and/or third persons shall incorporate by reference and shall be in accordance with all applicable federal, state, and local laws, ordinances, rules, regulations, and orders. The proposer shall be responsible for compliance with all federal, state, and local laws, ordinances, rules, regulations and orders in the management and construction of the Project.

For a time period of at least five (5) years preceding the date of this RFP and continuing for a period of at least one (1) year after final completion and final acceptance of the Project, Proposer shall be duly licensed and registered as a General Consultant in the Building Construction classification as required by the State of Alabama or another U.S. State. In the event that Proposer consists of more than one entity with the intent to combine to form a joint venture, the years of licensing and registration of the constituent entities of such joint venture may be combined to arrive at the five-year (5) requirement. In the case of acquired or merged companies, the acquired company's prior years of licensing can be counted by the newer acquiring company/Proposer towards fulfillment of this five (5) year requirement. Copies of all professional licenses, current and valid in accordance with all applicable Alabama laws, shall be submitted by the Proposer with its RFP.



All consultants and subconsultants identified as part of Consultant's team must, as of the date of this RFP, and continuing through final completion and final acceptance of the Project, be duly licensed and registered by the Alabama State Professional Licensing Board. Copies of all professional licenses, current and valid in accordance with all applicable Alabama laws, shall be submitted by the Proposer in its RFP.

To avoid any conflict of interest or the appearance of any conflict of interest in connection with this RFP, Proposer must disclose in its RFP any relationship Proposer, its parent or subsidiary, its current or former owners, officers, directors, employees, members of Proposer's team and/or others affiliated with Proposer have or in the past have had with:

- (1) current or former board members or employees of Mobile Airport Authority (MAA); or
- (2) anyone who has a contract or other relationship with a current or former MAA board member or employee or relative of said board member or employee who is or was significantly involved in the organization, preparation, or administration of this RFP or otherwise was in a position to significantly affect the RFP either through a decision-making capacity or through a review process.

If Proposer is a joint venture or intends to form a joint venture for purposes of this Project, it is not necessary for the joint venture to be registered with the Alabama Secretary of State at the time of submission of Proposer's RFP. However, if such Proposer is awarded a contract to provide construction management services for the Project, the joint venture shall be registered at the time of execution of the Contract.

Proposer shall provide evidence within its RFP showing that Proposer has the legal ability to enter into and perform a contract with the Owner to provide construction and/or construction management services for the Project.

#### **XIV. INSURANCE REQUIREMENTS**

MAA requires that licensees, lessees, and vendors have an approved Certificate of Insurance (not a declaration or policy) or proof of legal self-insurance on file with MAA for the issuance of a permit or contract. Within ten (10) consecutive calendar days of award of contract, successful Proposer must furnish MAA with the Certificates of Insurance proving coverage as specified within Attachment F.

In the event that the Consultant is authorized to subcontract any portion of the work or services provided pursuant to this Agreement, the contract between the

Consultant and such subconsultant shall require the subconsultant to maintain the same policies of insurance that the Consultant is required to maintain.

## **XV. DISCLOSURES**

MAA shall have no financial interest in the business of and shall not be liable for any debts or obligations incurred by the Consultant nor shall MAA be deemed or construed to be a partner, joint venture or otherwise interested in the assets of the Proposer, or in the sums earned or derived by Proposer, nor shall the Consultant at any time or times use the name or credit of MAA in purchasing or attempting to purchase any car, equipment, supplies or other thing or things whatsoever.

Proposer, in the performance of its operations and obligations hereunder, shall not be deemed to be an agent of MAA, but shall be deemed to be an Independent Consultant in every respect and shall take all steps at its own expense, as MAA may from time-to-time request, to indicate that it is an Independent Consultant. MAA does not and will not assume any responsibility for the means by which or the manner in which the services by Consultant are performed; but on the contrary, Consultant shall be wholly responsible, therefore.

Consultant shall acknowledge that its identity and peculiar capacity to provide the services described hereinabove shall constitute a material consideration for the MAA's execution of a contract with Consultant. Therefore, Consultant shall not transfer or assign an awarded contract or any of the rights or privileges granted therein without the prior written consent of MAA; such consent shall be granted or denied solely at MAA's discretion.

If selected, Consultant shall agree to comply strictly with all ordinances of MAA of Mobile, Alabama, and the laws of the State of Alabama and of the United States while performing its obligations.

Consultant agrees that, if selected, it will comply with Title 6 of the Civil Rights Act of 1964, which provides that no person will be excluded from participation in, or be denied benefits of, or otherwise be subjected to discrimination on the grounds of race, sex, color, national origin or disability, in connection with federally funded programs.

MAA may take all necessary and affirmative steps to assure that minority firms and women's business enterprises compete.

Consultant shall not collude in any manner or engage in any practices with any other Consultant which may restrict or eliminate competition or otherwise restrain trade. Violation of this instruction will cause MAA to reject the proposer's submittal.

## **XVI. CONE OF SILENCE**

To ensure a proper and fair evaluation, the MAA has established a Cone of Silence applicable to the Competitive Solicitation, including RFIs, RFPs, RFQs, and ITBs. The cone of silence is designed to protect the integrity of the procurement process by shielding it from undue influences. The cone of silence will be imposed on the Competitive Solicitation beginning on the date of the solicitation posting on MAA's website and ending with an award or decision prescribed in the MAA's Procurement Policy.

The cone of silence prohibits any communications regarding a specific RFI, RFP, RFQ, or ITB between:

1. A potential respondent, including its representative(s) (which includes vendors, service providers, Proposers, lobbyists, and consultants), and MAA staff or MAA consultants engaged to assist the MAA on a specific RFP, RFQ, or ITB, except for communications with the MAA's procurement agent or other supporting procurement staff responsible for administering the procurement, provided the communication is strictly limited to procedural matters of the Competitive Solicitation.
2. A potential respondent including its representative(s) (which includes vendors, service providers, Proposers, lobbyists, and consultants), and a Board member.
3. A potential respondent including its representative(s) (which includes vendors, service providers, Proposers, lobbyists, and consultants), and any member of the evaluation committee or negotiation team.
4. A Board member and any member of the evaluation committee or negotiation team.
5. Unless specifically provided otherwise in the applicable solicitation document, in addition to the exceptions set forth above, the cone of silence does not apply to:
  6. Oral communications at the pre-proposal or pre-bid conference.
  7. Oral communications during publicly noticed evaluation committee meetings that are specifically for presentations, demonstrations, or interviews.
  8. Oral communications during publicly noticed negotiation meetings.
  9. Oral communication during any duly noticed Board meeting.
  10. Communications relating to protests made in accordance with this Procurement Policy.

Notice of the cone of silence requirements will be included in all Competitive Solicitation documents. The notice will include the name and email of the MAA's procurement agent to whom communications regarding procedural matters of the Competitive Solicitation can be made. The notice will also include a statement that

any violation of the Cone of Silence by a respondent and their representative(s) may void its response as well as any resulting contract awarded to them. Please contact: Rita Barren, Procurement Officer at [RBarren@MOBAirport.com](mailto:RBarren@MOBAirport.com) regarding procedural and proposal format matters.

## **XVII. ATTACHMENTS**

Attachment A - MEP As-Builts

Attachment B - Pricing Proposal Form

Attachment C - Vendor Data Form

Attachment D - Signature & Acknowledgement Affidavit Form

Attachment E - Non-Collusion Affidavit

Attachment F - Insurance Requirements

Attachment G - Sample Contract

- END -

**Attachment B****PRICING PROPOSAL FORM****Bid Opening, October 04, 2023 @ 2:00 p.m.****RFP No. 2023-014****Assessment and Design Services for HVAC Systems  
at Airbus Engineering*****THIS PAGE MUST BE COMPLETED AND SUBMITTED WITH YOUR PROPOSAL RESPONSE***

Provide hourly rates, along with pricing in accordance with MAA's current requirements, as set forth in Section 3 Scope of Work. [Also provide your firm's proposed Staffing Plan (subtasks, employee classification, hourly rate, hours assigned and total cost) on a separate sheet of paper.] Proposer should use a separate form to state pricing for any added value.

	<b>Task</b>	<b>Total Cost</b>
<b>1</b>	Airbus Engineering Building HVAC Assessment	\$
<b>2</b>	Airbus Engineering Building HVAC Improvements Recommendation Report	\$
<b>3</b>	Airbus Engineering Building HVAC PS&E (Plans, Specification and Estimates)	\$
<b>4</b>	Airbus Engineering Building HVAC Bidding/Construction Services	\$
	<b>TOTAL:</b>	\$

Total proposal amount in written form: \_\_\_\_\_

Optional Tasks: \_\_\_\_\_

Pricing shall remain firm for a minimum of two (2) years. Any and all requests for pricing adjustments for follow-up contract renewal periods shall be provided no later than sixty (60) days prior to the end of the contract period.

The consultant shall provide a separate rate schedule identifying staff members' hourly rates, reimbursable expenses and/or rates, mileage and/or travel cost, etc.

<b>Employee</b>	<b>Hourly Rate</b>	<b>Hours Worked</b>	<b>Total Cost</b>
	\$		\$
	\$		\$
	\$		\$
	\$		\$

**Attachment C**

**VENDOR DATA FORM**  
**RFP No. 2023-014**  
**Assessment and Design Services for HVAC Systems**  
**at Airbus Engineering**

***THIS PAGE MUST BE COMPLETED AND SUBMITTED WITH YOUR PROPOSAL RESPONSE***

**TYPE OF APPLICANT:**             **NEW**         **CURRENT VENDOR**

Legal Contractual Name of Corporation: \_\_\_\_\_

Contact Person for Agreement: \_\_\_\_\_

Corporate Mailing Address: \_\_\_\_\_

City, State and Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Contact Person for Proposals: \_\_\_\_\_

Title: \_\_\_\_\_ Email Address: \_\_\_\_\_

Business Phone: \_\_\_\_\_

Is your business: (Check one)

DBE/ACDBE Certified     Non-DBE/ACDBE Certified

Signature of Authorized Representative: \_\_\_\_\_

Representative's Name: \_\_\_\_\_ Title: \_\_\_\_\_

**Attachment D**

**SIGNATURE & ACKNOWLEDGEMENT  
AFFIDAVIT FORM**

**RFP No. 2023-014**

**Assessment and Design Services for HVAC Systems  
at Airbus Engineering**

***THIS PAGE MUST BE COMPLETED AND SUBMITTED WITH YOUR PROPOSAL RESPONSE***

I, the undersigned duly authorized representative of the Bidder, understand that the Proposal must be signed by the Bidder or an authorized representative of the Bidder. Further, I acknowledge that I have read and understand all the proposal instructions, specifications, terms and conditions, and agree, on behalf of myself and the Bidder to be bound by them.

Receipts of the following Addenda are hereby acknowledged: (List all / any Addenda)

ADDENDUM NO. \_\_\_\_\_

ADDENDUM NO. \_\_\_\_\_

ADDENDUM NO. \_\_\_\_\_

<b>ILLEGAL IMMIGRANT CONFIRMATION</b>
By signing and submitting a response to this solicitation, a Prospective Bidder agrees and certifies that they do not employ or contract with illegal immigrants. If selected, the Prospective Bidder certifies that they will not employ or contract with illegal immigrants during the aggregate term of a contract.
<b>SUBMITTAL ACKNOWLEDGEMENT</b>
<input type="checkbox"/> Prospective Bidder acknowledges proposal includes one (1) complete original and three (3) copies.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Company Name

(\_\_\_\_\_) \_\_\_\_\_  
Telephone

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/State/Zip



**Attachment E**

**NON-COLLUSION AFFIDAVIT**

The undersigned proposal or agent, being duly sworn on oath, declares that he / she has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him / her, entered into any combination, collusion, or agreement with any person relative to the price to be bid by anyone at such letting, nor to prevent any person from bidding, nor to include anyone to refrain from proposing, and that this proposal is made without reference to any other proposals and without any agreement, understanding or combination with any other person in reference to such proposals/bidding.

He / She further states that no person or persons, firms, or corporations, has, have or will receive directly or indirectly, any rebate, fee gift, commission or item of value on account, or in return for such sale.

**OATH AND AFFIRMATION**

I HEREBY AFFIRM UNDER THE PENALTIES FOR PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID/PROPOSAL FOR PUBLIC WORKS ARE TRUE AND CORRECT.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Name of Organization

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title of Person Signing

**THE STATE OF \_\_\_\_\_**  
**\_\_\_\_\_ COUNTY**

I, \_\_\_\_\_, a Notary Public, hereby certify that \_\_\_\_\_ whose name is signed to the foregoing instrument or conveyance, and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, he/she/they executed the same voluntarily on the day the same bears date.

Given under my hand this \_\_\_\_\_ day of \_\_\_\_\_, A. D. 20\_\_\_\_\_.

\_\_\_\_\_  
Notary Public

Print Name \_\_\_\_\_

My commission expires: \_\_\_\_\_

## **Attachment F**

### **INSURANCE REQUIREMENTS**

The company **MUST** agree to insurance requirements as outlined below, as well a complete vendor agreement. Evidence of all required coverage to be furnished in the form of a Certificate of Insurance stating that policy shall not be canceled, changed, allowed to lapse, or allowed to expire without 30 days written notice. The policies shall be endorsed to stipulate that the insurance afforded by the additional insureds shall apply as primary insurance and that any other insurance or self-insurance maintained by MAA shall be excess only. The company shall ensure that its subcontractors of any tier shall procure and maintain insurance that complies with the requirements set forth.

A copy of each endorsement shall be attached to the Certificate of Insurance. The Certificate shall indicate the Certificate Holder as:

**Mobile Airport Authority  
1891 9<sup>th</sup> Street  
Mobile, AL 36615**

Where appropriate, copies of endorsements should be attached to the Certificate of Insurance (COI).

- \*\* Waiver of Subrogation must be indicated "YES"
- \*\* "*Mobile Airport Authority*" must be listed on the bottom left of the COI form
- \*\* Must specify Mobile Airport Authority as insured
- \*\* MAA must always keep a current policy on file

The following is a list of the minimum requirements for the Mobile Airport Authority. Please note that each project is different and the minimum insurance requirements may change without notice.

	Commercial General Liability	General Aggregate	Auto Liability	Umbrella	Worker's Compensation
Non-Airside <\$100,000	\$1,000,000	\$2,000,000	\$500,000	\$0	State Law
Non-Airside \$100,001-\$500,000	\$1,000,000	\$2,000,000	\$1,000,000	\$0	State Law
Non-Airside \$500,001-\$2,000,000	\$1,000,000	\$2,000,000	\$1,000,000	\$2,000,000	\$1,000,000
Non-Airside >\$2,000,000	\$1,000,000	\$2,000,000	\$1,000,000	\$5,000,000	\$1,000,000
Service Vendor	\$1,000,000	\$2,000,000	Exposure Dependent	\$0	State Law
Terminal/Non-Airside	\$1,000,000	\$2,000,000	\$1,000,000	\$5,000,000	\$1,000,000
FAA Projects/Airside	\$1,000,000	\$2,000,000	\$1,000,000	\$9,000,000	\$1,000,000

The company shall indemnify, defend, and hold harmless Mobile Airport Authority and its affiliates, and all their employees, officers, directors, shareholders, etc. (collectively

"Indemnitees") from and against any and all claims, demands, losses, damages, liabilities, expenses, obligations, judgments, recoveries and deficiencies, arising out of or resulting from the performance of the services provided.

Mobile Airport Authority has the right to terminate the contract for non-compliance with insurance requirements.

### **Waiver of Subrogation**

The contractor shall waive its right to subrogation on each of the policies herein. If any of the policies do not permit the insured to enter a pre-loss waiver, or voids coverage because of same, there this Waiver of Subrogation requirement shall not apply and Subcontractor shall obtain a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent.

Insurance required by this Agreement shall be as broad as necessary to support the indemnification requirement in said contract or as broad as the indemnitor's insurance coverage, whichever is broader.

**Attachment G**

**Sample Contract Cover Page**  
**RFP No. 2023-014**  
**Assessment and Design Services for HVAC Systems**  
**at Airbus Engineering**

**DO NOT FILL OUT OR SIGN THE ATTACHED  
SAMPLE CONTRACT TEMPLATE.**

**The attached document is a sample only. The selected bidder will receive a draft copy of the final contract and will be expected to sign it. Therefore, you should review the attached sample contract template in its entirety and make sure that you are able to comply with all terms and conditions.**

STATE OF ALABAMA     )

MOBILE COUNTY         )

**CONTRACT FOR PROFESSIONAL SERVICES**  
**BETWEEN**  
**OWNER AND CONSULTANT**

This Contract for Professional Services Between Owner and Consultant (the “Agreement”) is made and entered into this the \_\_ day of \_\_\_\_\_, 2023 by and between Mobile Airport Authority, a public corporation organized under the laws of the State of Alabama, hereafter referred to as the “Owner” and [CONSULTANT], a [DESCRIBE BUSINESS ORGANIZATION] firm, hereafter referred to as the “Consultant.”

**WITNESSETH:**

WHEREAS the Owner desires [insert the desired objective or purpose of this engagement]; and

WHEREAS the Consultant is (i) qualified to order to conduct such \_\_\_\_\_ in accordance with any and all applicable laws, rules, and regulations, (ii) qualified to conduct business in the State of Alabama, and (iii) desirous of providing certain professional services to the Owner, as provided hereinbelow.

NOW, THEREFORE, for and in consideration of the premises, and other good and valuable consideration, including the inspection fees to be paid to Consultant hereunder, the parties hereto agree as follows:

1. The Consultant shall furnish, perform and provide to Owner [describe the services to be rendered]. All such Services shall be rendered in compliance with the General Provisions attached hereto.

2. In consideration of Consultant’s satisfactory performance of the Services, the Owner shall pay the Consultant a fee in an amount not to exceed \$XXXXX.XX (the “Service Fee”). The Service Fee shall include any and all expenses, including, but not limited to, salaries, payroll costs, additives, overhead and profit of Consultant. All payments by the Owner to the Consultant shall be in accordance with Section 5 of the General Provisions. The fees for Services required by Owner after said one (1) year period will be subject to renegotiation by the parties.

3. The Consultant will, at its expense, obtain and maintain in full force and effect during the term of this Agreement, errors, and omission insurance with minimum limits of \$\_\_\_\_\_ and comprehensive general liability insurance with minimum limits of \$\_\_\_\_\_. The Consultant shall comply, at its expense, with all applicable local, state and federal laws or regulations relating to employment, including, without limitation, any and all such laws or regulations in respect to worker’s compensation and unemployment compensation as shall be reasonably satisfactory to Owner. Any and all insurance required of Consultant

hereunder shall be primary to any insurance obtained by Owner, if any. Consultant shall provide Owner with certificates evidencing the required coverage which list Owner as an additional named insured and provides such coverage cannot be canceled or altered without providing to Owner at least thirty (30) days prior written notice.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first written above.

**CONSULTANT:**

Witness:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**OWNER:**

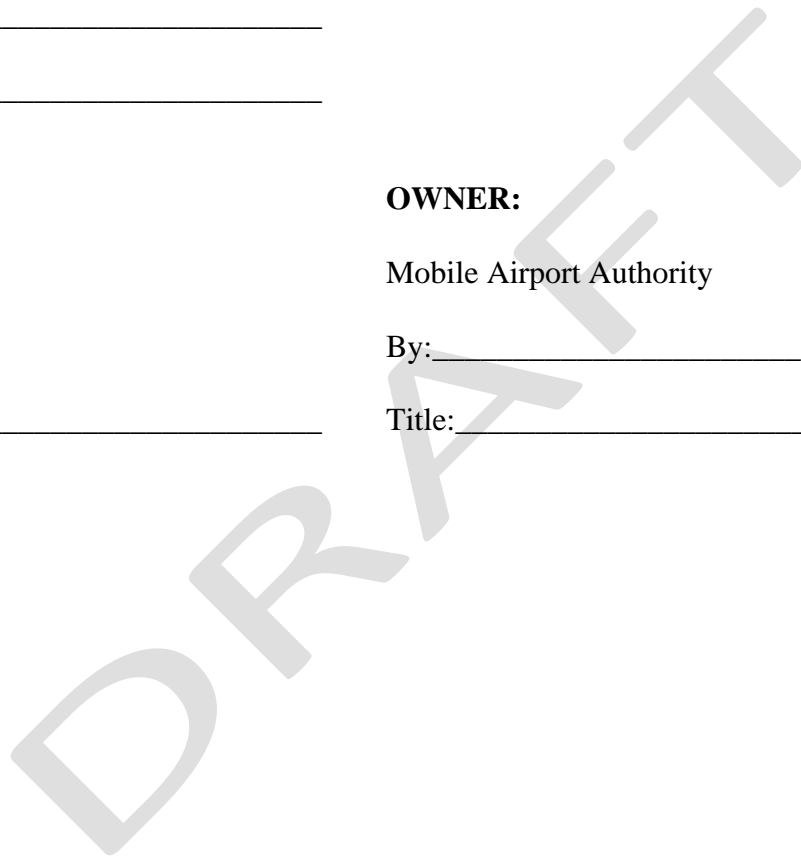
Mobile Airport Authority

Attest:

By: \_\_\_\_\_

\_\_\_\_\_

Title: \_\_\_\_\_



## GENERAL PROVISIONS

These General Provisions are attached to and made a part of the Agreement for Professional Services between Owner and Consultant (the “Agreement”) dated \_\_\_\_, 2022, by and between the Mobile Airport Authority, a public corporation organized under the laws of the State of Alabama (“Owner”), and \_\_\_\_\_, a [describe business organization] “Consultant”).

**1. DESCRIPTION OF SERVICES.** The Consultant shall furnish, perform, and provide the Services described in the Agreement in conformity with acceptable industry and professional service practices in the State of Alabama and those standards set forth in the [name the applicable professional association/authority/regulator] and the rules and regulations promulgated in association therewith. The purpose of the Services is to determine whether the [insert ]

**2. RESPONSIBILITIES OF THE OWNER.** The Owner shall:

- (a) Provide the Consultant with a list of the Dwellings to be inspected and such other information as Consultant may reasonably request of Owner.
- (b) Designate, at a minimum, one person to act on the Owner’s behalf and respond in a timely manner to submissions by Consultant for approvals and authorizations as appropriate so that work may continue at a normal pace.

**3. DUTIES, RESPONSIBILITIES AND LIMITATIONS OF AUTHORITY OF THE CONSULTANT.** The Consultant shall:

- (a) Duties and Responsibilities:
  - (i) As requested by the Owner, assist the Owner in obtaining additional details or information, when required at the job site for proper execution of the Services.
  - (ii) If required by the Owner, attend conferences to advise the Owner of findings.
- (b) Review of Work, Rejection of Defective Work, and Inspection of Work:
  - (i) After the initial inspections are made by Consultant hereunder and in the event defects or inadequacies are discovered and corrected , conduct re-inspections of the corrections thereof shall be made by Consultant, if required by the Owner.
  - (ii) Maintain files of the inspections performed to allow Owner to comply with federal auditing requirements.

- (iii) The Consultant shall indemnify and hold the Owner harmless from and against any and all claims or demands for injury to persons, including death, and damage to property, arising out of, related to, connected with or caused by the Consultant's negligent performance acts or omissions in respect to any of the Services furnished under this Agreement, except for errors, omissions or other deficiencies to the extent solely attributable to the Owner. The Consultant shall not be responsible for any time delays in the project caused by circumstances beyond the Consultant's reasonable control.

4. **SCOPE AND LIMITATIONS OF INSPECTION SERVICES PROVIDED BY CONSULTANT.**

- (a) The Services to be provided consist [scope of services to be rendered]

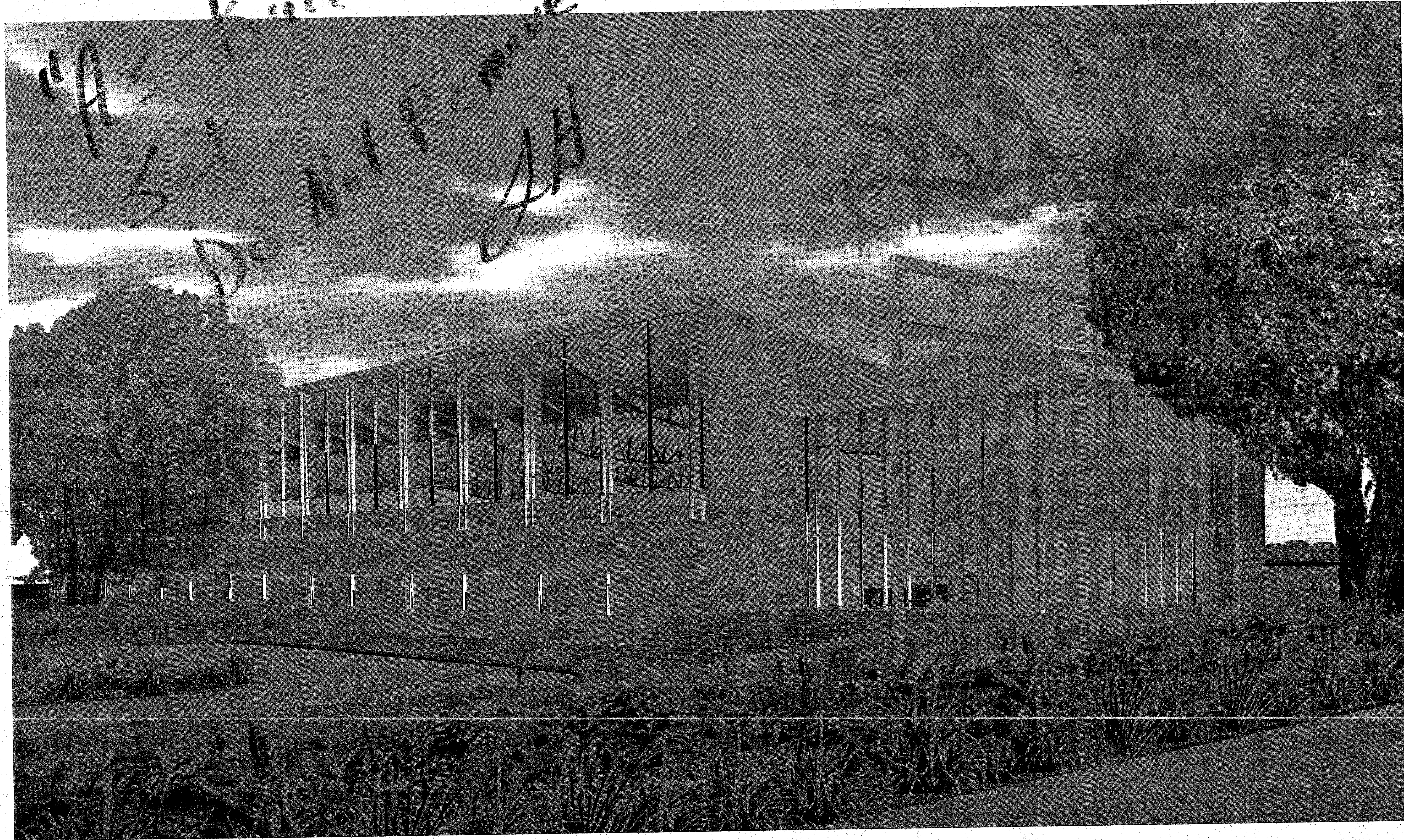
5. **METHOD OF PAYMENT.** Payments for the satisfactory completion of the Services rendered in connection with the work accomplished herein shall be made within thirty (30) days after presentation by Consultant of an original invoice to the Owner.

6. **TERMINATION.** This Agreement may be terminated in whole or in part in writing by either party in the event of a material failure by either party to fulfill its obligations under this Agreement through no fault of the terminating party; provided, however, that no such termination may be effected unless the other party is given not less than ten (10) days written notice of intent to terminate and an opportunity for cure of such failure by the defaulting party or consultation within three (3) days with the terminating party prior to termination. Consultant shall have the right to terminate this Agreement in whole or in part on ten (10) days written notice to Owner in the event Consultant ceases operating a home inspection business.

7. **PERSONAL SERVICES CONTRACT.** This Agreement is a services contract between the Consultant and the Owner. The Consultant acknowledges and agrees that the Owner is relying on Consultant to perform the Services described herein, and the Consultant agrees that no other person, employee, or agent shall perform any of the Services hereunder without the prior written consent of the Owner. The rights and obligations of the Consultant under this Agreement cannot be assigned to any other person or entity and any attempted assignment shall be null and void and of no effect. The Consultant acknowledges and agrees that the Consultant will not employ any agents or employees to perform any part of the Services hereunder unless and until the Owner consents to the same in writing and Consultant obtains and provides the Owner with evidence of worker's compensation insurance as required by law.



**ATTACHMENT A**



RECEIVED  
MAR 28 2006  
HOAR CONSTRUCTION

**AIRBUS ENGINEERING CENTER**  
**1801 SOUTH BROAD STREET, MOBILE, ALABAMA 36615**

RECEIVED  
APR 06 2006  
HOAR CONSTRUCTION FIELD OFFICE

**CLIENT:**

MOBILE AIRPORT AUTHORITY  
1891 NINTH STREET  
BROOKLEY AIRPORT COMPLEX  
MOBILE, ALABAMA 36615  
PHONE: (251) 436-7334

**TENANT:**

AIRBUS NORTH AMERICA HOLDINGS, INC.  
198 VAN BUREN STREET  
HERNDON, VIRGINIA 20170-5335  
PHONE: (703) 834-3486

**ARCHITECT:**

PERKINS + WILL  
2100 M STREET, NW  
SUITE 800  
WASHINGTON, DC  
PHONE: (202) 737-1020  
FAX: (202) 223-1570

**CIVIL/STRUCTURAL:**

THOMPSON ENGINEERING  
3707 COTTAGE HILL ROAD  
MOBILE, AL 36609  
PHONE: (251) 666-2443  
FAX: (251) 666-6422

**MEP&F:**

AI ENGINEERING  
11520 NUCKOLS ROAD  
SUITE 110  
GLEN ALLEN, VA  
PHONE: (804) 474-7800  
FAX: (804) 474-6822

**PERKINS  
& WILL**

Architecture • Interiors • Planning

**FOR CONSTRUCTION**  
**03/27/06**

### ABBREVIATIONS

AVV	AUTOMATIC AIR VENT	MVF	MAKE-UP AIR FAN
AVF	ABOVE	MVF	MAKE-UP AIR VENT
A/C	AIR CONDITIONING	MAX	MAXIMUM
ACU	AIR CONDITIONING UNIT	MBH	THOUSAND BTU PER HOUR
AF	ABOVE FINISHED FLOOR	MCA	MINIMUM CURRENT AMPACITY
AHU	AIR HANDLING UNIT	MCFM	THOUSANDS OF CUBIC FEET PER MINUTE
AD	BACK DRAFT DAMPER (GRAVITY)	MHP	MOTOR HORSE POWER
BD	BELOW FINISHED FLOOR	MIN	MINIMUM
BDC	BUILDING	N.O.D.	NOT TO SCALE
BHP	BREAK HORSEPOWER	NOP	NORMALY OPEN
BEL	BELOW	NOCOP	NORMALLY IN CONTRACT
B.S.	BIRD SCREEN	NC	NOT IN CONTRACT
BTUH	BRITISH THERMAL UNITS PER HOUR	NO	NORMALLY CLOSED
CD	CENTRAL AIR	N.O.	NORMALLY OPEN
CFM	CUBIC FEET PER MINUTE	NS	NOT TO SCALE
CLG	CEILING	OB	OUTSIDE AIR
CL	CENTER LINE	OD	OPPOSED BLADE DAMPER
CONT.	CONTINUATION	ODD	OPEN END DUCT
CONN	CONNECTION	P	PUMP
CT	COOLING TOWER	PD	PRESSURE DROP
CU	CONDENSING UNIT	PH	PHASE
CJH	CABINET UNIT HEATER	PPM	POUNDS PER MILLION
CU	COLD WATER	PPM	PARTS PER MILLION
D	CONDENSATE DRAIN	PSF	POUNDS PER SQUARE INCH ABSOLUTE
DB	DRY BULB TEMPERATURE	PSIG	POUNDS PER SQUARE INCH GAUGE
DF	DEGREE FAHRENHEIT	RA	RETURN AIR
DN	DOWN	RAF	RETURN AIR FAN
DH	DUCT HEATER	RF	RELIEF AIR
EA	EACH	RG	RETURN GRILLE
EAT	ENTERING AIR TEMPERATURE	RH	RELATIVE HUMIDITY
EFF	EFFICIENCY	RLA	RUNNING LOAD AMPS
EL	ELEVATION	RPM	REVOLUTIONS PER MINUTE
ERU	ENERGY RECOVERY UNIT	RM	ROOM
ESP	EXTERNAL STATIC PRESSURE	RTU	RUN THROUGH JOIST
EXT	EXTERNAL	RTU	ROOF TOP AIR HANDLING UNIT
EX	EXISTING	SA	SUPPLY AIR
EX1	EXISTING	SAF	SUPPLY AIR FAN
EX2	EXISTING	SF	SQUARE FOOT
F	FAHRENHEIT	S.F.D.	COMBINATION SMOKE/FIRE DAMPER
F.D.	FIRE DAMPER	SP	STATIC PRESSURE
FCU	FAN COIL UNIT	SPEC.	SPECIFICATIONS
FPTB	FAN POWERED TERMINAL BOX	SPF	STAIR PRESSURIZATION FAN
FL	FLOOR	SR	SUPPLY REGISTER
FLA	FULL LOAD AMPS	STAT.	THERMOSTAT
FLEX	FLEXIBLE	STRUCT.	STRUCTURAL
FT	FEET PER MINUTE	TEMP.	TEMPERATURE
FT	FEET	TYP.	TYPICAL
GPH	GALLON PER HOUR	TWU	THRU THE WALL UNIT
GAL	GALLON	TSP	TOTAL STATIC PRESSURE
GPM	GALLON PER MINUTE	TSTAT	THERMOSTAT
HE	HEAT EXCHANGER	U.C.	UNDERCUT
HE	HEAT EXCHANGER	UH	UNIT HEATER
HE	HEAT EXCHANGER	UN	UNLESS OTHERWISE NOTED
HP	HORSEPOWER	V	VOLT
HR	HOUR	VAC	VOLTS ALTERNATING CURRENT
HW	HOT WATER	VAV	VARIABLE AIR VOLUME
HZ	HERTZ	VAV	VARIABLE FREQUENCY DRIVE
KW	KILOWATT	VP	VELOCITY PRESSURE
LAT	LEAVING AIR TEMPERATURE	VSD	VARIABLE SPEED DRIVE
L.D.	LOUVERED DOOR	W	WATTS
LF	LINEAR FOOT	W/	WITH
LG	LENGTH	W/O	WITHOUT
LMID	LOG MEAN TEMP. DIFFERENTIAL	WB	WET BULB
LWT	LEAVING WATER TEMPERATURE	WC	WALL CAP
LRA	LOCKED ROTOR AMPS	WH	WALL HEATER
		WG	WATER GAUGE
		WMS	WIRE MESH

### DUCTWORK SYMBOLS

	RECTANGULAR DUCTWORK - W/ TAKE-OFF PLAN & PROFILE
	ROUND DUCTWORK - W/ TAKE-OFF PLAN & PROFILE
	SUPPLY DUCTWORK UP AND DOWN
	RETURN DUCTWORK UP AND DOWN
	EXHAUST OUTSIDE AIR DUCTWORK UP AND DOWN
	DUCTWORK UP (R), DOWN (D) IN DIRECTION OF ARROW
	DUCTWORK WITH ACOUSTICAL LINING
	FLEXIBLE CONNECTION
	FLEXIBLE DUCTWORK
	FIRE DAMPER/ACCESS DOOR
	VOLUME DAMPER
	BACK DRAFT DAMPER
	SPLITTER DAMPER
	DUCT TRANSITION OR REDUCER SQUARE TO ROUND TRANSITION
	FLANGED METAL TAKE-OFF WITH GASKET AND VOLUME DAMPER
	RADIUSED ELBOW, USE RADIUSED ELBOWS WHEREVER SPACE PERMITS USE ON ALL MEDIUM PRESSURE DUCTWORK
	ELBOW WITH TURNING VANES, USE RADIUSED ELBOWS WHEREVER SPACE PERMITS NOT ALLOWED ON MEDIUM PRESSURE DUCTWORK
	RECTANGULAR BRANCH DUCTWORK
	ROUND BRANCH DUCTWORK
	MOTORIZED DAMPER
	STATIC PRESSURE SENSOR
	SMOKE DETECTOR
	FIRESTAT
	STATIC PRESSURE SENSOR
	SUPPLY REGISTER TYPE A, 200 CFM 6x4 NECK
	RETURN OR EXHAUST REGISTER TYPE B, 200 CFM 6x4 NECK
	CEILING DIFFUSER TYPE C, 200 CFM
	LINEAR SLOT DIFFUSER TYPE D, 200 CFM 6 FEET IN LENGTH
	RECTANGULAR DUCT
	FLAT-OVAL DUCT
	ROUND DUCT

### PIPING IDENTIFICATION

	CONDENSATE DRAIN LINE
	REFRIGERANT LIQUID
	REFRIGERANT SUCTION
	HOT GAS LINE

### HVAC SYMBOLS

L.D.	LOUVERED DOOR (BY ARCHITECT)
U.C.	UNDERCUT DOOR (BY ARCHITECT)
	CARBON MONOXIDE SENSOR (MOUNT @ 60" AFF UNLESS OTHERWISE NOTED)
	CARBON DIOXIDE CO SENSOR (MOUNT @ 60" AFF UNLESS OTHERWISE NOTED)
	THERMOSTAT/TEMPERATURE SENSOR (MOUNT @ 60" AFF UNLESS OTHERWISE NOTED)
	HUMIDISTAT (MOUNT @ 60" AFF UNLESS OTHERWISE NOTED)
	SINGLE DUCT TERMINAL BOX
	SERIES FAN POWERED TERMINAL BOX
LF	(L-LOWER LEVEL-SEQUENCE#)
UF	(U-UPPER LEVEL-SEQUENCE#)

### HVAC NOTES

- 1) ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS INCLUDING BUT NOT LIMITED TO:  
2000 INTERNATIONAL BUILDING CODE  
2000 INTERNATIONAL MECHANICAL CODE  
LATEST SMACNA STANDARDS
- 2) CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND SHALL ARRANGE FOR ALL INSPECTIONS AS REQUIRED.
- 3) THE FOLLOWING NOTES ARE GENERAL IN NATURE AND PERTAIN TO THE ENTIRE PROJECT. WHERE THERE ARE EXCEPTIONS, ADDITIONS, OR REVISIONS TO THESE NOTES, SUCH EXCEPTIONS, ADDITIONS OR REVISIONS ARE SO NOTED ON THE PARTICULAR DRAWING WHERE THEY OCCUR.
- 4) ABBREVIATIONS & SYMBOLS ON THIS SHEET ARE COMPREHENSIVE LISTS AND ARE NOT NECESSARILY ALL UTILIZED FOR THIS PROJECT.
- 5) THE DRAWINGS ARE DIAGNOSTIC AND SHOULD NOT BE SCALED TO ESTABLISH LOCATION OF WORK. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND MAKE ADJUSTMENTS AS NECESSARY TO COMPLETE THE WORK. VERIFY EXISTING CONDITIONS BEFORE FABRICATION OF DUCTWORK OR OTHER NEW WORK.
- 6) THE CONTRACTOR SHALL FULLY COORDINATE ALL WORK WITH OTHER TRADES TO ASSURE ALL WORK CAN BE PROPERLY INSTALLED WITHOUT INTERFERENCE OR DELAY.
- 7) REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL CEILING MOUNTED DIFFUSERS.
- 8) PROVIDE 1" x 1/2" LB DENSITY ACOUSTICAL SOUND LINING DOWNSTREAM OF NEW FAN POWERED TERMINAL BOXES, MINIMUM 8' IN LENGTH. PROVIDE 1" x 1/2" LB DENSITY ACOUSTICAL SOUND LINING ON ALL RETURN TRANSFER DUCTS.
- 9) PROVIDE A FLANGED AND GASKETED "AIR-TIGHT" FITTING WITH VOLUME DAMPER AT EACH CONNECTION BETWEEN MAIN DUCT AND BRANCH DUCT. SECURE FITTING TO MAIN DUCTWORK USING SELF-ADHESIVE GASKET AND SHEET METAL SCREWS. WHERE THE DEPTH OF THE TAPPED DUCTWORK IS LESS THAN TAP DIAMETER USE A FACTORY-FABRICATED OVAL FITTING OF EQUIVALENT FREE AREA SHALL BE USED.
- 10) NOTE NOT USED.
- 11) DUCT SIZES SHOWN ON DRAWINGS ARE IN INCHES AND REPRESENT THE FREE OR UNOBSTRUCTED AREA REQUIRED ON THE INSIDE OF THE DUCT.
- 12) ALL DUCT RUN-OUTS TO TERMINAL BOX INLETS SHALL BE THE SAME SIZE AS THE BOX INLET UNLESS OTHERWISE NOTED.
- 13) ALL DUCT RUN-OUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE DIFFUSER NECK UNLESS OTHERWISE NOTED.
- 14) ALL DUCTWORK AND PIPING SHALL RUN AS HIGH AS POSSIBLE, UNLESS OTHERWISE NOTED.
- 15) PROVIDE ACCESS PANELS FOR ALL VALVES AND MECHANICAL EQUIPMENT IN THE CEILING.
- 16) ALL EQUIPMENT INSTALLED IN THE CEILING PLENUM SHALL HAVE MAXIMUM FLAME SPREAD INDEX OF 25 AND A SMOKE DEVELOPED INDEX NOT EXCEEDING 50 IN ACCORDANCE WITH ASTM E84.
- 17) THE CONTRACTOR SHALL NOT CORE DRILL CONCRETE SLABS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE STRUCTURAL ENGINEER AND THE BUILDING OWNER.
- 18) CONTRACTOR TO RADIOGRAPH PROBABLE CORE DRILL LOCATIONS TO PREVENT CUTTING CONCEALED RE-BARS AND/OR CONDUIT IN CONCRETE MASS.
- 19) ALL SPECIFIED EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 20) SUBMITTALS:  
a) 1/4" SCALE COORDINATED SHEET METAL FABRICATION SHOP DRAWINGS (COORDINATED WITH STRUCTURAL/ARCHITECTURAL CEILING HEIGHTS/ LIGHTING AND PIPING).  
b) 1/4" COORDINATION CHANGES SUPERIMPOSING MECHANICAL, PLUMBING, ELECTRICAL AND OTHER TRADES.  
c) SHOP DRAWINGS FOR EQUIPMENT  
d) AIR BALANCE REPORT  
e) AS-BUILT DRAWINGS  
f) O & M MANUALS IN 3-RING HARD COVER BINDERS.
- 21) COORDINATE DIFFUSER LOCATIONS WITH REFLECTED CEILING AND LIGHTING PLAN.
- 22) ALL DUCTWORK AND PIPING SHALL CONNECT TO EQUIPMENT WITH FLEXIBLE CONNECTIONS.
- 23) COORDINATE FRAMING OF SLAB TO SLAB PARTITIONS WITH EXISTING DUCTWORK. FRAMING SHALL NOT BE ATTACHED TO DUCTWORK.
- 24) PROVIDE RETURN AIR TRANSFER OPENINGS (AT AIR VELOCITY NOT EXCEEDING 400 FEET PER MINUTE) IN SLAB TO SLAB PARTITIONS.
- 25) SEAL AROUND ALL PENETRATIONS THROUGH FIRE RATED FLOORS AND WALLS WITH UL LISTED FIRESTOP ASSEMBLIES.
- 26) SUPPLY AND INSTALL TEMPORARY FILTERS IN ALL A/C UNITS. REPLACE TEMPORARY FILTERS WITH FINAL FILTERS UPON COMPLETION OF CONSTRUCTION AND BEFORE COMMISSIONING.
- 27) AT ALL POINTS WHERE FLEXIBLE BRANCH DUCTS WOULD PENETRATE SLAB-TO-SLAB PARTITIONS OR FLOOR SLABS, PROVIDE RIGID METAL DUCT IN LIEU OF FLEX 12" ON EITHER SIDE OF WALL OR SLAB.
- 28) SUPPLY AND INSTALL FIRE/SMOKE DAMPERS WITH ACCESS DOOR IN ACCORDANCE WITH NFPA, AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND CONSISTENT WITH THEIR LISTING. DAMPERS SHALL BE LISTED UNDER UL 555 S.
- 29) SUPPLY AND INSTALL VIBRATION ISOLATION HANGERS FOR ALL EQUIPMENT SUSPENDED FROM STRUCTURE AS PER SPECIFICATIONS.
- 30) COORDINATE WEIGHTS OF EQUIPMENT ADDED WITH STRUCTURAL ENGINEER FOR ADEQUATE STRUCTURAL SUPPORT.
- 31) ALL DUCT BRANCH LINES AND BRANCH TAKEOFFS SHALL BE THE SAME SIZE AS THE INLET OF THE DIFFUSER TO WHICH THEY CONNECT UNLESS OTHERWISE SHOWN. THE MAXIMUM LENGTH OF FLEXIBLE DUCTWORK BETWEEN BRANCH DUCTS AND DIFFUSERS SHALL BE 10'-0" UNLESS OTHERWISE SPECIFIED. FLEXIBLE DUCTWORK SHALL BE RUN WITH SMOOTH BENDS AND NO SAGGING SO AS TO NOT RESTRICT AIRFLOW.
- 32) AIR IS RETURNED TO THE PLENUM THROUGH RETURN GRILLES AND/OR THROUGH RETURN SLOTS IN LIGHT FIXTURES.
- 33) CONTRACTOR IS PROHIBITED FROM RELEASING ANY REFRIGERANT INTO THE ATMOSPHERE DURING INSTALLATION, STARTUP OR SERVICING OF NEW HVAC EQUIPMENT, EITHER DIRECTLY OR INDIRECTLY. CONTRACTOR SHALL BE EPA CERTIFIED AND SHALL UTILIZE AN APPROPRIATE REFRIGERANT PURIFICATION/RECLAMATION SYSTEM THAT IS CAPABLE OF SEPARATION AND REMOVAL OF OIL AND RESIDUAL MOISTURE, AND DOT-APPROVED CONTAINMENT OF RECOVERED REFRIGERANT.
- 34) INSULATE ALL MEDIUM PRESSURE DUCTWORK EXCEPT WHEN DUCT IS INSTALLED WITH SOUND LINING.
- 35) ALL THERMOSTAT AND TEMPERATURE SENSORS SHALL BE INSTALLED 60" A.F.F. UNLESS OTHERWISE NOTED. THERMOSTATS AND TEMPERATURE SENSORS LOCATED ON PERIMETER WALLS/COLUMNS SHALL BE PROVIDED WITH INSULATED SUB-BASES.
- 36) CONTRACTOR SHALL FURNISH AND INSTALL TEMPERATURE SENSORS IN LOCATIONS INDICATED ON THE DRAWINGS. TEMPERATURE SENSORS SHALL NOT BE LOCATED ABOVE DAMPER SWITCHES OR OTHER HEAT-PRODUCING ELECTRICAL DEVICES. THERMOSTATS AND TEMPERATURE SENSORS/TRANSMITTERS SHALL BE ALIGNED WITH TOP EDGE OF ADJACENT LIGHT SWITCH (ES).
- 37) CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL AIR TERMINAL BOXES TO ENSURE THAT ALL REQUIRED SERVICE AREAS BELOW AND AROUND AIR TERMINAL BOXES BETWEEN CEILING AND UNDERSIDE OF SLAB ARE FREE FROM PARTITION FRAMING, PIPING, CONDUIT, OR OTHER IMPEDIMENTS. WHERE PARTITION FRAMING MUST BE LOCATED WITHIN AIR TERMINAL BOX CONTROLLER ACCESS AREA, CONTRACTOR SHALL FRAME A FULL SIZED OPENING IN THE PARTITION FRAMING FROM TOP OF CEILING TO UNDERSIDE OF BUILDING STRUCTURE.
- 38) COORDINATE LOCATIONS OF AIR TERMINAL BOXES WITH SPRINKLER PIPING, TENANT PARTITIONS, AND OTHER AND EQUIPMENT TO ENSURE ADEQUATE SERVICE AND MANUFACTURER REQUIRED CLEARANCES AROUND AIR TERMINALS.
- 39) WHERE INSULATED DUCTS PENETRATE WALLS, CONTINUE THE INSULATION UNINTERRUPTED THROUGH THE WALL PENETRATIONS, EXCEPT IN CASES OF RATED WALLS.
- 40) ALL FIRE DAMPERS TO BEAR THE UL LABEL. INSTALL DAMPERS SO THEY ARE ACCESSIBLE FOR SERVICE.
- 41) WHERE VOLUME DAMPERS, SPLITTER DAMPERS, ETC., ARE LOCATED ABOVE OR BEHIND DRYWALL CEILING ENCLOSURES COORDINATE WITH ARCHITECT ACCESS DOORS, IN THE CEILING OR REMOTELY LOCATE DAMPER IN AN ACCESSIBLE CEILING.
- 42) MOTORIZED DAMPERS THAT ARE INTERLOCKED VIA DAMPER END SWITCHES WITH FANS OR OTHER EQUIPMENT ARE TO OPEN PRIOR TO START-UP OF ASSOCIATED FANS OR EQUIPMENT.
- 43) BLANK OFF ALL INACTIVE SECTIONS OF SLOT LINEAR DIFFUSERS AND LINEAR BAR GRILLES.

### GENERAL SYMBOLS

	POINT OF CONNECTION
	DUCTWORK - LINEWEIGHT ON PLANS
	DETAIL OR SECTION NUMBER
	SHEET ON WHICH DETAIL OR SECTION APPEARS
	SHEET ON WHICH DETAIL OR SECTION IS CUT
	KEY NOTES
	REVISION NOTES

### MECHANICAL DRAWING INDEX

M-001	DRAWING INDEX, ABBREVIATIONS AND SYMBOLS, MECHANICAL NOTES
M-201	LOWER LEVEL MECHANICAL PLAN
M-202	UPPER LEVEL MECHANICAL PLAN
M-203	ROOF PLAN MECHANICAL
M-701	DETAILS - MECHANICAL
M-901	SCHEDULE SHEET

**PERKINS  
+ WILL**

2100 M Street, NW  
Suite 800  
Washington, DC 20007  
P: 202.272.2020  
F: 202.223.1570  
www.perkinswill.com



11520 Nudokle Road  
Suite 110  
Glen Allen, VA 23060-9507  
Telephone 804.474.7800  
Facsimile 804.474.6822



**AIRBUS**

**Engineering  
Center**

1801 S. Broad St., Mobile, AL 36615

CLIENT

**Mobile Airport  
Authority**

1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TEAM

**Airbus North America  
Holdings, Inc.**

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486

### Revisions

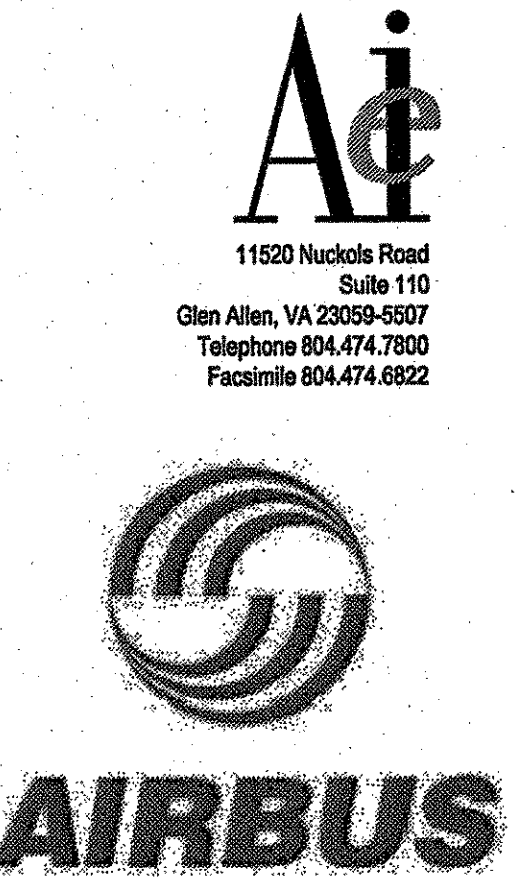
ISSUED FOR CLIENT REVIEW	01.11.08
DESIGN DEVELOPMENT	01.23.08
PERMIT SET	03.20.08
FOR CONSTRUCTION	03.27.08

NO.	ISSUE	DATE
Sheet Information		
Date	03/27/2008	
Job Number	25069	
Drawn		
Checked		
Approved		
Title		

DRAWING INDEX  
ABBREVIATIONS AND  
SYMBOLS,  
MECHANICAL NOTES

Sheet

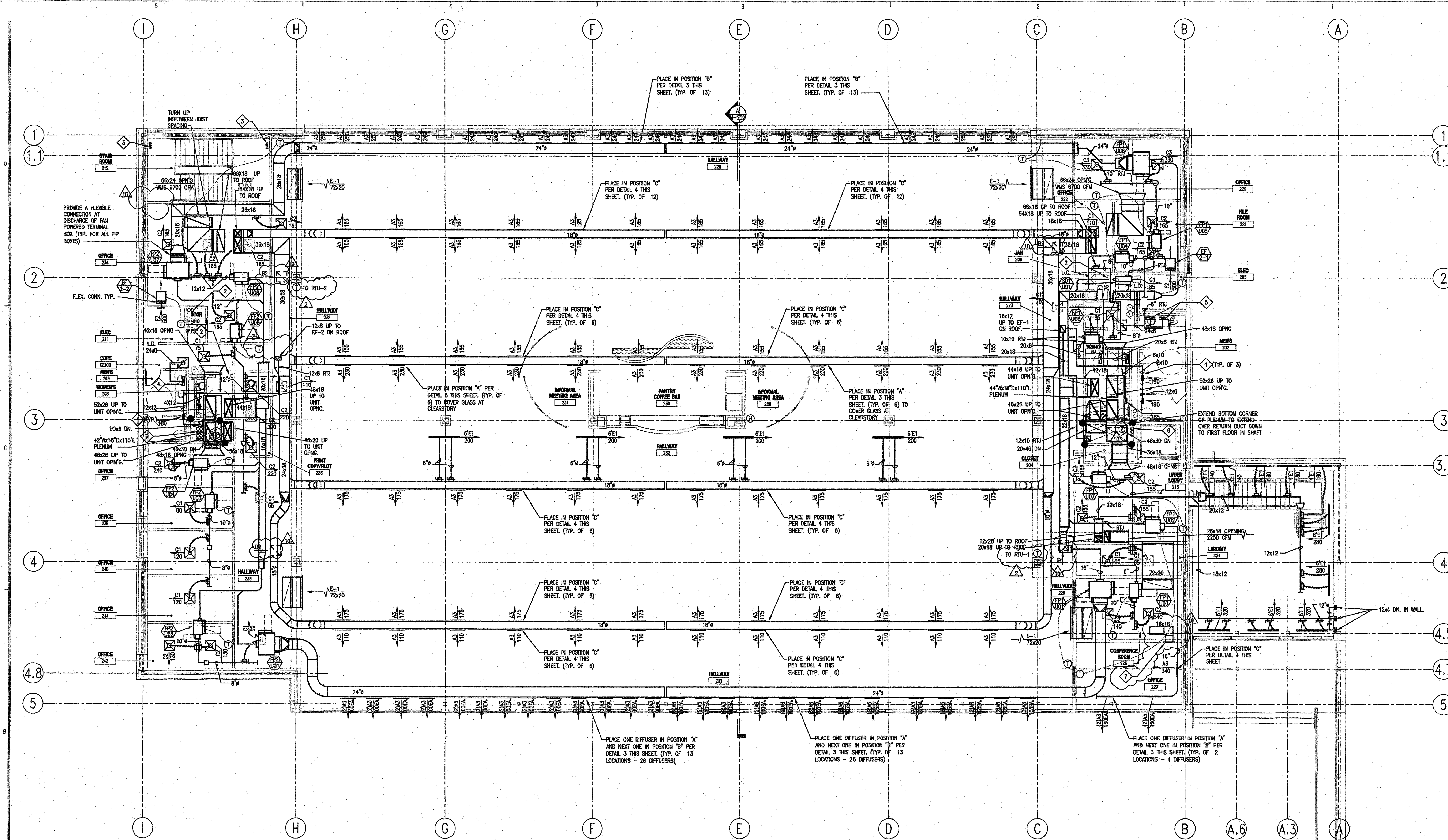
M-001



**Engineering  
Center**  
1801 S. Broad St., Mobile, AL 36615

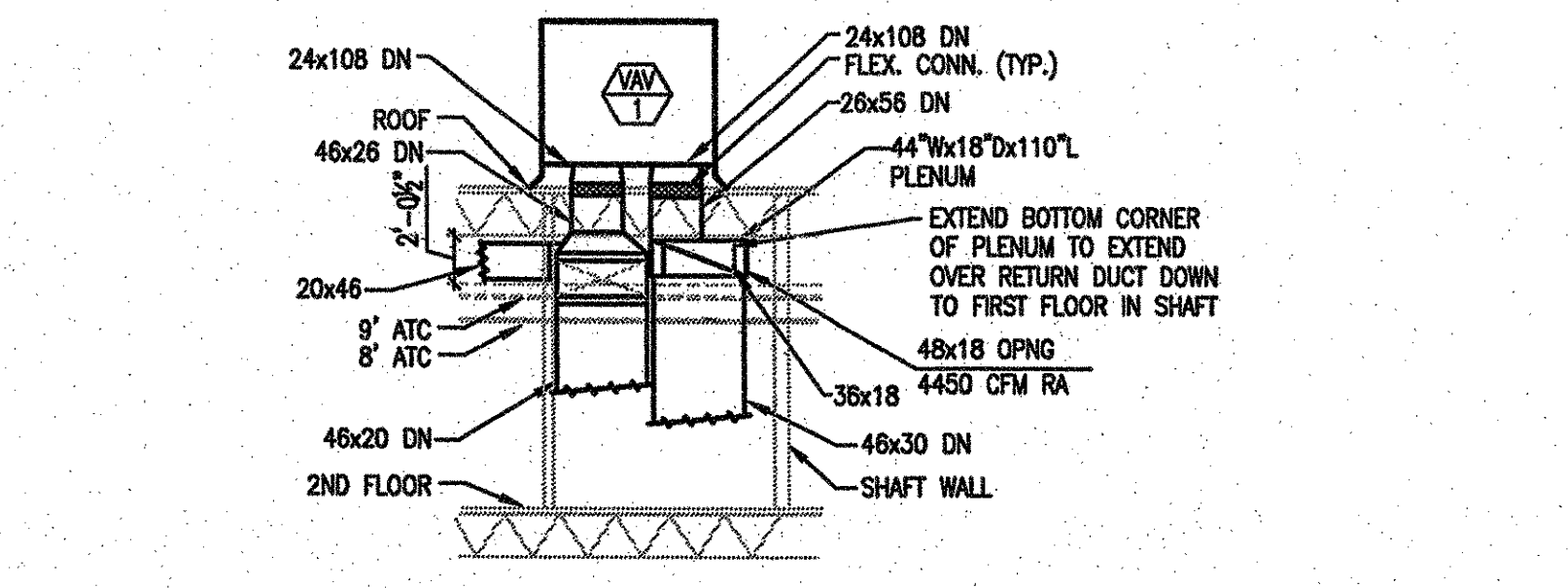
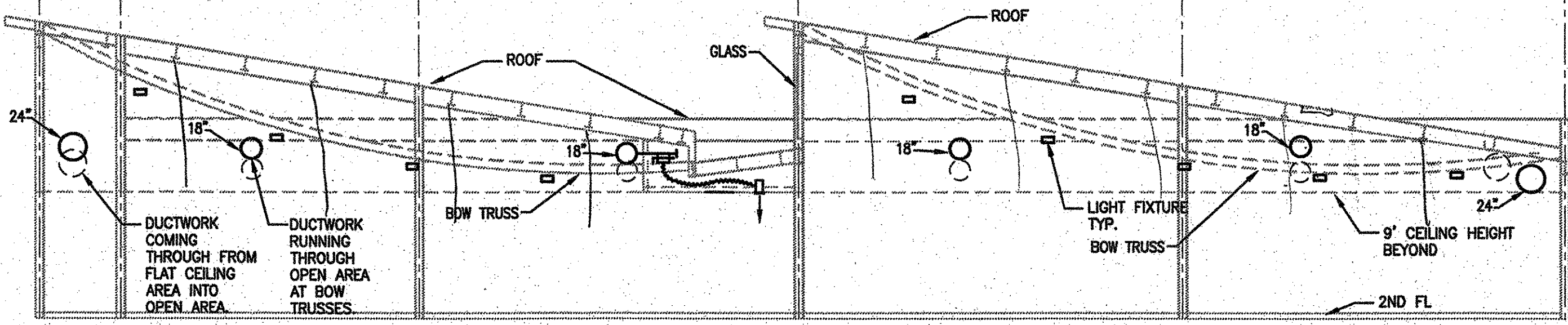
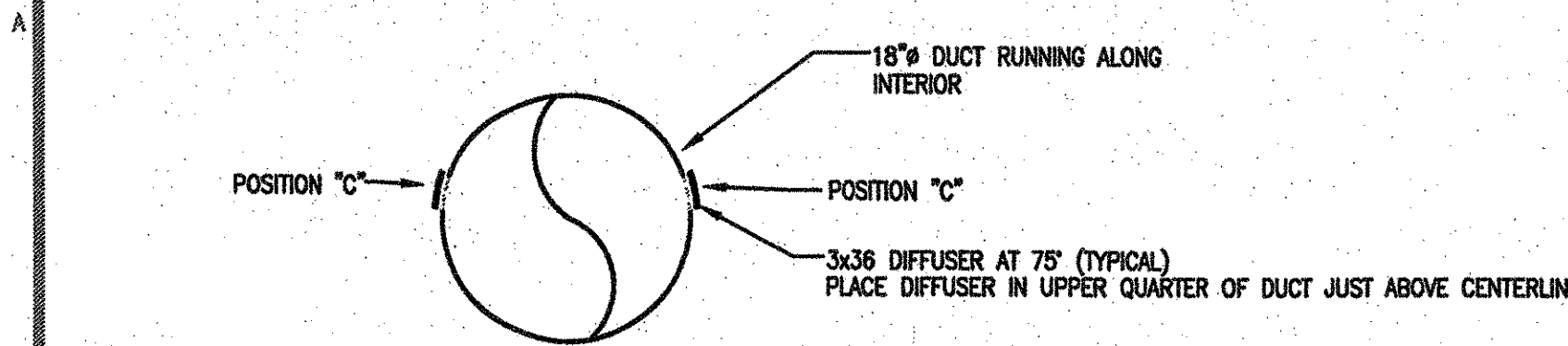
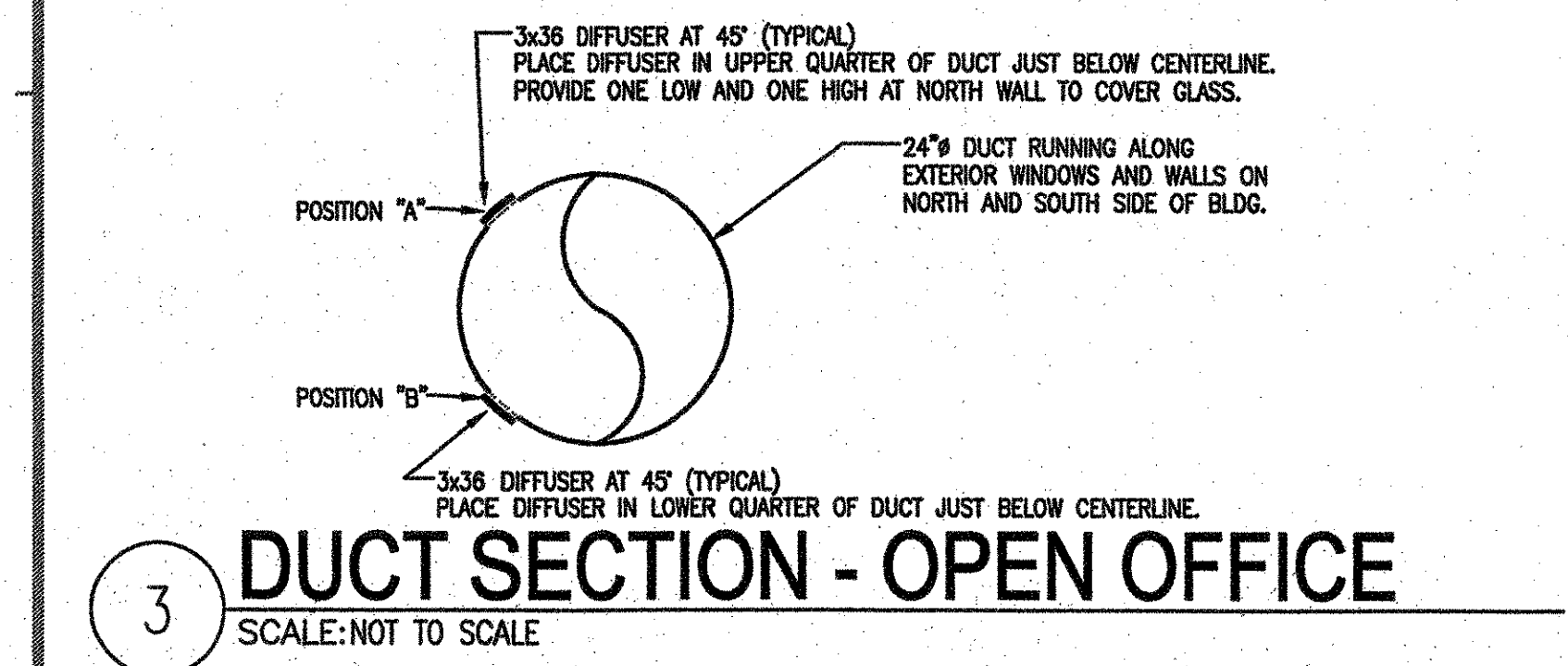
CLIENT  
**Mobile Airport  
Authority**  
1801 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TENANT  
**Airbus North America  
Holdings, Inc.**  
188 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486



**1 UPPER LEVEL PLAN - MECHANICAL**  
SCALE: 1/8" = 1'-0"

- 1 PROVIDE 6x6 DUCT OPENING WITH BALANCING DAMPER AND WMS, TO PULL EXHAUST THROUGH CEILING OPENING. SEE ARCHITECTURAL DETAIL OF SOFFIT IN THIS AREA.
- 2 PROVIDE A 3/4" I.C.
- 3 PROVIDE 6x4 DUCT SUPPLY OPENING WITH BALANCING DAMPER WHERE DUCTED AND WMS. SEE ARCHITECTURAL DETAIL OF SOFFIT. NO DAMPERS ARE REQUIRED FOR TRANSFER AIR OPENINGS.
- 4 PROVIDE DUCT OPENING IN SOFFIT. SEE ARCHITECTURAL DETAIL OF SOFFIT IN THIS AREA.
- 5 PROVIDE DUCT OPENING WITH BALANCING DAMPER IN SOFFIT. SEE ARCHITECTURAL DETAIL OF SOFFIT IN THIS AREA.
- 6 RUN REFRIGERANT LINES TO ACCU CONDENSING UNITS ON ROOF.



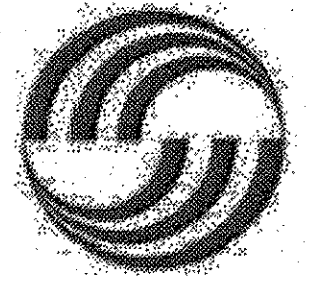
**2 DUCT SECTION - WEST END**  
SCALE: 1/8" = 1'-0"

Revisions	
ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06
ADDITION #2 INTERIOR CLARIFICATIONS	05.03.06
ADDITION #10 FIRE/SMOKE TIER/TRANSFERS	08.23.06

NO.	ISSUE	DATE
<b>Sheet Information</b>		
Date	03/27/2006	
Job Number	25069	
Drawn		
Checked		
Approved		

UPPER LEVEL  
MECHANICAL  
PLAN RECEIVED  
AUG 31 2006  
HOAR CONSTRUCTION OFFICE



**AIRBUS**

**Engineering  
Center**

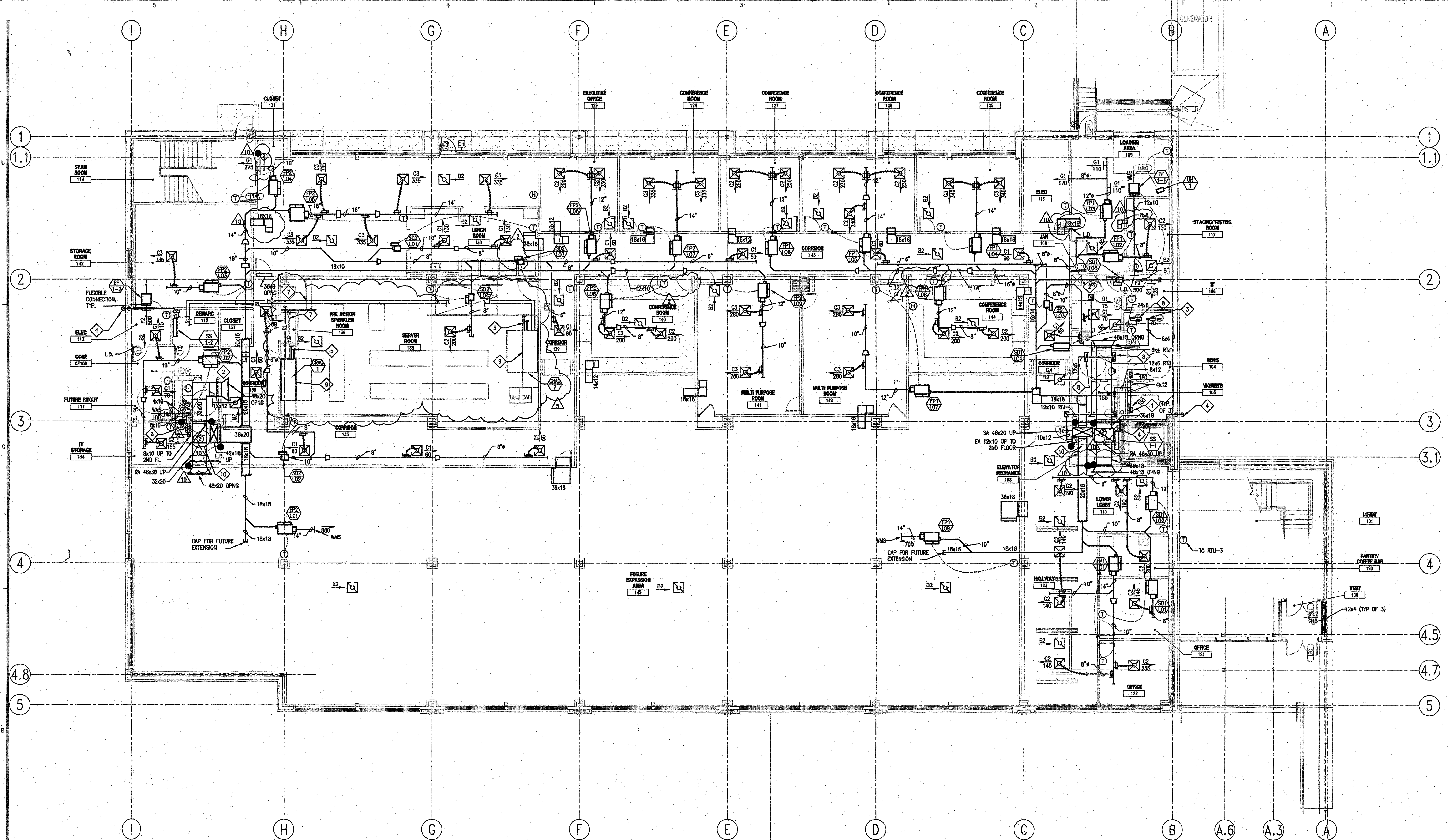
1801 S. Broad St., Mobile, AL 36615

CLIENT  
**Mobile Airport  
Authority**

1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TENANT  
**Airbus North America  
Holdings, Inc.**

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486



**1 LOWER LEVEL PLAN - MECHANICAL**  
SCALE: 1/8" = 1'-0"

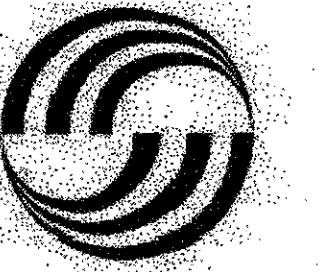
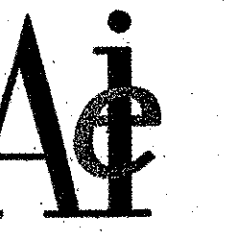
- 1 PROVIDE 6x6 DUCT OPENING WITH BALANCING DAMPER, TO PULL EXHAUST THROUGH CEILING OPENING.
- 2 PROVIDE A 3/4" U.C.
- 3 PROVIDE 6x4 DUCT OPENING WITH BALANCING DAMPER IN SOFFIT. SEE ARCHITECTURAL DETAIL OF SOFFIT IN THIS AREA.
- 4 3/4" COND. DRAIN TURN OUT 6" ABOVE FINISHED GRADE. PROVIDE GRAVEL BELOW DRAIN 3" DEEP, UNLESS AREA IS DESIGNATED MULCHED PLANTING AREA. SLOPE DRAIN LINE IN WALL MIN. 1/8" PER FT.
- 5 ROUTE 1/2" CONDENSATE DRAINS FROM AIR CONDITIONING UNIT TO NEAREST FLOOR DRAIN.
- 6 REFRIGERATION PIPING UP TO CONDENSER ON ROOF, TYP.
- 7 ROUTE REFRIGERATION PIPING TO IT STORAGE ROOM, AND TURN UP TO ROOF.
- 8 PROVIDE DUCT OPENING IN SOFFIT. SEE ARCHITECTURAL DETAIL OF SOFFIT IN THIS AREA.
- 9 COORDINATE LOCATION OF CRAC UNITS WITH SERVER EQUIPMENT LOCATION BEFORE PLACEMENT.
- 10 LOCATE FIRE DAMPER IN FIRE RATED WALL, TYP.

Revisions	
ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06
ADDITIONAL REV	05.03.06
REVISIONS	08.08.06
REVISIONS	08.23.06

NO.	ISSUE	DATE

**Sheet Information**  
Date: 03/27/2006  
Job Number: 25069  
Drawn: \_\_\_\_\_  
Checked: \_\_\_\_\_  
Approved: \_\_\_\_\_

LOWER LEVEL  
MECHANICAL  
PLAN  
RECEIVED  
31 2006



**AIRBUS**

**Engineering  
Center**

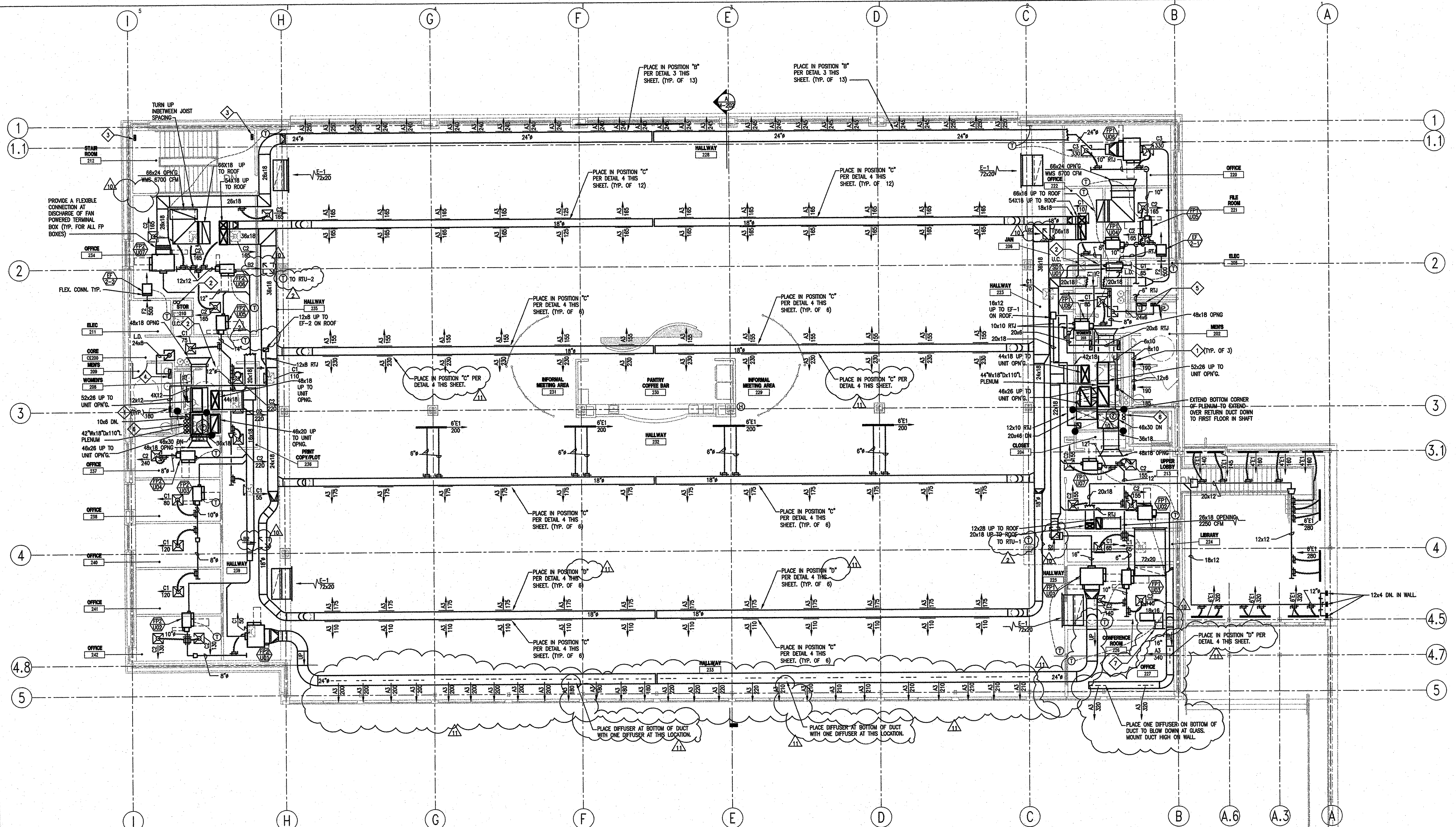
1801 S. Broad St., Mobile, AL 36615

CLIENT  
**Mobile Airport  
Authority**

1801 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

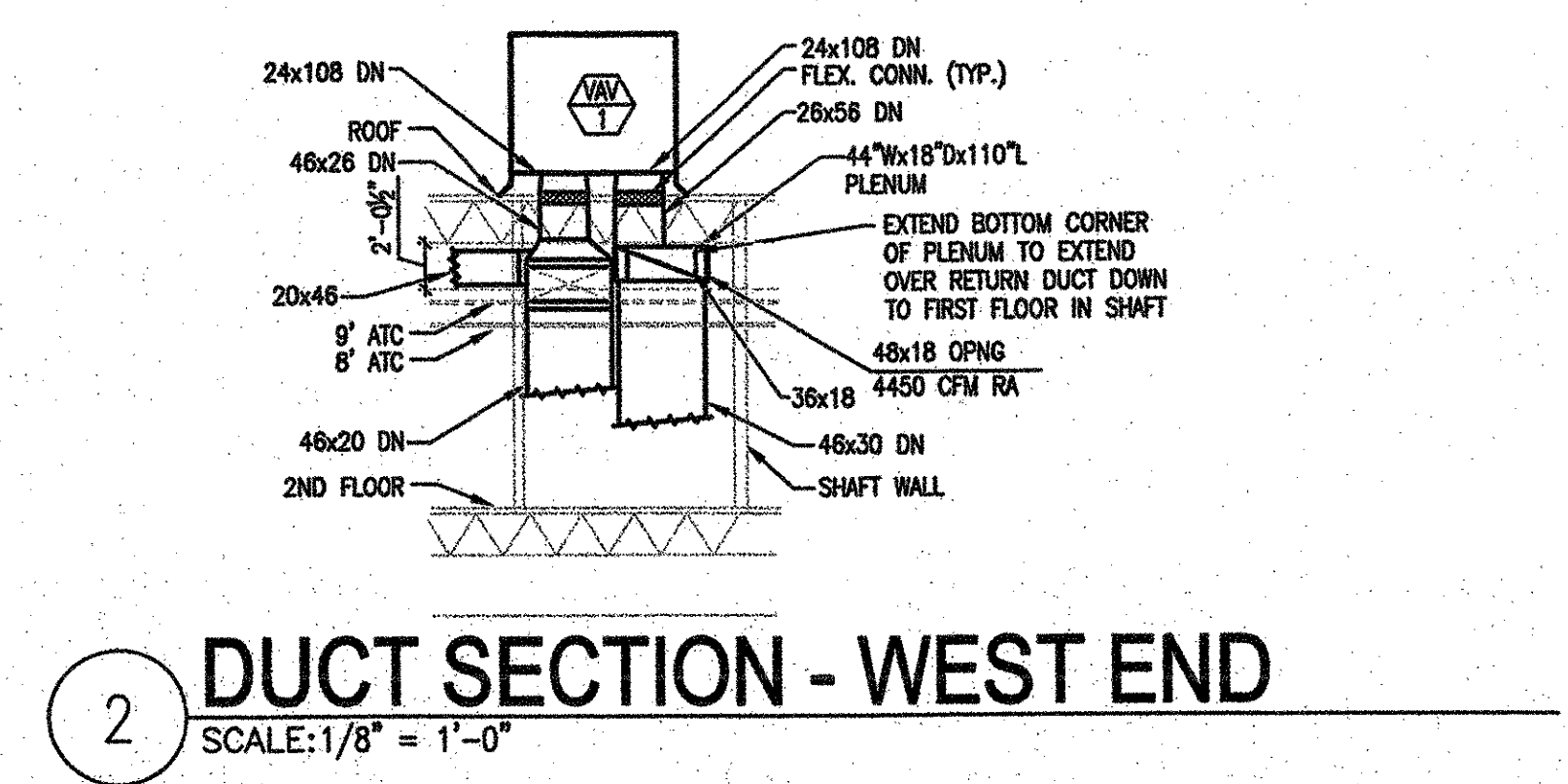
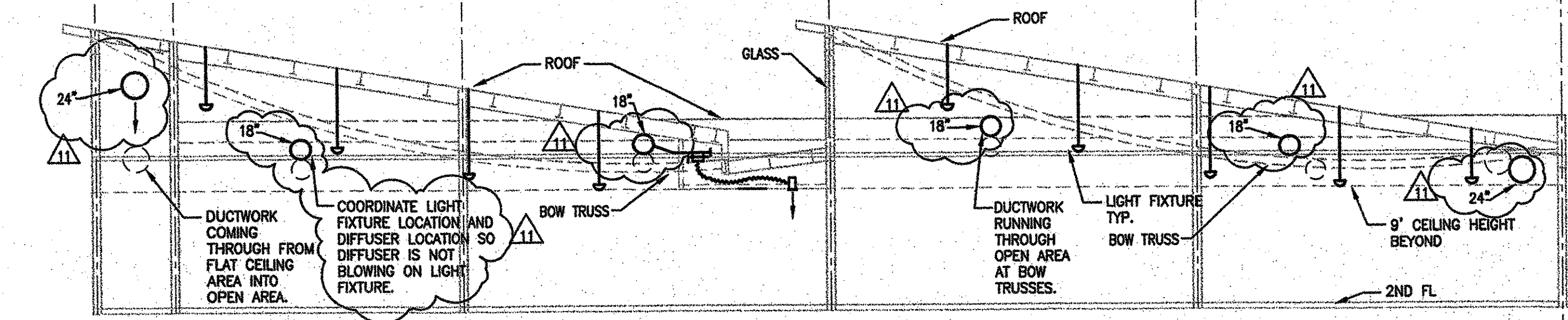
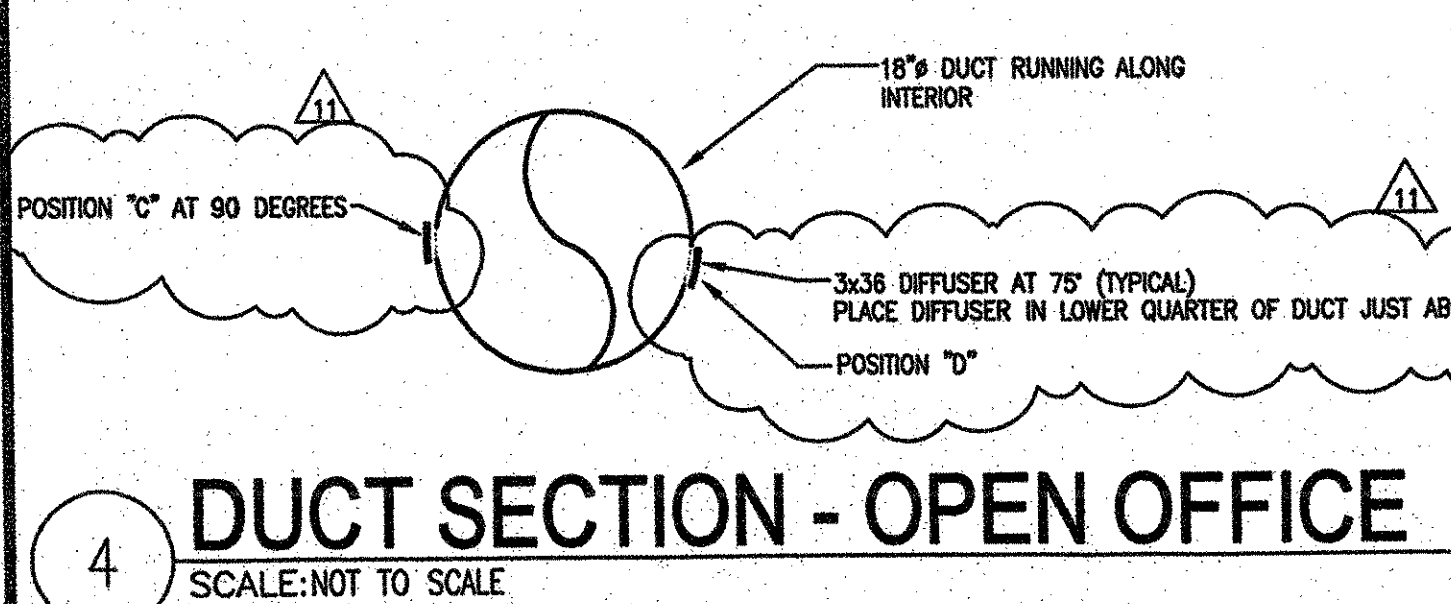
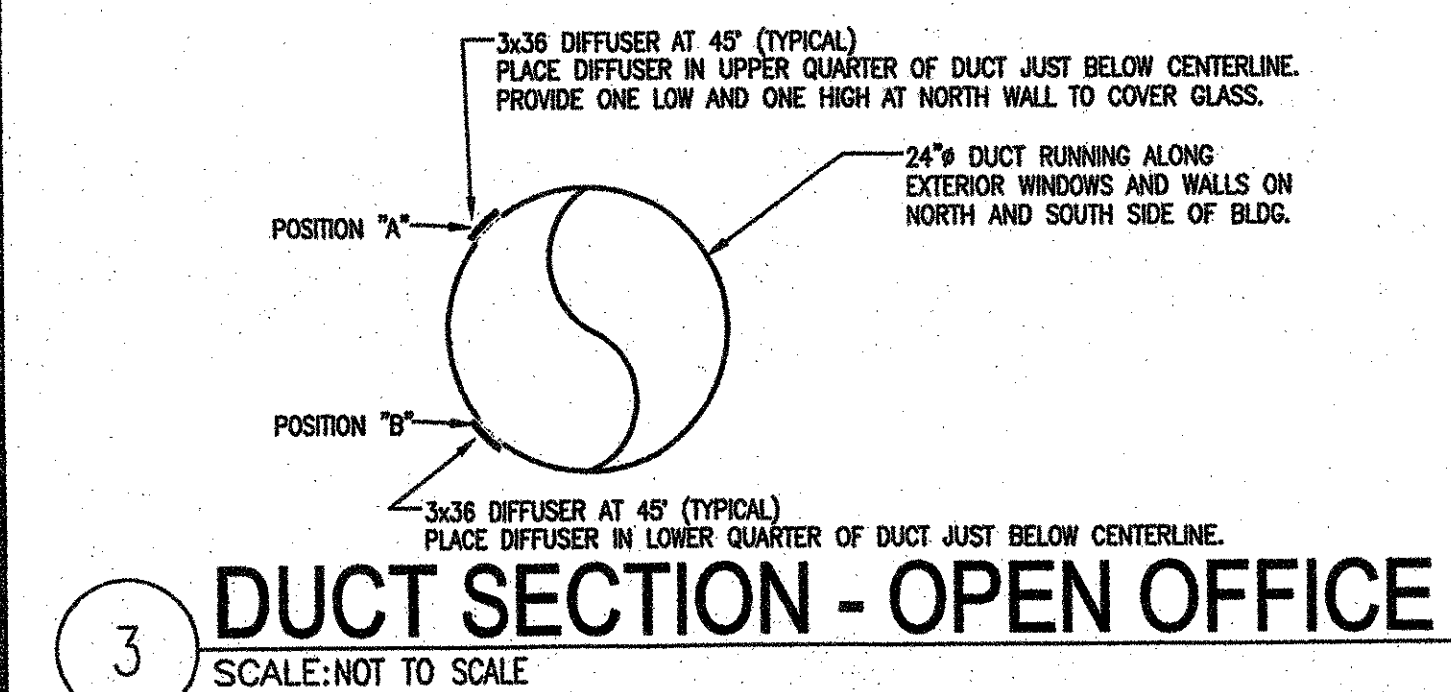
TENANT  
**Airbus North America  
Holdings, Inc.**

188 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.634.3486



**1 UPPER LEVEL PLAN - MECHANICAL**  
SCALE: 1/8" = 1'-0"

- 1 PROVIDE 6x8 DUCT OPENING WITH BALANCING DAMPER AND VMS, TO PULL EXHAUST THROUGH CEILING OPENING. SEE ARCHITECTURAL DETAIL OF SOFFIT IN THIS AREA.
- 2 PROVIDE A 3/4" U.C.
- 3 PROVIDE 8x4 DUCT SUPPLY OPENING WITH BALANCING DAMPER WHERE DUCTED AND VMS, SEE ARCHITECTURAL DETAIL OF SOFFIT. NO DAMPERS ARE REQUIRED FOR TRANSFER AIR OPENINGS.
- 4 PROVIDE DUCT OPENING IN SOFFIT. SEE ARCHITECTURAL DETAIL OF SOFFIT IN THIS AREA.
- 5 PROVIDE DUCT OPENING WITH BALANCING DAMPER IN SOFFIT. SEE ARCHITECTURAL DETAIL OF SOFFIT IN THIS AREA.
- 6 RUN REFRIGERANT LINES TO ACCU CONDENSING UNITS ON ROOF.
- 7 PROVIDE GRILLE EQUAL TO G-1 TYPE GRILLE WITH 18x16 NECK SIZE.



**Revisions**

ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06
PROVISION FOR INTERIOR CLASSIFICATIONS	05.03.06
BULLETIN #10	08.23.06
BULLETIN #11	09.25.06

**Sheet Information**

NO.	ISSUE	DATE

Date: 03/27/2006  
Job Number: 25069  
Drawn:  
Checked:  
Approved:

UPPER LEVEL  
MECHANICAL  
PLAN



**AIRBUS**

**Engineering  
Center**

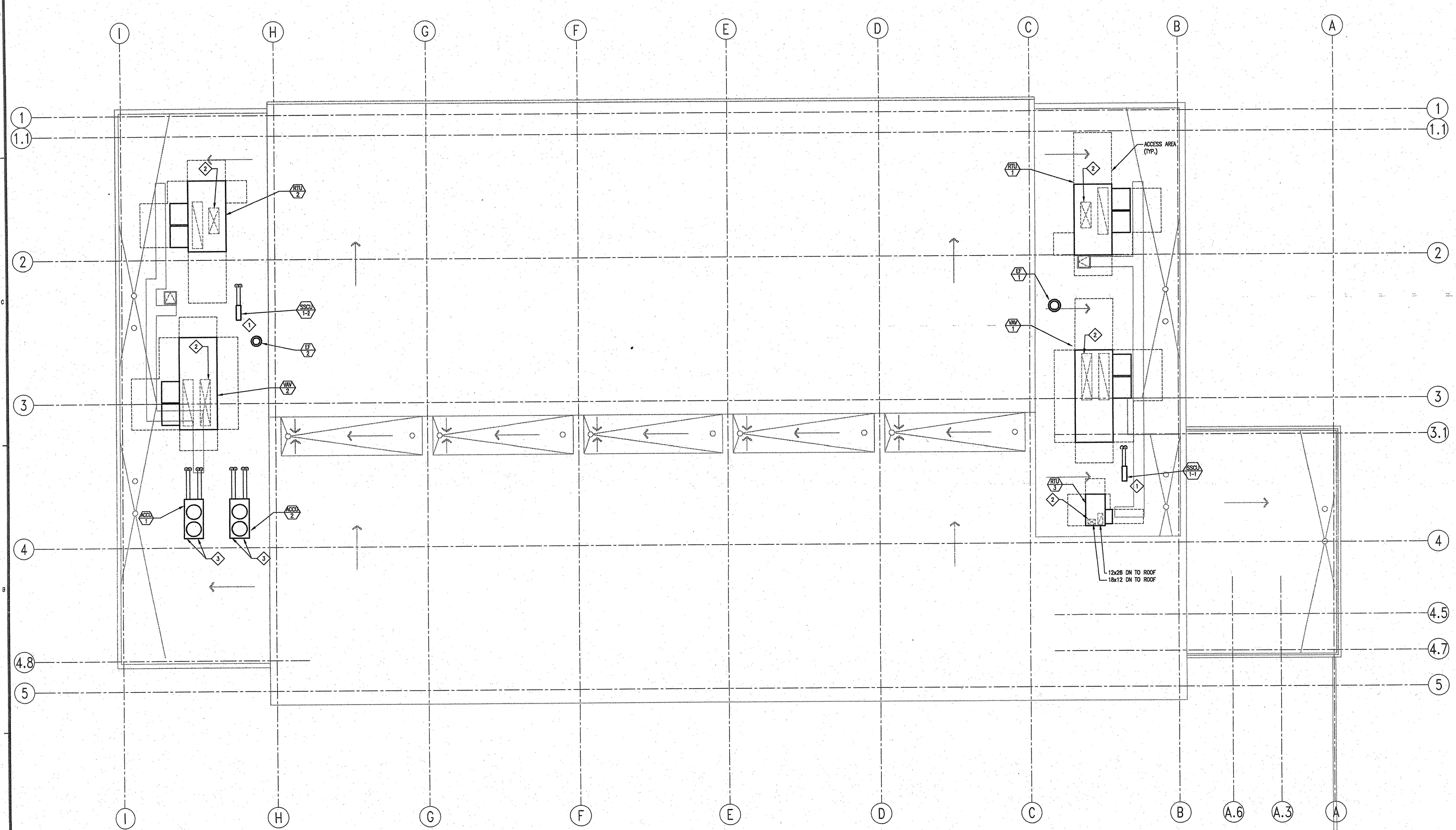
1801 S. Broad St., Mobile, AL 36615

CLIENT  
**Mobile Airport  
Authority**

1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TENANT  
**Airbus North America  
Holdings, Inc.**

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486



**1 ROOF PLAN - MECHANICAL**  
SCALE: 1/8" = 1'-0"

- KEY NOTES**
- 1 1/4" R.L. AND 3/8" R.S. VERIFY LINE SIZES WITH MANUFACTURER FOR ACTUAL LENGTH AND ROUTING OF LINES.
  - 2 PROVIDE SHORT RADIUS ELBOW OR IF NOT SUFFICIENT SPACE A SQUARE ELBOW WITHOUT VANES AT THE FIRST ELBOW OFF OF THE UNIT DISCHARGE TO HELP REDUCE NOISE IN THE OFFICE SPACE BELOW.
  - 3 7/8" R.L. AND 1 1/8" HOT GAS. VERIFY LINE SIZES WITH MANUFACTURER FOR ACTUAL LENGTH AND ROUTING OF LINES.

Revisions	
ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06

Sheet Information	
Date	03/27/2006
Job Number	25069
Drawn	
Checked	
Approved	

ROOF PLAN  
MECHANICAL

Sheet

M-203

**Revisions**

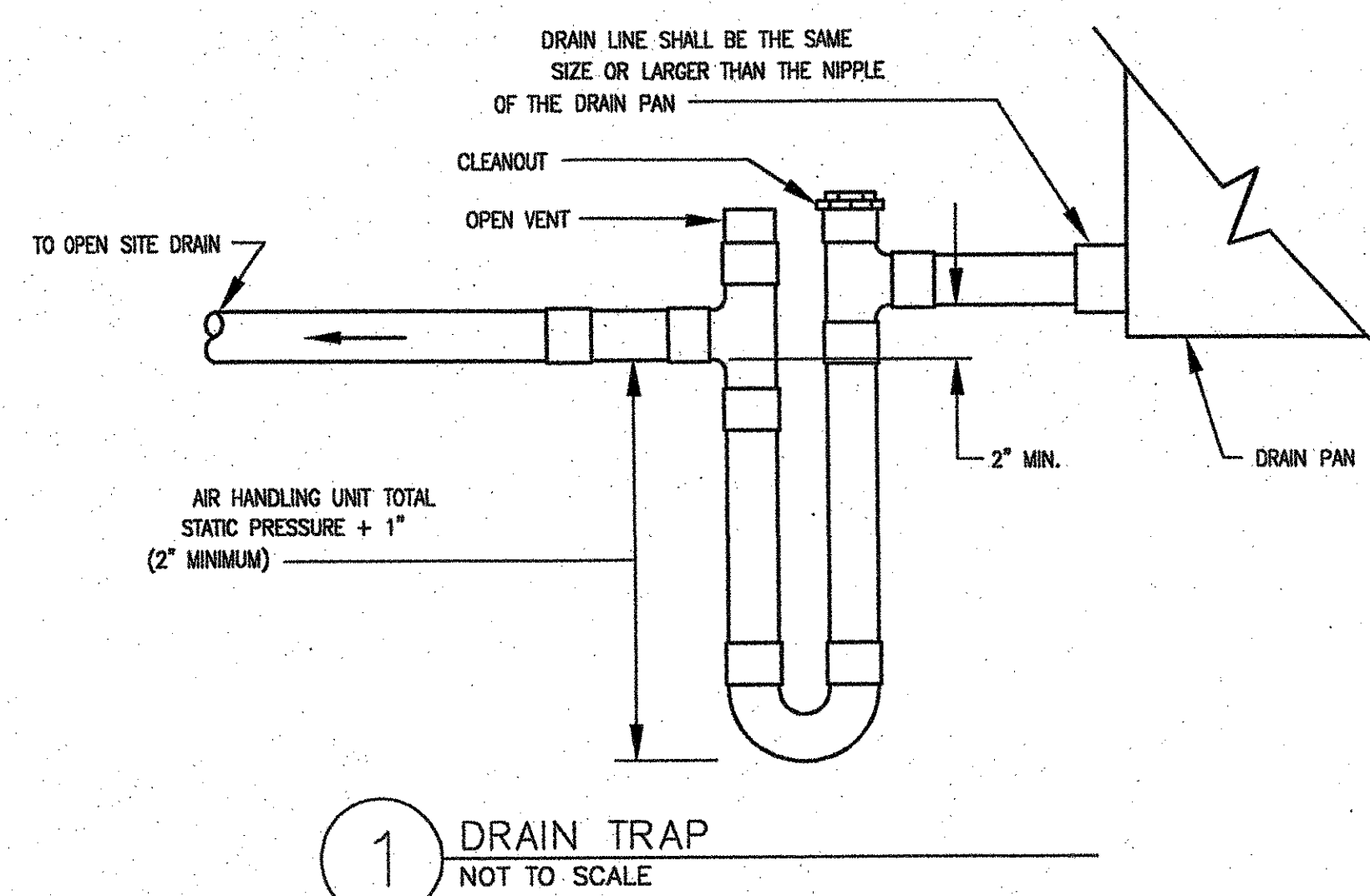
ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06

NO.	ISSUE	DATE
<b>Sheet Information</b>		
Date	03/27/2006	
Job Number	25069	
Drawn		
Checked		
Approved		

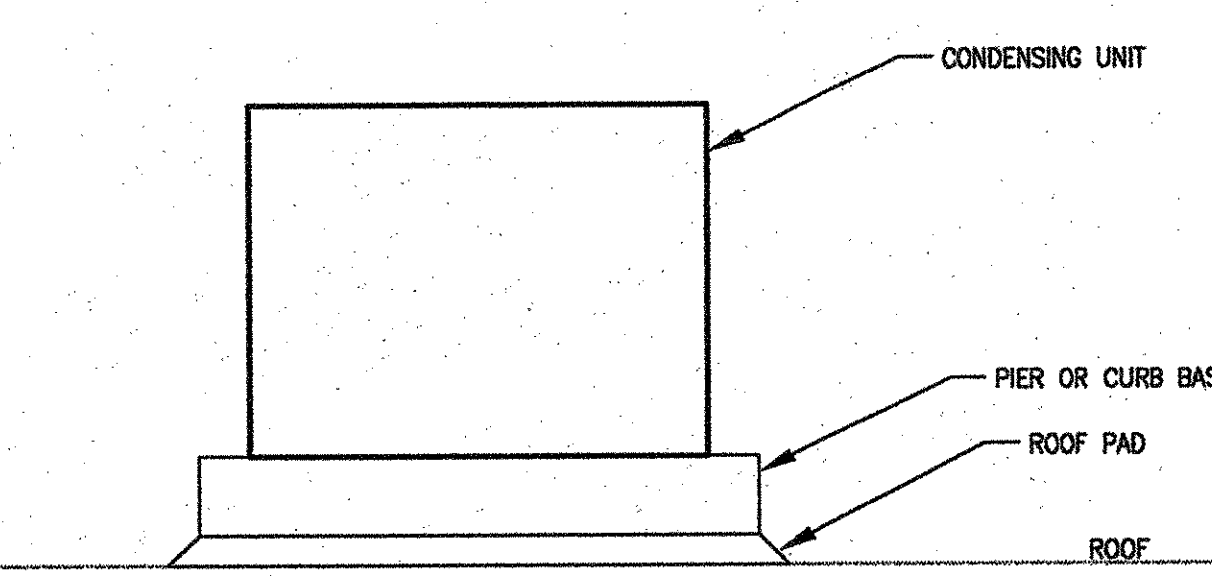
DETAILS  
MECHANICAL

Sheet

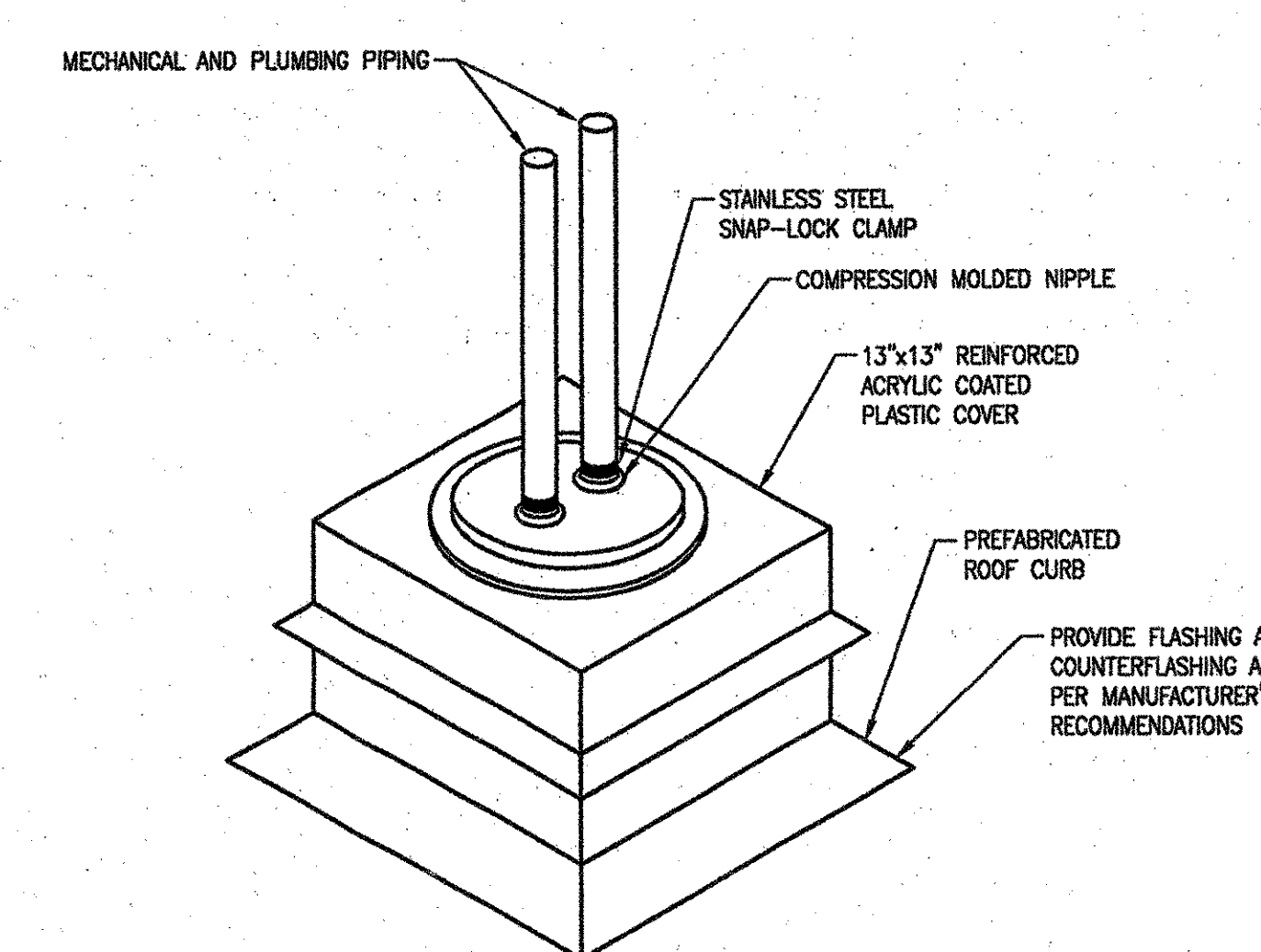
M-701



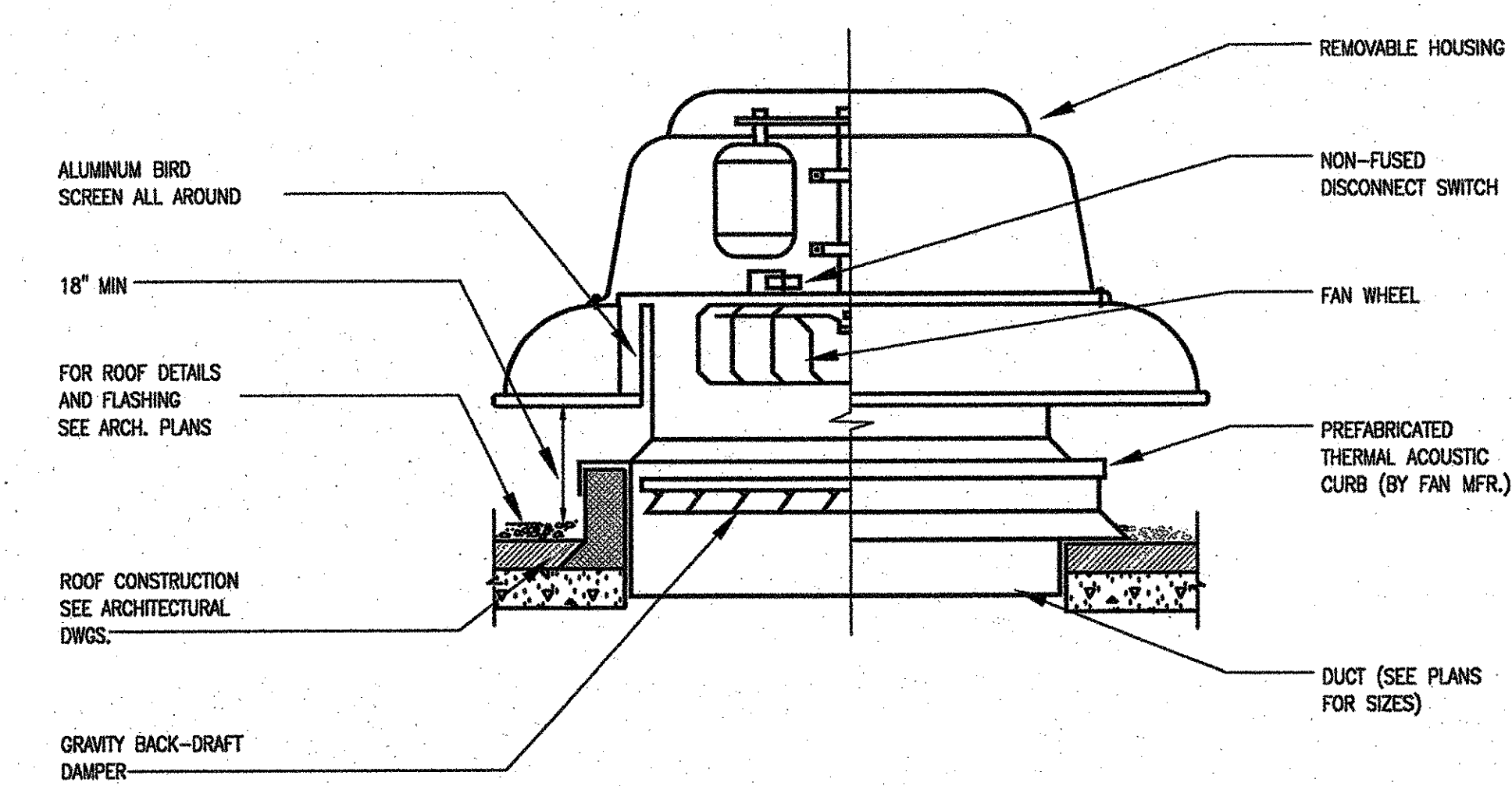
1 DRAIN TRAP  
NOT TO SCALE



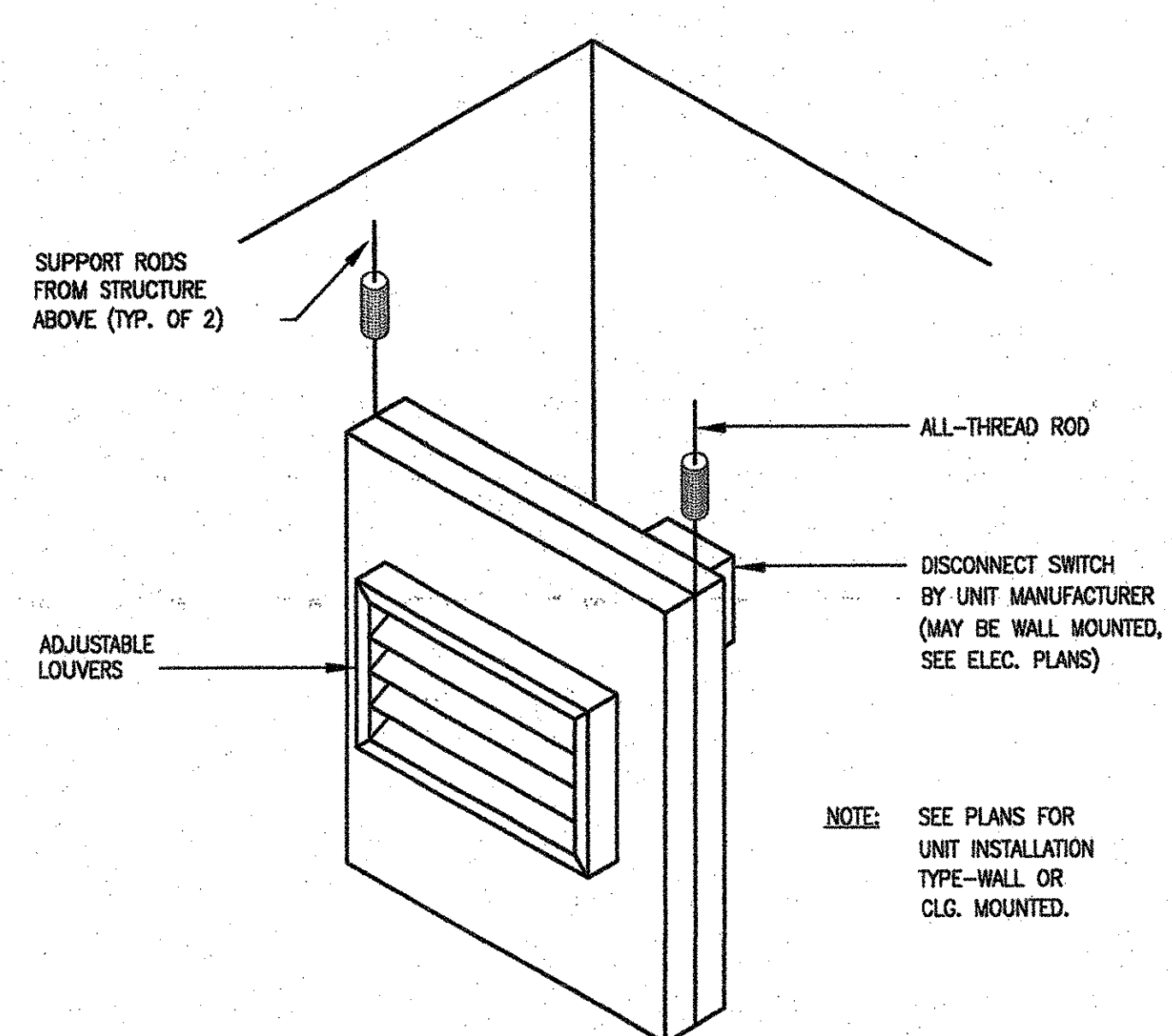
2 CU MOUNTING DETAIL  
SCALE: NTS



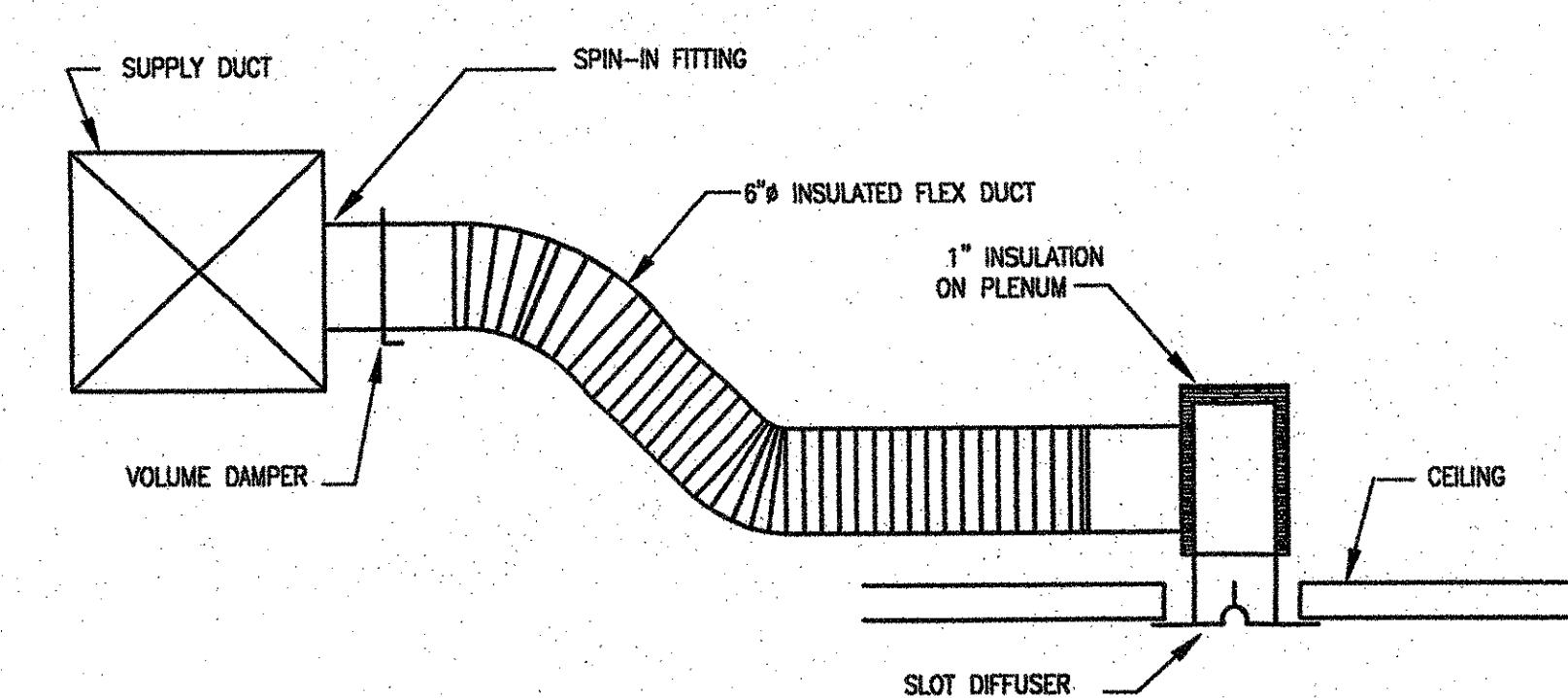
3 PIPE PORTAL  
NOT TO SCALE



4 ROOF VENTILATOR DETAIL  
NOT TO SCALE

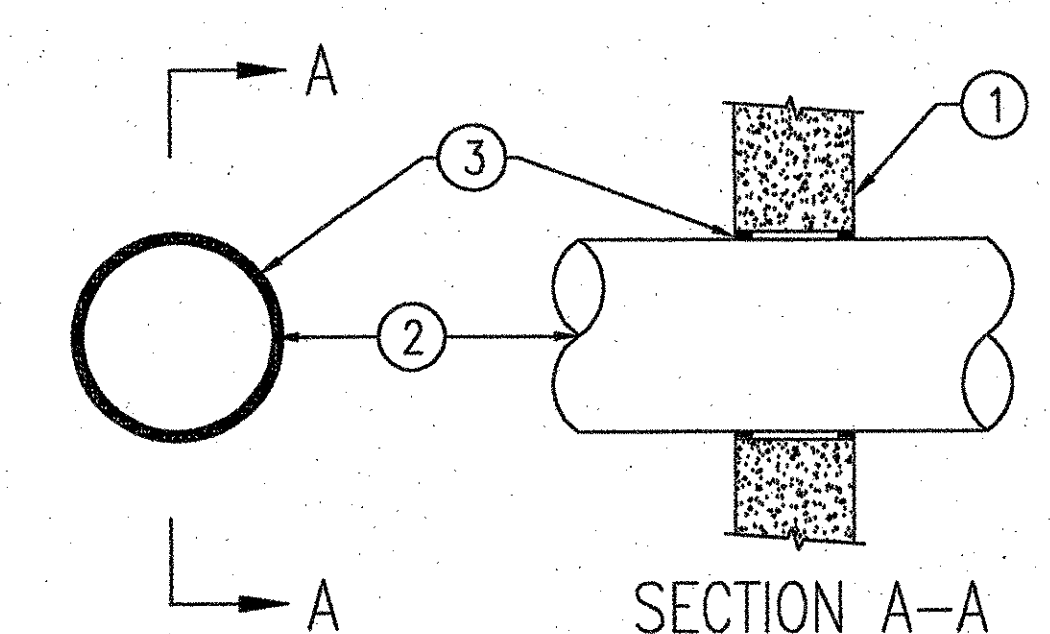


5 UNIT HEATER, CEILING-HUNG HORIZONTAL BLOW  
NOT TO SCALE



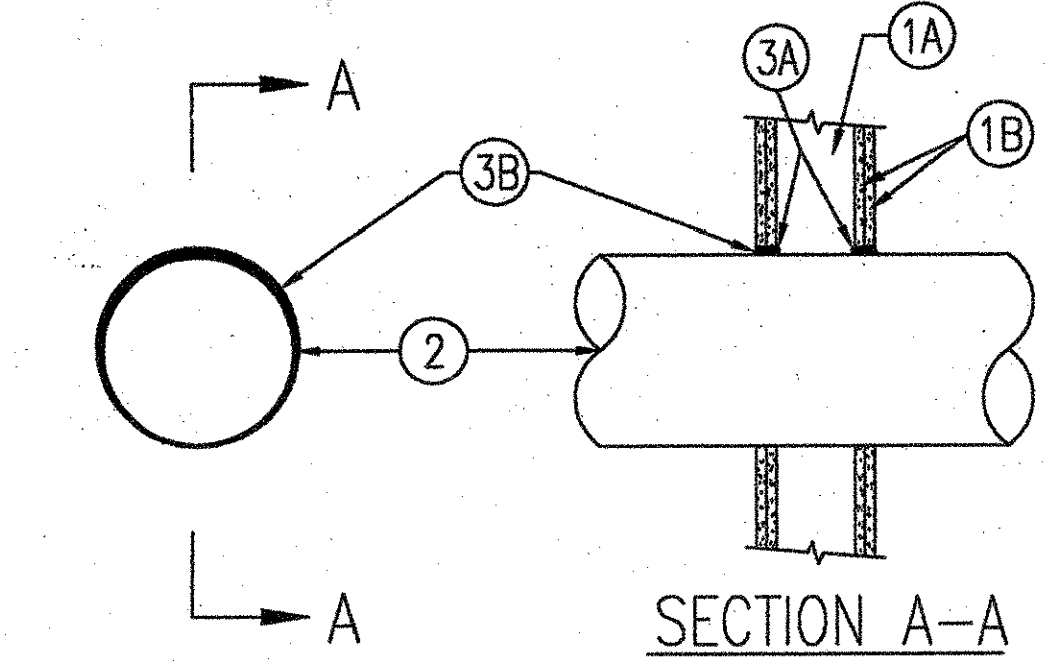
8 LINEAR DIFFUSER INSTALLATION DETAIL  
NOT TO SCALE

SYSTEM NO. W-J-1042  
F RATINGS - 4 HR  
T RATING - 0 HR

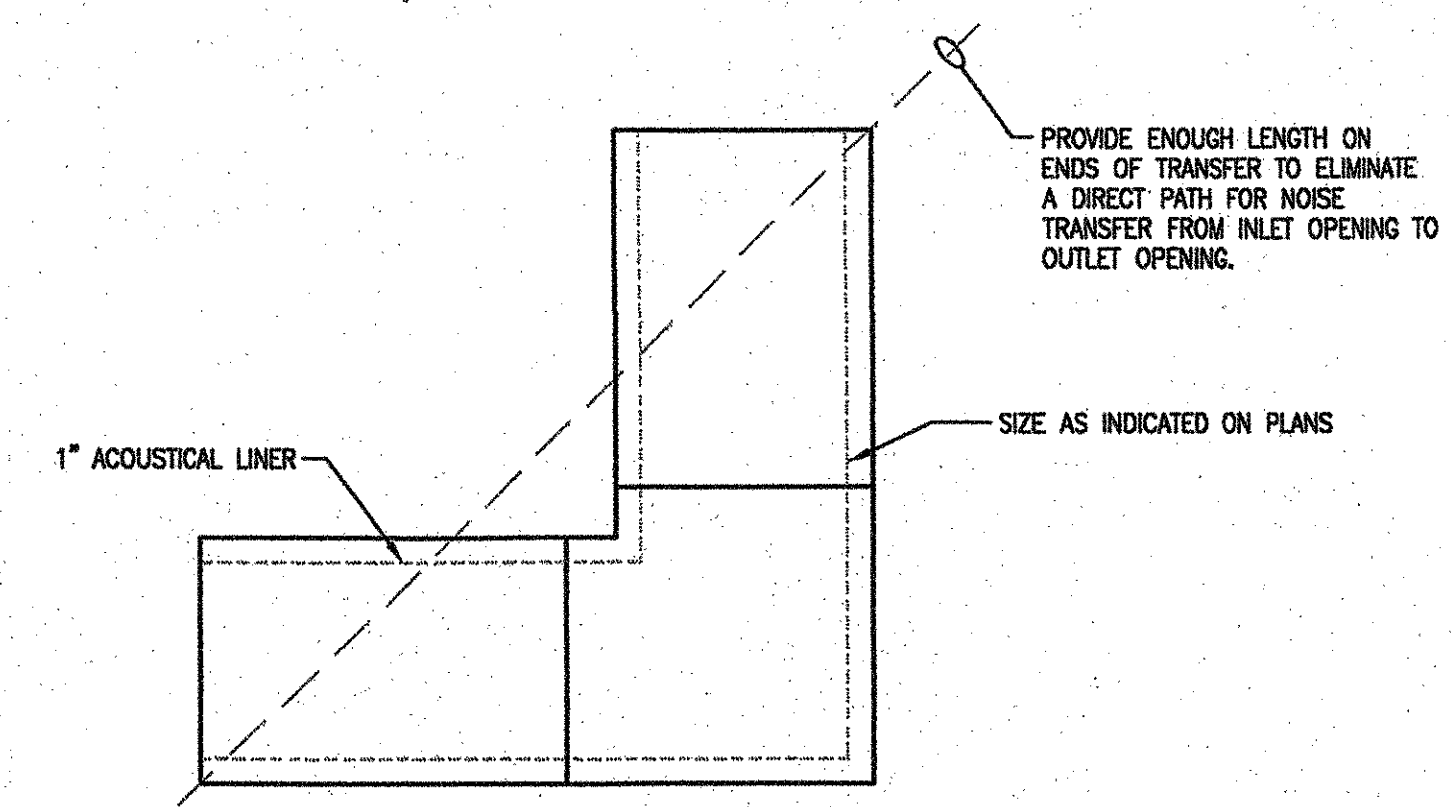


6 FIRE PENETRATION DETAIL - VERIFY & INSTALL PER MANUFACTURES RECOMMANDATIONS  
NOT TO SCALE

SYSTEM NO. W-L-1158  
F RATINGS - 1 AND  
2 HR (SEE ITEM 1)  
T RATING - 1/4 HR



7 FIRE PENETRATION DETAIL - VERIFY & INSTALL PER MANUFACTURES RECOMMANDATIONS  
NOT TO SCALE



9 TRANSFER DUCT DETAIL  
NOT TO SCALE

UNIT NO.	PRIMARY AIR		INLET SIZE	MOTOR NO.	HP	FAN						ESP P.D.	REHEAT COIL			DISCHARGE SOUND POWER -DB							SMOKE DETECTOR	MANUFACTURER & MODEL NO.	REMARKS								
	CFM MAX	CFM MIN				V	PH	HZ	AMP	ELECTRICAL			OCTAVE BAND			OCTAVE BAND																	
	2	3								4	5		6	7	2	3	4	5	6	7													
FP1-L01	680	170	8	1	1/4	277	1	60	1.5	0.43	17	5	3	55.0	87	277	1	60	68	69	67	64	63	70	70	65	61	54	52	NO	CARRIER SERIES NO. 45J UNIT SIZE 3		
FP1-L02	150	90	6	1	1/10	277	1	60	0.7	0.5	7	2	3	55.0	101	277	1	60	55	558	59	54	49	45	62	63	58	49	45	41	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP1-L03	390	90	6	1	1/4	277	1	60	0.7	0.5	10	3	3	55.0	87	277	1	60	65	66	66	62	58	68	69	63	55	50	47	NO	CARRIER SERIES NO. 45J UNIT SIZE 3		
FP1-L04	680	170	8	1	1/4	277	1	60	1.5	0.5	17	5	3	55.0	85.7	277	1	60	67	66	67	64	62	60	69	69	63	58	52	49	NO	CARRIER SERIES NO. 45J UNIT SIZE 3	
FP1-L05	680	170	8	1	1/4	277	1	60	1.5	0.5	17	5	3	55.0	85.4	277	1	60	67	66	67	64	62	60	69	69	63	58	52	49	NO	CARRIER SERIES NO. 45J UNIT SIZE 3	
FP1-L06	500	90	6	1	1/10	277	1	60	0.7	0.6	14	4	3	55	88.4	277	1	60	63	59	61	56	53	51	65	64	59	52	47	43	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP1-L07	580	170	8	1	1/4	277	1	60	1.5	0.6	6	5	3	55	90.1	277	1	60	65	64	64	61	58	56	67	67	61	56	50	47	NO	CARRIER SERIES NO. 45J UNIT SIZE 3	
FP1-L08	400	90	6	1	1/10	277	1	60	0.7	0.45	3	3	3	55	86.4	277	1	60	65	66	66	62	58	56	68	69	63	55	50	47	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP1-L09	700	170	8	1	1/4	277	1	60	1.5	0.5	6	5	3	55	85.1	277	1	60	67	66	67	64	62	60	69	69	63	58	52	49	NO	CARRIER SERIES NO. 45J UNIT SIZE 3	
FP1-U01	2770	650	16	2	3/4	277	1	60	9.9	0.6	21	20	3	55	85.4	480	3	60	74	72	71	70	68	66	77	74	70	65	61	58	YES	CARRIER SERIES NO. 45J UNIT SIZE 7	
FP1-U02	980	170	8	1	1/4	277	1	60	2.1	0.6	6	7	3	55	85.8	277	1	60	66	67	68	66	63	61	65	61	55	48	45	NO	CARRIER SERIES NO. 45J UNIT SIZE 4		
FP1-U03	280	90	6	1	1/10	277	1	60	0.7	0.3	4	3	3	55	95.6	277	1	60	59	61	61	57	53	49	65	65	60	51	47	44	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP1-U04	400	90	6	1	1/10	277	1	60	0.7	0.45	3	3	3	55	86.4	277	1	60	65	66	66	62	58	56	68	69	63	55	50	47	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP1-U05	680	170	8	1	1/4	277	1	60	1.5	0.58	6	5	3	55	87.5	277	1	60	67	66	67	64	62	60	69	69	63	58	52	49	NO	CARRIER SERIES NO. 45J UNIT SIZE 3	
FP1-U06	3250	650	16	2	3/4	277	1	60	9.9	0.6	22	23	3	55	85.6	480	3	60	77	76	75	75	72	71	79	77	72	68	64	61	YES	CARRIER SERIES NO. 45J UNIT SIZE 7	
FP1-U07	750	170	8	1	1/4	277	1	60	1.5	0.47	6	6	3	55	89	277	1	60	67	66	67	64	62	60	70	70	65	61	54	52	NO	CARRIER SERIES NO. 45J UNIT SIZE 3	
FP1-U08	265	90	6	1	1/10	277	1	60	0.7	0.6	3	2	3	55	85.4	277	1	60	59	61	61	57	53	49	65	65	60	51	47	44	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP2-L01	880	170	8	1	1/4	277	1	60	1.5	0.6	5	5	3	55	81	277	1	60	69	71	71	69	67	66	72	72	66	62	58	54	NO	CARRIER SERIES NO. 45J UNIT SIZE 3	
FP2-L02	340	90	6	1	1/10	277	1	60	0.7	0.6	4	3	3	55	91	277	1	60	62	63	64	59	58	53	67	67	61	53	49	45	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP2-L03	335	90	6	1	1/10	277	1	60	0.7	0.6	3	3	3	55	90.6	277	1	60	62	63	64	59	58	53	67	67	61	53	49	45	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP2-L04	275	90	6	1	1/10	277	1	60	0.7	0.6	4	3	3	55	92.2	277	1	60	59	61	61	57	53	49	65	65	60	51	47	44	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP2-L05	1675	360	12	1	3/4	277	1	60	3.5	0.6	12	12	3	55	85.4	480	3	60	74	73	72	71	70	69	77	73	66	59	55	52	NO	CARRIER SERIES NO. 45J UNIT SIZE 6	
FP2-L06	500	90	8	1	1/4	277	1	60	1.5	0.6	3	4	3	55	88.4	277	1	60	63	59	61	56	53	51	65	64	59	52	47	43	NO	CARRIER SERIES NO. 45J UNIT SIZE 3	
FP2-L07	670	170	8	1	1/4	277	1	60	1.5	0.6	6	5	3	55	87.2	277	1	60	67	66	67	64	62	60	69	69	63	58	52	49	NO	CARRIER SERIES NO. 45J UNIT SIZE 3	
FP2-L08	400	90	6	1	1/10	277	1	60	0.7	0.6	3	3	3	55	86.4	277	1	60	65	66	66	62	58	56	69	69	63	58	52	49	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP2-L09	560	170	8	1	1/4	277	1	60	1.5	0.6	6	4	3	55	85.9	277	1	60	65	64	64	61	58	56	67	67	61	56	50	47	NO	CARRIER SERIES NO. 45J UNIT SIZE 3	
FP2-U01	2520	500	16	2	3/4	277	1	60	9.9	0.6	17	18	3	55	85.5	480	3	60	75	72	71	70	68	66	76	73	69	64	60	57	YES	CARRIER SERIES NO. 45J UNIT SIZE 7	
FP2-U02	310	90	6	1	1/10	277	1	60	0.7	0.6	4	3	3	55	92.6	277	1	60	59	61	61	57	53	49	65	65	60	51	47	44	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP2-U03	320	90	6	1	1/10	277	1	60	0.7	0.6	4	3	3	55	91.8	277	1	60	59	61	61	57	53	49	67	67	61	53	49	45	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP2-U04	240	90	6	1	1/10	277	1	60	0.7	0.6	3	2	3	55	87.5	277	1	60	55	58	59	54	49	45	62	63	58	49	45	41	NO	CARRIER SERIES NO. 45J UNIT SIZE 2	
FP2-U05	900	170	10	1	1/4	277	1	60	1.5	0.6	6	6	3	55	86.1	277	1	60	69	71	71	69	67	66	72	72	66	62	58	54	NO	CARRIER SERIES NO. 45J UNIT SIZE 4	
FP2-U06	660	170	8	1	1/4	277	1	60	1.5	0.6	6	5	3	55	87.5	277	1	60	67	66	67	64	62	60	69	69	63	58	52	49	NO	CARRIER SERIES NO. 45J UNIT SIZE 3	
FP2-U07	3250	650	16	2	3/4	277	1	60	9.9	0.6	22	23	3	55	85.5	480	3	60	77	76	75	75	72	71	79	77	72	68	64	61	YES	CARRIER SERIES NO. 45J UNIT SIZE 7	

1. PROVIDE WITH DISCONNECT.

UNIT NO.	NOMINAL TONS	SUPPLY FAN CFM ESP HP	OA CFM	COOLING COIL		HEAT PUMP HTG		ELECTRICAL HEATING COIL			RELIEF TYPE	COND. FAN		COMPRESSOR		OUTSIDE SOUND POWER LEVEL							SMOKE DETECTOR	MANUFACTURER & MODEL NO.	WEIGHT LBS	REMARKS										
				CFM	HP	BTUH TOTAL	BTUH INTD	DEF F	CAPACITY MBH	KW		STEPS	NO	HP	NO	FLA (CA)	HP	MCA	MCOFP	V	PH	HZ					2	3	4	5	6	7				
				1	2	3	4	5	6	7		8	9	10	11	12	13	14	15	16	17	18					19	20	21	22	23	24	25			
RTU 1	20	7450	1.5	10	1175	78.3	64.7	175.6	218.9	123.2	123.2	82.7	90.7	36	1	EXH FAN 23.6	2	1	1	17.8	--	126.2	150	460	3	60	96	94	93	93	91	86	Y	CARRIER SOEJQ24	4600	SEE NOTES
RTU 2	20	7450	1.5	10	1175	78.1	64.4	178.9	224.2	123.1	123.1	82.9	95.2	36	1	EXH FAN 23.6	2	1	1	17.8	--	126.2	150	460	3	60	96	94	93	93	91	86	Y	CARRIER SOEJQ24	4600	SEE NOTES
RTU 3	5	2500	0.75	3	250	23.6	61.5	50.8	58.2	41.1	37.7	66.1	39.7	12.9	1	GRAVITY DAMPER	1	0.25	1	9.6	--	37	40	490	3	60	70	67	72	75	72	68	Y	CARRIER SOHJQ007H	800	SEE NOTES
VW 1	40	14800	2.86	20	3350	78.4	64	357	457	--	--	--	--	--	--	EXH FAN 12.6	4	1	2	13.5	--	118.8	125	480	3	60	97	96	96	94	89	89	Y	CARRIER SOAK040	6000	SEE NOTES
VW 2	40	14590	2.825	20	3210	78.9	64.1	360	456	--	--	--	--	--	--	EXH FAN 12.6	4	1	2	13.5	--	118.8	125	480	3	60	97	96	96	94	89	89	Y	CARRIER SOAK040	6000	SEE NOTES

NOTES:  
 1. PROVIDE INTEGRATED MICROPROCESSOR CONTROLS, ECONOMIZER CYCLE WITH COMPARATIVE ENTHALPIES AND 0-100% MODULATION.  
 2. PROVIDE WITH HINGED ACCESS DOORS, DISCONNECT SWITCH, CORROSION RESISTANT DRAIN PAN, CLOGGED FILTER AND FAN FAILURE, HIGH PRESSURE CUTOOUT, COMPRESSOR CYCLE DELAY.  
 3. CO2 CONTROL, SMOKE DETECTOR IN RETURN AHEAD OF FILTERS-OA AND RELIEF INTAKES, HOT GAS BYPASS, ROOF CURB.

UNIT NO.	NOMINAL TONS	AREA SERVED	SUPPLY FAN		COOLING COIL			AMBIENT HEATER			HUMIDIFIER		SMOKE DETECTOR	UNIT WEIGHT	MANUFACTURER & MODEL NO.								
			CFM	HP	NO.	ESP	EAT	BTUH SENS.	BTUH TOTAL	DEF F	KW	FLA				MCOFP							
			1	2	3	4	5	6	7	8	9	10				11	12						
CRAC 1	15	SERVER ROOM	8400	3	2	0.4	75/61	184500	184500	95	25	7.2	22	51.6	63.3	60	460	3	60	YES	1840	LIBERT DH199	
CRAC 2	15	SERVER ROOM	8400	3	2	0.4	75/61	184500	184500	95	25	7.2	22	51.6	63.3	60	460	3	60	YES	1840	LIBERT DH199	

1. PROVIDE THE FOLLOWING EQUIPMENT WITH EACH UNIT: CONDENSATE PUMP WITH CHECK VALVE, COORDINATE CONNECTION OF ALL SMOKE DETECTORS WITH FIRE ALARM SYSTEM.  
 2. PROVIDE UNIT WITH STANDARD FILTERS, 4 STEP DX, ADVANCED MICROPROCESSOR, ELECTRIC REHEAT, STEAM GENERATING HUMIDIFIER AND SMOKE DETECTOR.  
 3. PROVIDE UNIT WITH RAISED FLOOR STAND. VERIFY RAISED FLOOR HEIGHT.  
 4. PROVIDE INDOOR AND OUTDOOR UNIT WITH FACTORY MOUNTED DISCONNECT SWITCH.

UNIT NO.	NOMINAL TONS	AREA SERVED	SUPPLY FAN		COOLING COIL		AMBIENT HEATER		HUMIDIFIER		SMOKE DETECTOR	UNIT WEIGHT	MANUFACTURER & MODEL NO.
			CFM	HP	BTUH SENS.	BTUH TOTAL	DEF F	TEMP	HTR.				



GENERAL NOTES

- 1. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF THE ELECTRICAL EQUIPMENT... 2. THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF CIRCUITS AND OUTLETS... 3. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE BUILDING OWNER...

ELECTRICAL SYMBOL LEGEND

NOTE FOR ALL LIGHT FIXTURE AND SWITCH SYMBOLS: CAPITAL LETTER(S) NEAR FIXTURE SYMBOL INDICATES FIXTURE TYPE... FLOUORESCENT LIGHT FIXTURES, DOWN LIGHT FIXTURE, WALL WASH LIGHT FIXTURE, WALL MOUNTED LIGHT, INDUSTRIAL TYPE FLOURESCENT FIXTURE...

FIRE PROTECTION SYMBOLS

FIRE ALARM CONTROL PANEL, SMOKE DETECTOR, FIRE DAMPER CONNECTION, FIRE/SMOKE CONNECTION, MANUAL PULL STATION, COMBINATION AUDIBLE/VISUAL ALARM SIGNALING UNIT, STROBE, VALVE TAMPER SWITCH, PRESSURE SWITCH, REMOTE ANNUNCIATOR, DUCT SMOKE DETECTOR, SMOKE DAMPER CONNECTION, HEAT DETECTOR, ALARM BELL, WATER FLOW SWITCH, HORN/SPEAKER, SINGLE-STATION OR MULTI-STATION SMOKE DETECTOR

SYMBOLS - SECURITY

CCTV CAMERA, CCTV MONITOR, PUSH BUTTON, MAGNETIC LOCK, CARD READER, DUAL TECH MOTION SENSOR, ELECTRIC DEADBOLT, EXIT BUTTON, CCTV CAMERA WITH PAN/TILT/ZOOM CONTROL, SECURITY SYSTEM CONTROL PANEL, GLASS BREAK, ELECTRIC STRIKE, BALANCED MAGNETIC DOOR CONTACTS, KEYPAD, REQUEST-TO-EXIT, SPEAKER

ABBREVIATIONS

A AMPERE, AF AMPERE TRIP, AF AMPERE FRAME, AFF ABOVE FINISHED FLOOR, AWG AMERICAN WIRE GAGE, C CONDUIT, CB CIRCUIT BREAKER, CKT CIRCUIT, EC EMPTY CONDUIT, ESB ENERGY SAVING BALLAST, (E) EXISTING, FLA FULL LOAD AMPS, FSS FUSED SAFETY SWITCH, GFI, GFCI GROUND FAULT INTERRUPTER, GND GROUND, HP HORSEPOWER, HPF HIGH POWER FACTOR, IG ISOLATED GROUND, K KELVIN, KW KILOWATT, MCB MAIN CIRCUIT BREAKER, MH MOUNTING HEIGHT, MLD MAIN LUGS ONLY, MOPC MAXIMUM OVERCURRENT PROTECTION, MTC MOUNTING, N NEUTRAL, NFSS NON-FUSED SAFETY SWITCH, P POLE OR PHASE, PNL PANELBOARD, QTY QUANTITY, REC RECESSED, UNLESS OTHERWISE NOTED, UNO UNLESS OTHERWISE NOTED, V VOLTAGE/VOLTS, W WIRE OR WATTS, WP WEATHERPROOF, XFMR TRANSFORMER, (D) DEMOLITION, (ER) EXISTING TO REMAIN

EXISTING WORK SYMBOLS

EXISTING WORK TO BE REMOVED, EXISTING WORK TO REMAIN, NEW OR RELOCATED WORK, NEW WORK BURIED OR IN CONCRETE, FUTURE WORK OR WORK SHOWN ON OTHER DOCUMENTS

LIGHTING FIXTURE SCHEDULE

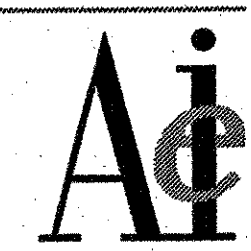
Table with columns: TYPE, DESCRIPTION, MANUFACTURER, CATALOG No., EQUIVALENT MANUFACTURERS, MOUNTING, VOLTAGE, QTY, LAMPS, TYPE, NOTES. Includes items like DOWNLIGHT, WALL BRACKET, RECESSED 2X2, SURFACE MOUNTED STRIP, etc.

- 1. PROVIDE TRIM AND ACCESSORIES SUITABLE FOR MOUNTING FIXTURES IN EACH LOCATION INDICATED ON PLANS... 2. PROVIDE POLE BASE PER DETAIL ON DRAWING E-601... 3. PROVIDE WITH ARROWS IF/AS INDICATED ON FLOOR PLANS FOR EACH LOCATION...

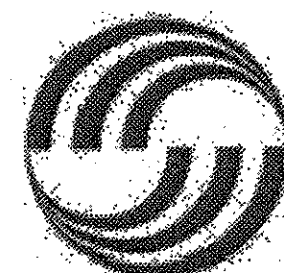
ELECTRICAL DRAWING INDEX

- E-001 SYMBOLS, ABBREVIATIONS, NOTES & SCHEDULES, E-101 ELECTRICAL SITE PLANS, E-201 POWER - LOWER LEVEL FLOOR PLAN, E-202 POWER - UPPER LEVEL FLOOR PLAN, E-203 POWER - ROOF PLAN, E-301 LIGHTING - LOWER LEVEL FLOOR PLAN, E-302 LIGHTING - UPPER LEVEL FLOOR PLAN, E-601 DETAILS, E-601 RISERS, E-901 SCHEDULES, E-902 SCHEDULES, E-903 SCHEDULES

200 N Street, NW, Suite 800, Washington, DC 20007, 202.297.7020, 202.228.8770, www.perkinswill.com



11620 Nucleus Road, Suite 110, Glen Allen, VA 22089-5607, Telephone 804.474.1800, Facsimile 804.474.6822



AIRBUS

Engineering Center

1801 S. Broad St., Mobile, AL 36615

CLIENT Mobile Airport Authority

1891 Ninth Street, Mobile, Alabama 36615, Brookley Airport Complex, T: 251.438.7334

OWNER Airbus North America

Holdings, Inc.

198 Van Buren Street, Herndon, VA 20170-6335, T: 703.834.3486

Revisions

Table with columns: REVISION, DATE. Includes rows for ISSUED FOR CLIENT REVIEW (01.11.06), DESIGN DEVELOPMENT (01.23.06), PERMIT SET (03.20.06), FOR CONSTRUCTION (03.27.06), and ADDENDUM TO INITIAL CONDITIONS (05.03.06).

Table with columns: NO., ISSUE, DATE. Includes rows for SHEET INFORMATION: Date (03/27/2006), Job Number (25069), Drawn, Checked, and Approved.

LEGEND, NOTES, SCHEDULES

Sheet

NONE

JLC E-001



**AIRBUS**

**Engineering  
Center**

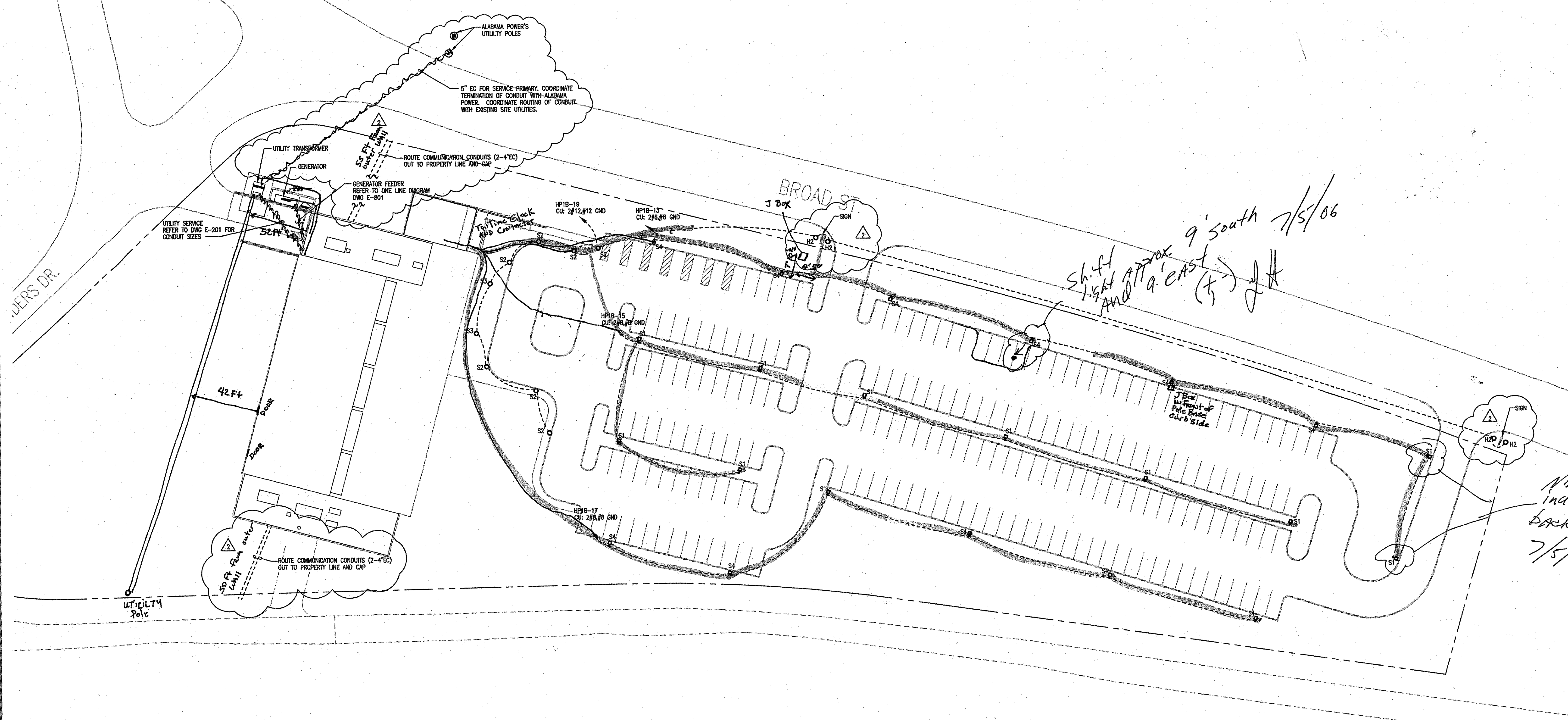
1801 S. Broad St., Mobile, AL 36615

CLIENT  
**Mobile Airport  
Authority**

1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TEAM  
**Airbus North America  
Holdings, Inc.**

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486



**1 SITE PLAN - LIGHTING**  
SCALE: 1" = 30'

Revisions	
ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06
ADDITIONAL REVISIONS	05.03.06

NO.	ISSUE	DATE
<b>Sheet Information</b>		
Date	03/27/2006	
Job Number	25069	
Drawn		
Checked		
Approved		
<b>Title</b>		

**POWER  
SITE PLAN**

Sheet  
**E-101**



Engineering  
Center

1801 S. Broad St., Mobile, AL 36615

CLIENT  
Mobile Airport  
Authority

1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TENANT  
Airbus North America  
Holdings, Inc.

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486

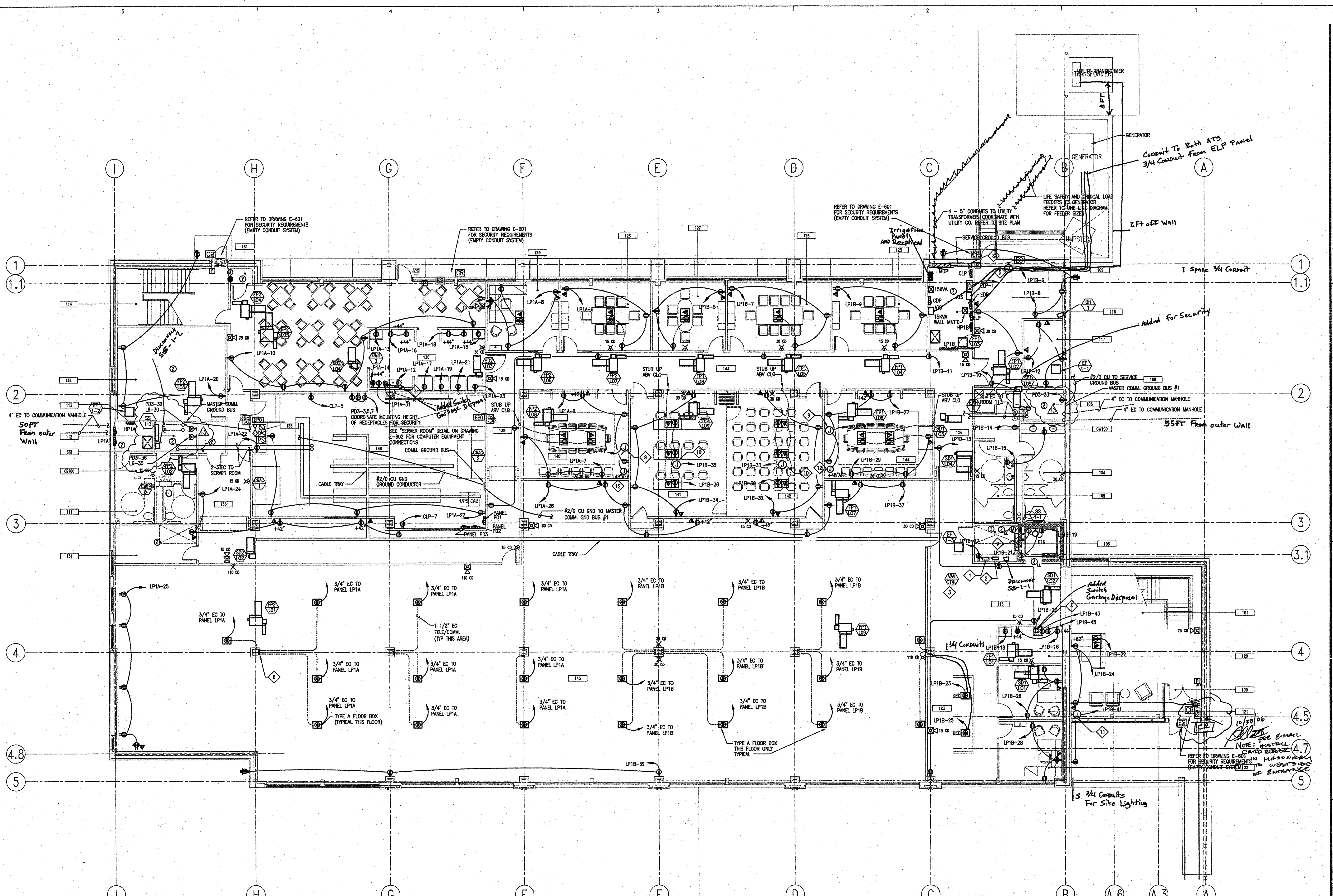
RECEIVED  
OCT 10 2006  
HOAR CONSTRUCTION FIELD OFFICE

Revisions	
ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06
	05.03.06
BULLETIN #5	08.06.06
BULLETIN #13	10.06.06
RECEPTACLE REVISIONS	

NO.	ISSUE	DATE
Sheet Information		
Date	03/27/2006	
Job Number	25069	
Drawn		
Checked		
Approved		
Title		

POWER  
LOWER LEVEL FLOOR PLAN

Sheet  
NONE  
JLC  
E-201



**PLAN NOTES:**

- 1 20A DISCONNECT FOR ELEVATOR CAB LIGHTS AND FAN. CONNECT TO CIRCUIT ELP-2.
- 2 DISCONNECT FOR ELEVATOR. SEE EQUIPMENT CONNECTION SCHEDULE FOR FEEDER AND DISCONNECT SIZING.
- 3 VAV CONTROL. SEE EQUIPMENT CONNECTION SCHEDULE FOR CIRCUITING.
- 4 RECEPTACLE FOR GARBAGE DISPOSAL CONTRACTOR TO COORDINATE EXACT LOCATION.
- 5 JUNCTION BOX FOR DOOR OPENER. CONTRACTOR TO COORDINATE EXACT LOCATION.
- 6 1-1/2\"/>

**1 FIRST FLOOR POWER PLAN**  
SCALE: 1/8" = 1'-0"



**AIRBUS**

Engineering  
Center

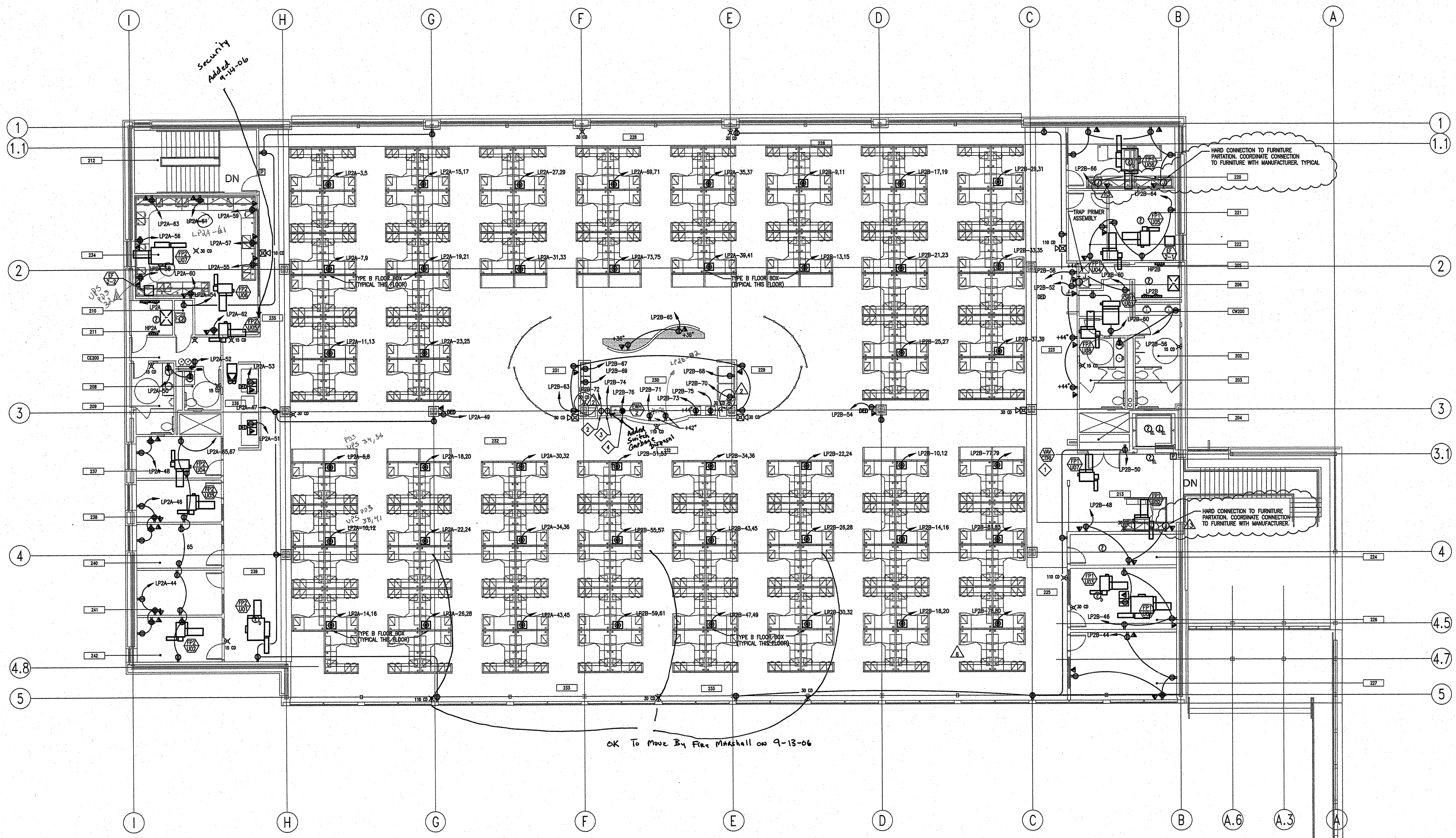
1801 S. Brood St., Mobile, AL 36615

CLIENT  
Mobile Airport  
Authority

1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TENANT  
Airbus North America  
Holdings, Inc.

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486



**1 SECOND FLOOR POWER PLAN**  
SCALE: 1/8" = 1'-0"

**PLAN NOTES:**

- ◊ VAV CONTROL. SEE EQUIPMENT SCHEDULE FOR CIRCUITING.
- ◊ RECEPTACLE FOR ICEMAKER. CONTRACTOR TO COORDINATE EXACT LOCATION.
- ◊ RECEPTACLE FOR DISHWASHER. CONTRACTOR TO COORDINATE EXACT LOCATION.
- ◊ RECEPTACLE FOR GARBBAGE DISPOSAL. CONTRACTOR TO COORDINATE EXACT LOCATION.

Revisions	
ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06
FOR INTERIOR CLARIFICATIONS	

▲ Bulletin No. 6	07.25.06
▲ BULLETIN #13 RECEPTACLE REVISIONS	10.06.06

NO.	ISSUE	DATE
Sheet Information		
Date	03/27/2006	
Job Number	25069	
Drawn		
Checked		
Approved	RECEIVED	

POWER  
UPPER LEVEL FLOOR PLAN

Sheet

1/8"=1'-0"

JLC

**E-202**



**AIRBUS**

**Engineering  
Center**

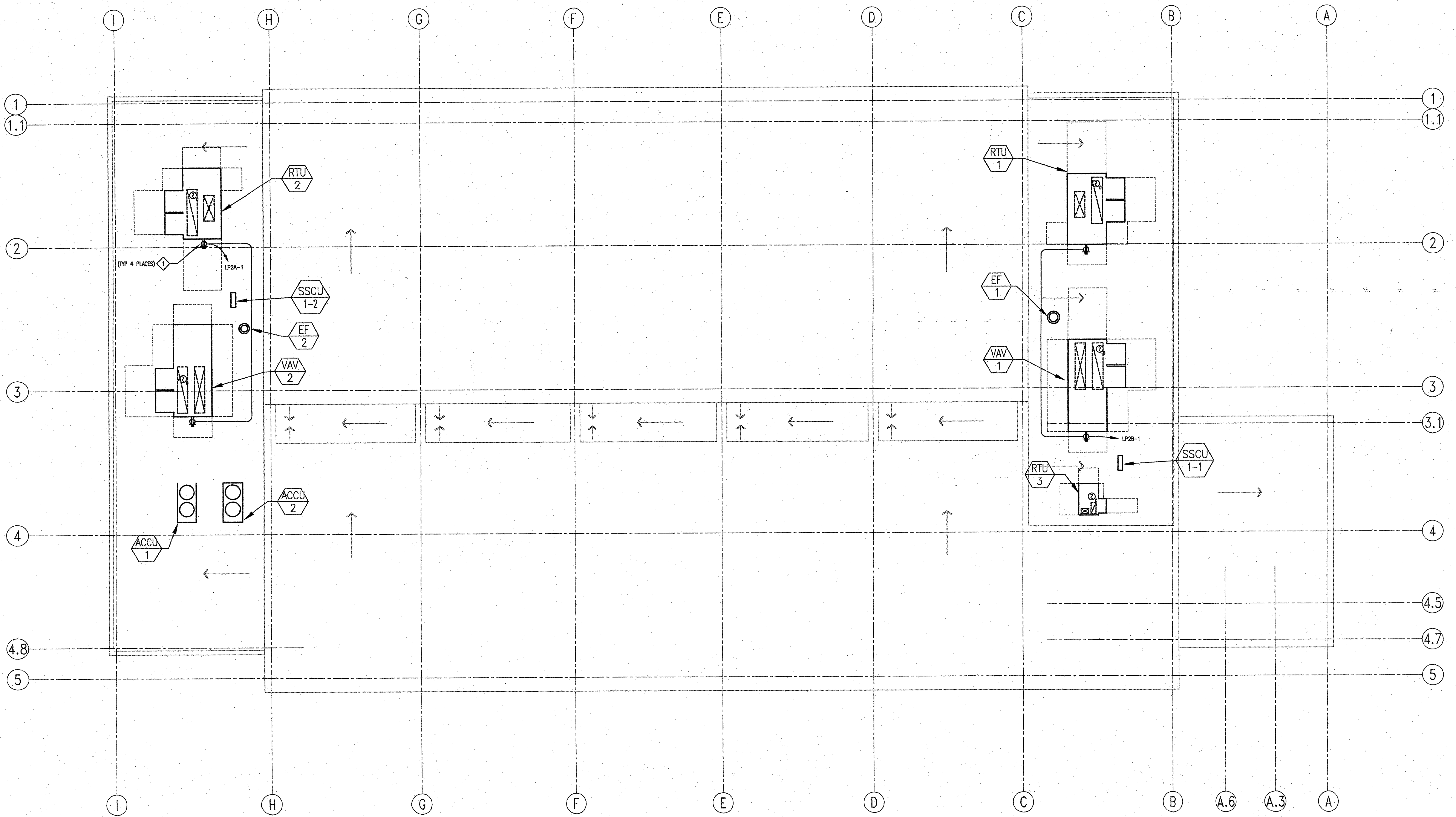
1801 S. Broad St., Mobile, AL 36615

CLIENT  
**Mobile Airport  
Authority**

1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TENANT  
**Airbus North America  
Holdings, Inc.**

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486



**1 ROOF POWER PLAN**  
SCALE: 1/8" = 1'-0"

**PLAN NOTES:**

① WEATHERPROOF-IN-USE RECEPTACLE. INSTALL ADJACENT TO MECHANICAL EQUIPMENT.

**Revisions**

ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06

**Sheet Information**

NO.	ISSUE	DATE
<b>Sheet Information</b>		
Date	05/20/2006	
Job Number	25069	
Drawn		
Checked		
Approved		
<b>Title</b>		

**POWER  
ROOF PLAN**

Sheet

1/8"=1'-0"  
JLC **E-203**



**AIRBUS**

**Engineering  
Center**

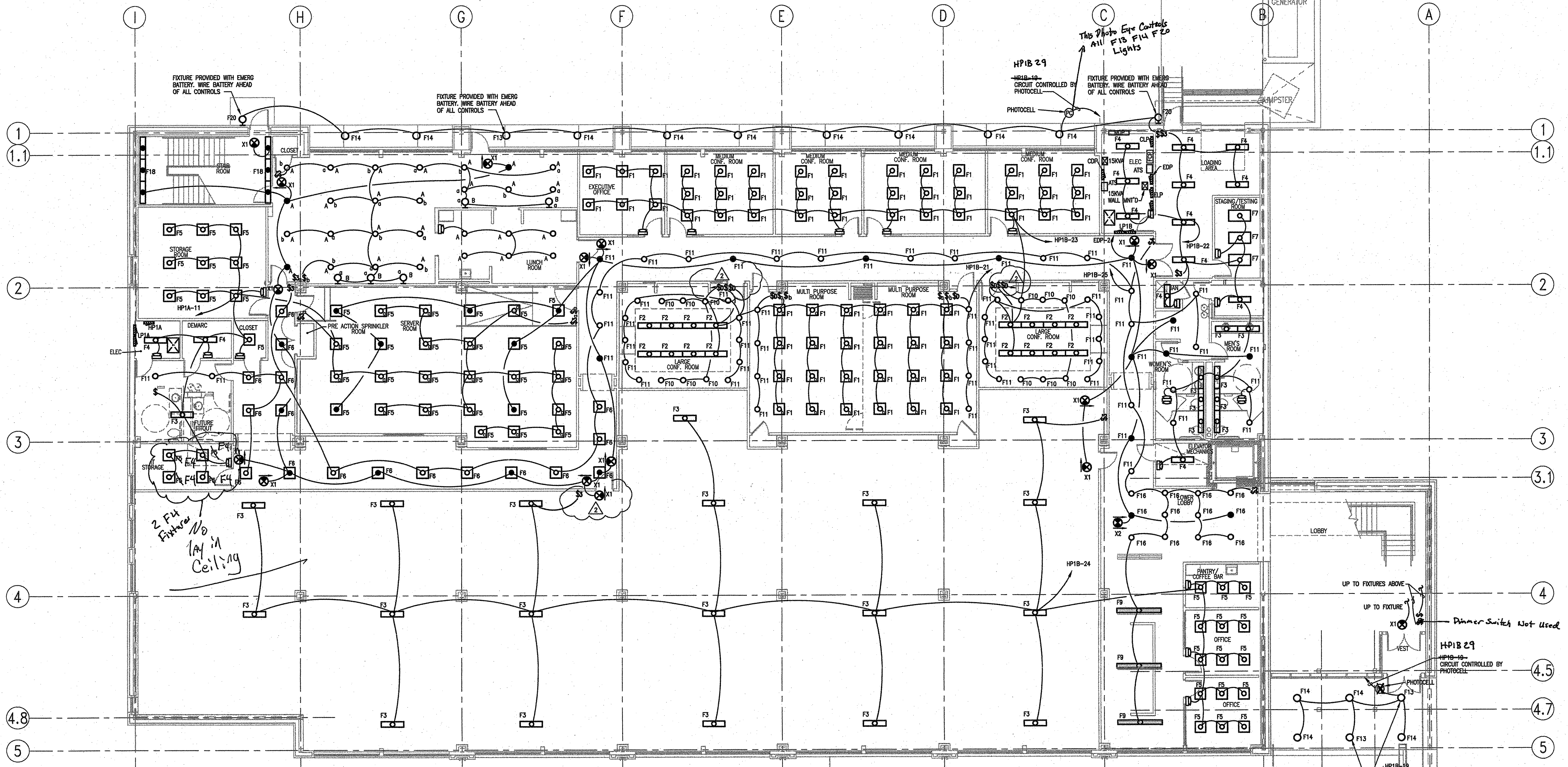
1801 S. Broad St., Mobile, AL 36615

CLIENT  
**Mobile Airport  
Authority**

1801 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7394

TENANT  
**Airbus North America  
Holdings, Inc.**

188 Van Buren Street  
Herndon, VA 20170-5395  
T: 703.834.3486



FIRST FLOOR PLAN - LIGHTING

**Revisions**

ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06
ADDITIONAL REVISIONS	05.03.06

**Sheet Information**

NO.	ISSUE	DATE
Date 03/27/2006		
Job Number 25069		
Drawn		
Checked		
Approved		

LIGHTING  
LOWER LEVEL FLOOR PLAN

Sheet

1/8"=1'-0"  
J.L.C. E-301

Nov 04, 2005 - 10:15am  
 A:\30000\Engineering\Perkins\25069-E-301.dwg  
 J.L.C.



**Engineering Center**

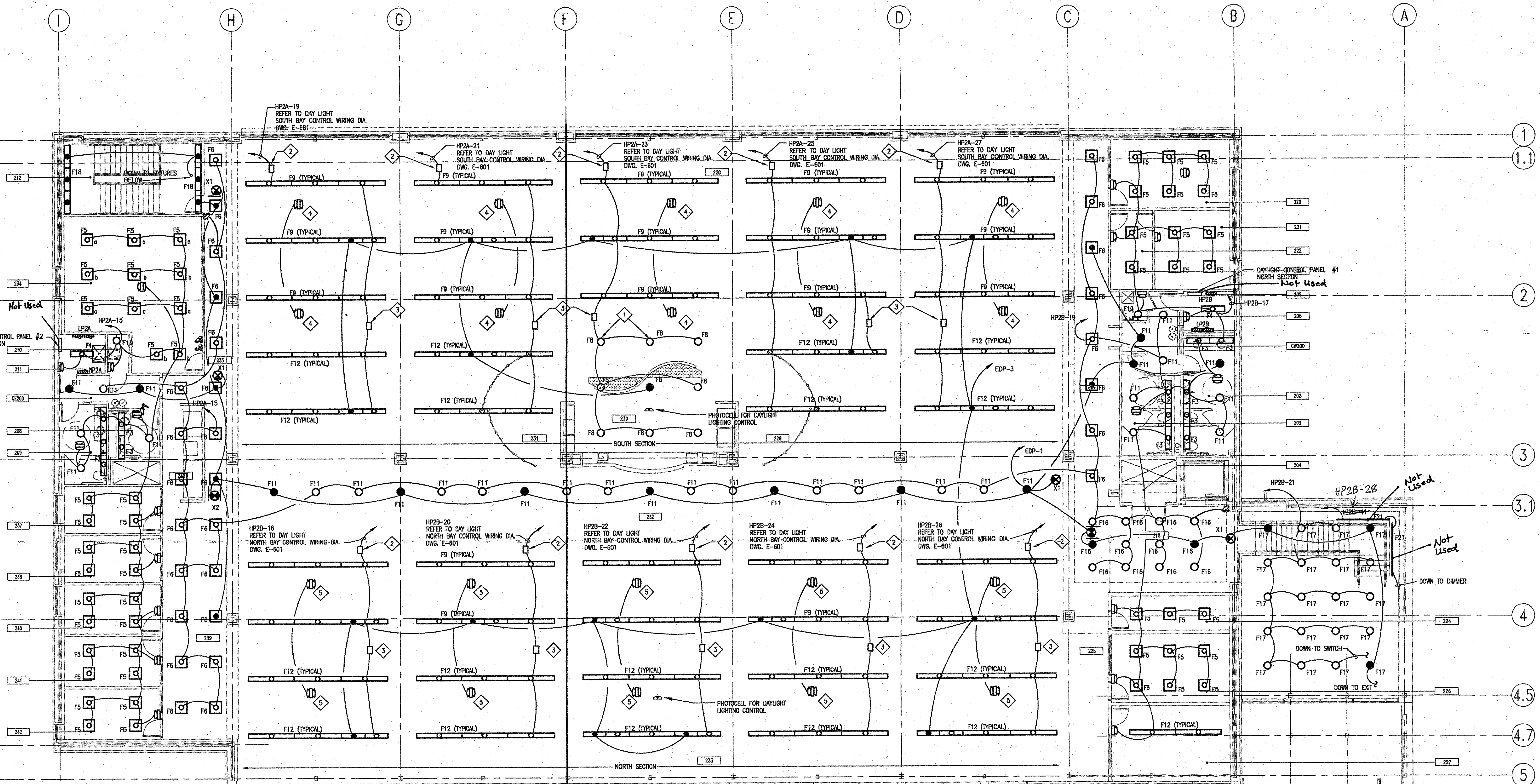
1801 S. Broad St., Mobile, AL 36615

**Mobile Airport Authority**

1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

**Airbus North America Holdings, Inc.**

188 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486



SECOND FLOOR PLAN - LIGHTING

PLAN NOTES:

- 1 TWO LAMPS IN FIXTURE TYPE F9 CONTROLLED BY POWER PACK #2 THIRD LAMP CONTROLLED BY POWER PACK #1.
- 2 DAYLIGHT CONTROL POWER PACK #1 (TYPICAL)
- 3 DAYLIGHT CONTROL POWER PACK #2 (TYPICAL)
- 4 OCCUPANCY SENSOR WIRED TO DAYLIGHT CONTROL SYSTEM #2 (TYPICAL). PENDANT MOUNT OCC. SENSORS EVEN WITH OR BELOW FIXTURES (TYPICAL)
- 5 OCCUPANCY SENSOR WIRED TO DAYLIGHT CONTROL SYSTEM #1 (TYPICAL). PENDANT MOUNT OCC. SENSORS EVEN WITH OR BELOW FIXTURES (TYPICAL)

Revisions		
ISSUED FOR CLIENT REVIEW	01.11.06	
DESIGN DEVELOPMENT	01.23.06	
PERMIT SET	03.20.06	
FOR CONSTRUCTION	03.27.06	

NO.	ISSUE	DATE
<b>Sheet Information</b>		
Date	03/20/2006	
Job Number	25099	
Drawn		
Checked		
Approved		
Title		

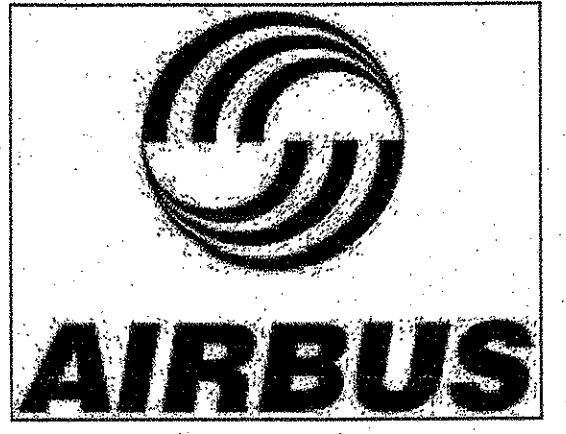
LIGHTING  
UPPER LEVEL FLOOR PLAN

Sheet

1/8"=1'-0"  
J.L.C. E-302



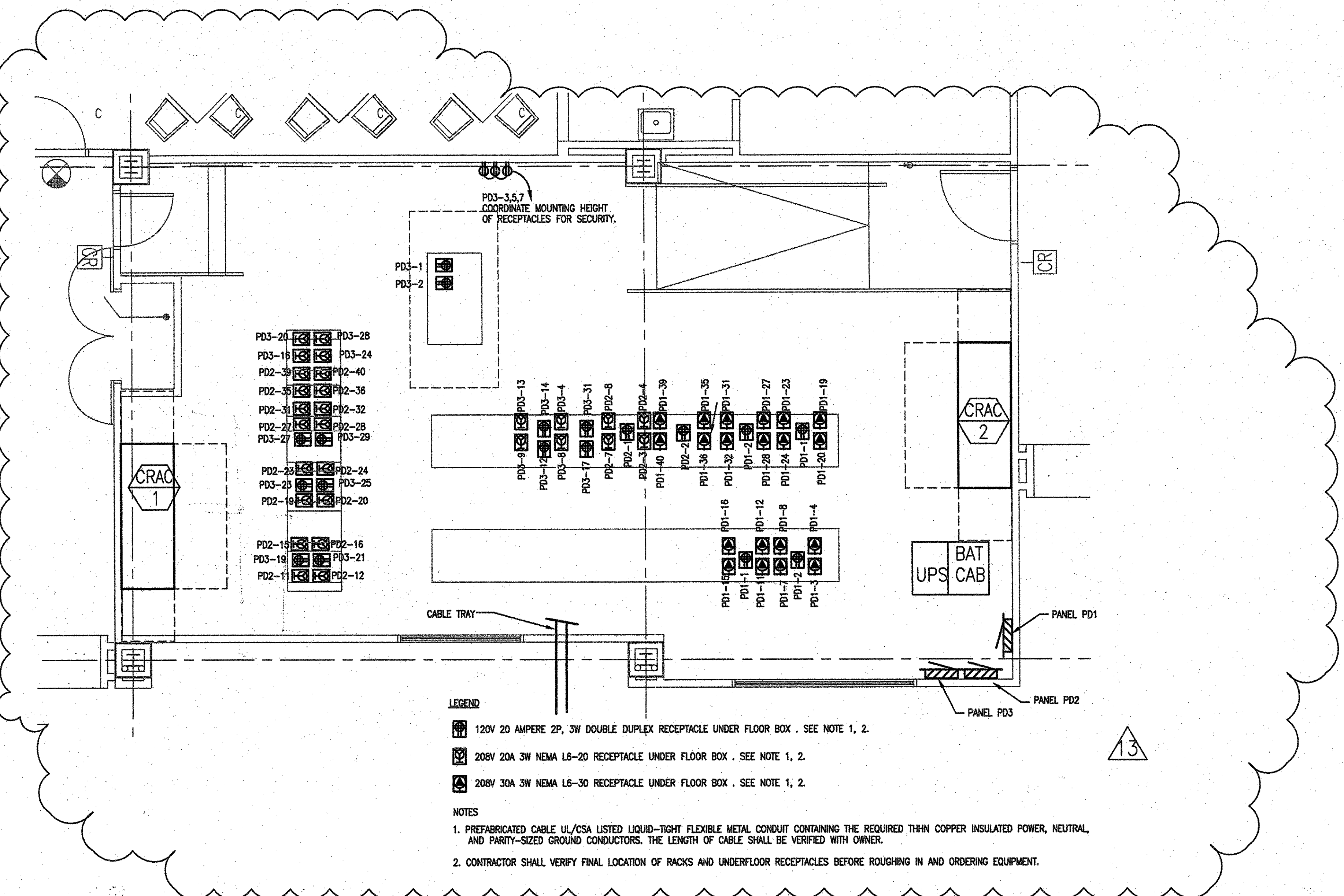




Engineering Center  
1801 S. Broad St., Mobile, AL 36615

CLIENT  
Mobile Airport Authority  
1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TENANT  
Airbus North America Holdings, Inc.  
198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486

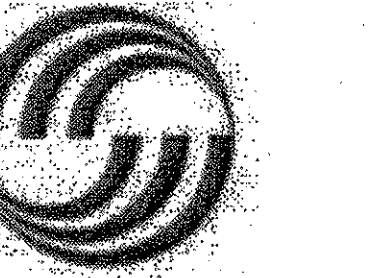


SERVER ROOM  
SCALE = 1/4"=1'-0"

PANELBOARD SCHEDULE - PD1																
PANEL: PD1 VOLTAGE: 208Y/120 MAIN: 400 AMP, 3 POLE, MAIN BREAKER LOCATION: ELECTRIC ROOM																
PHASE: 3 PHASE 4W MAIN BUS : 400 AMPS NEUTRAL BUS : FULL MOUNTING: SURFACE																
I.A.C.: AS REQUIRED																
SERVED FROM : PANEL PD1	LOAD LOCATION AND/OR DESCRIPTION	Code	BREAKER Letter	POLES-TRIP	CKT NO.	FULL GROUND BUS			BREAKER Letter	LOAD LOCATION AND/OR DESCRIPTION	Code	Letter	LOAD LOCATION AND/OR DESCRIPTION	Code	Letter	
						VA	A	B								C
UNIX SERVER	NT SERVER	O	2-30	1	800	A	800	2	1-20	O	NT SERVER					
UNIX SERVER	NT SERVER	O	2-30	3	2000	B	2000	4	2-30	O	NT SERVER					
UNIX SERVER	NT SERVER	O	2-30	5	2000	C	2000	8	2-30	O	NT SERVER					
UNIX SERVER	NT SERVER	O	2-30	7	2000	A	2000	8	2-30	O	NT SERVER					
UNIX SERVER	NT SERVER	O	2-30	9	2000	B	2000	10	2-30	O	NT SERVER					
UNIX SERVER	NT SERVER	O	2-30	11	2000	C	2000	12	2-30	O	NT SERVER					
UNIX SERVER	NT SERVER	O	2-30	13	2000	A	2000	14	2-30	O	NT SERVER					
UNIX SERVER	NT SERVER	O	2-30	15	2000	B	2000	16	2-30	O	NT SERVER					
UNIX SERVER	NT SERVER	O	2-30	17	2000	C	2000	18	2-30	O	NT SERVER					
UNIX SERVER	NT SERVER	O	2-30	19	2000	A	2000	20	2-30	O	UNIX SERVER					
UNIX SERVER	NT SERVER	O	2-30	21	2000	B	2000	22	2-30	O	UNIX SERVER					
UNIX SERVER	NT SERVER	O	2-30	23	2000	C	2000	24	2-30	O	UNIX SERVER					
UNIX SERVER	NT SERVER	O	2-30	25	2000	A	2000	26	2-30	O	UNIX SERVER					
UNIX SERVER	NT SERVER	O	2-30	27	2000	B	2000	28	2-30	O	UNIX SERVER					
UNIX SERVER	NT SERVER	O	2-30	29	2000	C	2000	30	2-30	O	UNIX SERVER					
UNIX SERVER	NT SERVER	O	2-30	31	2000	A	2000	32	2-30	O	UNIX SERVER					
UNIX SERVER	NT SERVER	O	2-30	33	2000	B	2000	34	2-30	O	UNIX SERVER					
UNIX SERVER	NT SERVER	O	2-30	35	2000	C	2000	36	2-30	O	UNIX SERVER					
UNIX SERVER	NT SERVER	O	2-30	37	2000	A	2000	38	2-30	O	UNIX SERVER					
UNIX SERVER	NT SERVER	O	2-30	39	2000	B	2000	40	2-30	O	UNIX SERVER					
UNIX SERVER	NT SERVER	O	2-30	41	2000	C	2000	42	2-30	O	UNIX SERVER					
LOAD SUMMARY					KVA CONNECTED											
LIGHTING (L)					A	B	C									
RECEPTACLE (R)	1	1	1													
MECH. HEAT (H)																
MECH. MOTOR (M)																
COOKING (C)																
WATER HTR (W)																
APPLIANCE (A)																
OTHER (O)																
TOTALS	46	46	46													
TOTALS					EST. DEMAND KVA = 391 AMPS				EST. DEMAND KW = 278 AMPS			ESTIMATED DEMAND KW = 88.6				

PANELBOARD SCHEDULE - PD2																
PANEL: PD2 VOLTAGE: 208Y/120 MAIN: 400 AMP, MAIN LUGS ONLY LOCATION: ELECTRIC ROOM																
PHASE: 3 PHASE 4W MAIN BUS : 400 AMPS NEUTRAL BUS : FULL MOUNTING: SURFACE																
I.A.C.: AS REQUIRED																
SERVED FROM : PANEL PD2	LOAD LOCATION AND/OR DESCRIPTION	Code	BREAKER Letter	POLES-TRIP	CKT NO.	FULL GROUND BUS			BREAKER Letter	LOAD LOCATION AND/OR DESCRIPTION	Code	Letter	LOAD LOCATION AND/OR DESCRIPTION	Code	Letter	
						VA	A	B								C
UNIX SERVER	UNIX SERVER	O	2-20	1	800	A	800	2	1-20	O	UNIX SERVER					
UNIX SERVER	UNIX SERVER	O	2-20	3	800	B	800	4	2-20	O	UNIX SERVER					
UNIX SERVER	UNIX SERVER	O	2-20	5	800	C	800	6	2-20	O	UNIX SERVER					
UNIX SERVER	UNIX SERVER	O	2-20	7	800	A	800	8	2-20	O	UNIX SERVER					
UNIX SERVER	UNIX SERVER	O	2-20	9	800	B	800	10	2-20	O	UNIX SERVER					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	11	800	C	800	12	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	13	800	A	800	14	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	15	800	B	800	16	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	17	800	C	800	18	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	19	800	A	800	20	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	21	800	B	800	22	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	23	800	C	800	24	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	25	800	A	800	26	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	27	800	B	800	28	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	29	800	C	800	30	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	31	800	A	800	32	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	33	800	B	800	34	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	35	800	C	800	36	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	37	800	A	800	38	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	39	800	B	800	40	2-20	O	DISTRIBUTION RACK					
DISTRIBUTION RACK	DISTRIBUTION RACK	O	2-20	41	800	C	800	42	2-20	O	DISTRIBUTION RACK					
LOAD SUMMARY					KVA CONNECTED											
LIGHTING (L)					A	B	C									
RECEPTACLE (R)	1	1	1													
MECH. HEAT (H)																
MECH. MOTOR (M)																
COOKING (C)																
WATER HTR (W)																
APPLIANCE (A)																
OTHER (O)																
TOTALS	22	20	20													
TOTALS					EST. DEMAND KVA = 66.0				EST. DEMAND KW = 65.3			ESTIMATED DEMAND KW = 58.8				

PANELBOARD SCHEDULE - PD3															
PANEL: PD3 VOLTAGE: 208Y/120 MAIN: 400 AMP, MAIN LUGS ONLY LOCATION: ELECTRIC ROOM															
PHASE: 3 PHASE 4W MAIN BUS : 400 AMPS NEUTRAL BUS : FULL MOUNTING: SURFACE															
I.A.C.: AS REQUIRED															
SERVED FROM : PANEL PD3	LOAD LOCATION AND/OR DESCRIPTION	Code	BREAKER Letter	POLES-TRIP	CKT NO.	FULL GROUND BUS			BREAKER Letter	LOAD LOCATION AND/OR DESCRIPTION	Code	Letter	LOAD LOCATION AND/OR DESCRIPTION	Code	Letter
						VA	A	B							
TAPE LIBRARY	UNIX SERVER	O	1-20	1	800	A	800	2	1-20	O	UNIX SERVER				
SECURITY PANEL	UNIX SERVER	R	1-20	3	1080	B	800	4	2-20	O	UNIX SERVER				
SECURITY PANEL	UNIX SERVER	R	1-20	5	1080	C	800	6	2-20	O	UNIX SERVER				
SECURITY PANEL	UNIX SERVER	R	1-20	7	1080	A	800	8	2-20	O	UNIX SERVER				
UNIX SERVER	UNIX SERVER	O	2-20	9	800	B	800	10	2-20	O	UNIX SERVER				
UNIX SERVER	UNIX SERVER	O	2-20	11	800	C	800	12	1-20	O	UNIX SERVER				
UNIX SERVER	UNIX SERVER	O	2-20	13	800	A	800	14	1-20	O	UNIX SERVER				
UNIX SERVER	UNIX SERVER	O	2-20	15	800	B	800	16	2-20	O	UNIX SERVER				
UNIX SERVER	UNIX SERVER	O	1-20	17	800	C	800	18	2-20	O	UNIX SERVER				
UNIX SERVER	UNIX SERVER	O	1-20	19	800	A	800	20	2-20	O	UNIX SERVER				
UNIX SERVER	UNIX SERVER	O	1-20	21	800	B	800	22	2-20	O	UNIX SERVER				
DISTRIBUTION	DISTRIBUTION	O	1-20	23	800	C	800	24	2-20	O	DISTRIBUTION				
DISTRIBUTION	DISTRIBUTION	O	1-20	25	800	A	800	26	2-20	O	DISTRIBUTION				
DISTRIBUTION	DISTRIBUTION	O	1-20	27	800	B	800	28	2-20	O	DISTRIBUTION				
DISTRIBUTION	DISTRIBUTION	O	1-20	29	800	C	800	30	2-20	O	DISTRIBUTION				
UNIX SERVER	UNIX SERVER	O	1-20	31	1200	A	1200	32	2-30	O	UNIX SERVER				
UNIX SERVER	UNIX SERVER	O	1-20	33	1200	B	1200	34	2-30	O	UNIX SERVER				
UNIX SERVER	UNIX SERVER	O	1-20	35	1200	C	1200	36	2-30	O	UNIX SERVER				
UNIX SERVER	UNIX SERVER	O	1-20	37	1200	A	1200	38	2-30	O	UNIX SERVER				
UNIX SERVER	UNIX SERVER	O	1-20	39	1200	B	1200	40	2-30	O	UNIX SERVER				
UNIX SERVER	UNIX SERVER	O	1-20	41	1200	C	1200	42	2-30	O	UNIX SERVER				



Engineering  
Center

1801 S. Broad St., Mobile, AL 36615

CLIENT

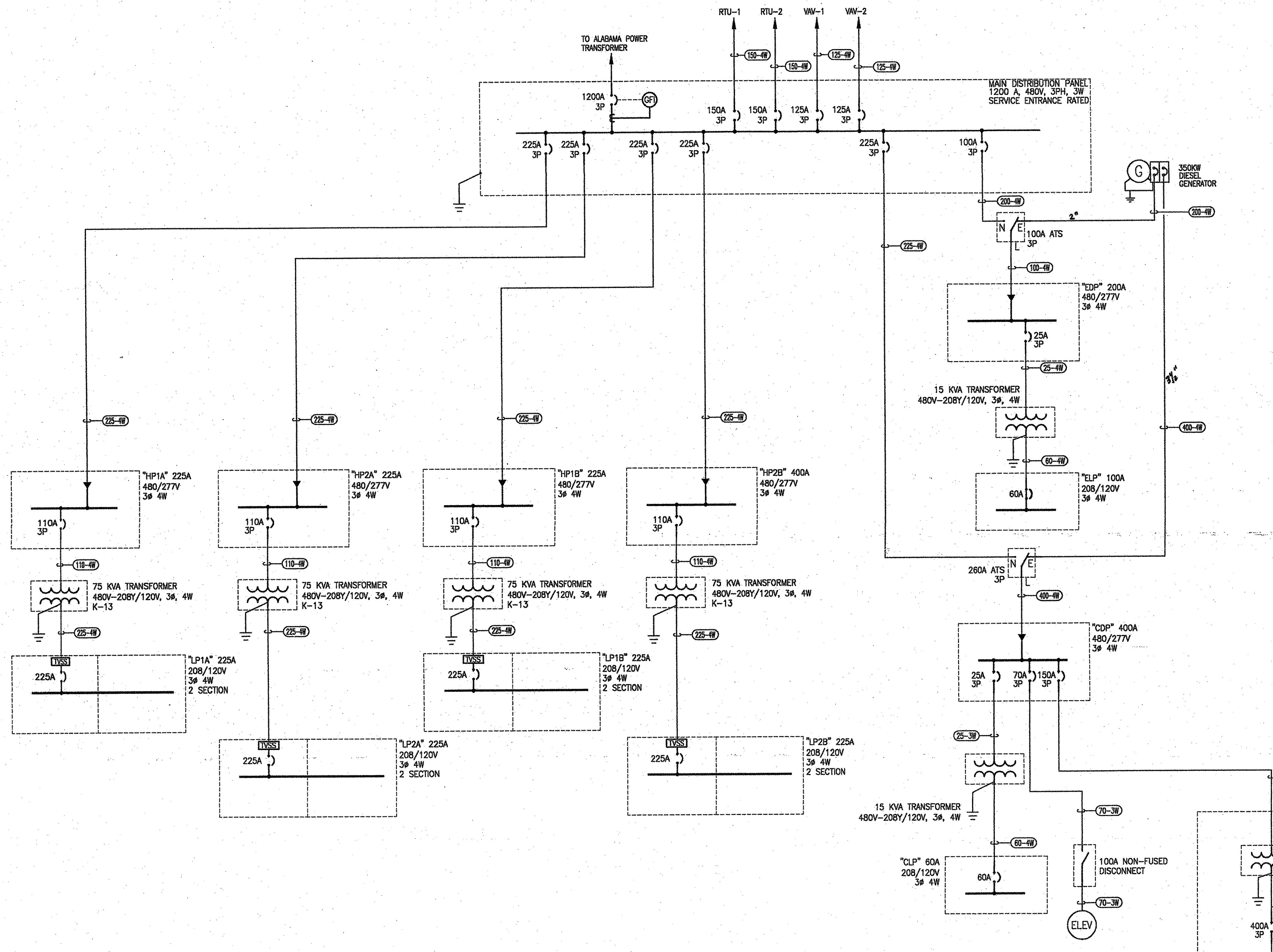
Mobile Airport  
Authority

1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TENANT

Airbus North America  
Holdings, Inc.

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3488



STANDARD FEEDERS - COPPER CONDUCTORS					
Based on THHN, 75C, Worst Case for Conduit Type					
Feeder Amps	Feeder Descriptions = No. Sets: AWG SIZE, GND, CONDUIT	No. Sets: AWG SIZE, GND, CONDUIT			"K" RATED XFMR SEC. - DOUBLE NEUTRAL - 40N
		2 WIRE - 3W	3 WIRE - 4W	4 WIRE - 4XS	
15	1:2#14, #14G, 3/4C.	1:3#14, #14G, 3/4C.	1:4#14, #14G, 3/4C.	1:4#14, #14G, 3/4C.	1:3#14, #14N, #14G, 3/4C.
20	1:2#12, #12G, 3/4C.	1:3#12, #12G, 3/4C.	1:4#12, #12G, 3/4C.	1:4#12, #12G, 3/4C.	1:3#12, #12N, #12G, 3/4C.
25	1:2#10, #10G, 3/4C.	1:3#10, #10G, 3/4C.	1:4#10, #10G, 3/4C.	1:4#10, #10G, 3/4C.	1:3#10, #10N, #10G, 3/4C.
30	1:2#10, #10G, 3/4C.	1:3#10, #10G, 3/4C.	1:4#10, #10G, 3/4C.	1:4#10, #10G, 3/4C.	1:3#10, #10N, #10G, 3/4C.
35	1:2#8, #8G, 3/4C.	1:3#8, #8G, 3/4C.	1:4#8, #8G, 3/4C.	1:4#8, #8G, 3/4C.	1:3#8, #8N, #8G, 3/4C.
40	1:2#8, #8G, 3/4C.	1:3#8, #8G, 3/4C.	1:4#8, #8G, 3/4C.	1:4#8, #8G, 3/4C.	1:3#8, #8N, #8G, 3/4C.
45	1:2#8, #8G, 3/4C.	1:3#8, #8G, 3/4C.	1:4#8, #8G, 3/4C.	1:4#8, #8G, 3/4C.	1:3#8, #8N, #8G, 3/4C.
50	1:2#8, #8G, 3/4C.	1:3#8, #8G, 3/4C.	1:4#8, #8G, 3/4C.	1:4#8, #8G, 3/4C.	1:3#8, #8N, #8G, 3/4C.
60	1:2#8, #8G, 3/4C.	1:3#8, #8G, 3/4C.	1:4#8, #8G, 3/4C.	1:4#8, #8G, 3/4C.	1:3#8, #8N, #8G, 3/4C.
70	1:2#8, #8G, 3/4C.	1:3#8, #8G, 3/4C.	1:4#8, #8G, 3/4C.	1:4#8, #8G, 3/4C.	1:3#8, #8N, #8G, 3/4C.
80	1:2#4, #8G, 3/4C.	1:3#4, #8G, 1C.	1:4#4, #8G, 1-1/4C.	1:4#4, #8G, 1-1/4C.	1:3#4, #8N, #8G, 1-1/4C.
90	1:2#4, #8G, 3/4C.	1:3#4, #8G, 1C.	1:4#4, #8G, 1-1/4C.	1:4#4, #8G, 1-1/4C.	1:3#4, #8N, #8G, 1-1/4C.
100	1:2#4, #8G, 1C.	1:3#3, #8G, 1-1/4C.	1:4#3, #8G, 1-1/4C.	1:4#3, #8G, 1-1/4C.	1:3#3, #8N, #8G, 1-1/4C.
110	1:2#2, #8G, 1C.	1:3#2, #8G, 1-1/4C.	1:4#2, #8G, 1-1/2C.	1:4#2, #8G, 1-1/2C.	1:3#2, #8N, #8G, 1-1/2C.
125	1:2#1, #8G, 1-1/4C.	1:3#1, #8G, 1-1/2C.	1:4#1, #8G, 1-1/2C.	1:4#1, #8G, 1-1/2C.	1:3#1, #8N, #8G, 1-1/2C.
150	1:2#1, 0, #8G, 1-1/4C.	1:3#1, 0, #8G, 1-1/2C.	1:4#1, 0, #8G, 2C.	1:4#1, 0, #8G, 2C.	1:3#1, 0, #8N, #8G, 2C.
175	1:2#2, 0, #8G, 1-1/4C.	1:3#2, 0, #8G, 1-1/2C.	1:4#2, 0, #8G, 2C.	1:4#2, 0, #8G, 2C.	1:3#2, 0, #8N, #8G, 2C.
200	1:2#2, 0, #8G, 1-1/2C.	1:3#3, 0, #8G, 2C.	1:4#3, 0, #8G, 2C.	1:4#3, 0, #8G, 2C.	1:3#3, 0, #8N, #8G, 2C.
225	1:2#4, 0, #4G, 1-1/2C.	1:3#4, 0, #4G, 2C.	1:4#4, 0, #4G, 2-1/2C.	1:4#4, 0, #4G, 2-1/2C.	1:3#4, 0, #4N, #4G, 2-1/2C.
250	1:2#250, #4G, 2C.	1:3#250, #4G, 2-1/2C.	1:4#250, #4G, 2-1/2C.	1:4#250, #4G, 2-1/2C.	1:3#250, #4N, #4G, 2-1/2C.
300	1:2#350, #4G, 2C.	1:3#350, #4G, 2-1/2C.	1:4#350, #4G, 3C.	1:4#350, #4G, 3C.	1:3#350, #4N, #4G, 3C.
350	1:2#400, #3G, 2C.	1:3#400, #3G, 2-1/2C.	1:4#400, #3G, 3C.	1:4#400, #3G, 3C.	1:3#400, #3N, #3G, 3-1/2C.
400	1:2#500, #3G, 2-1/2C.	1:3#500, #3G, 3C.	1:4#500, #3G, 3-1/2C.	1:4#500, #3G, 3-1/2C.	1:3#500, #3N, #3G, 3-1/2C.
450	2:2#4, 0, #2G, 2-1/2C.	2:3#4, 0, #2G, 2C.	2:4#4, 0, #2G, 2-1/2C.	2:4#4, 0, #2G, 2-1/2C.	2:3#4, 0, #2N, #2G, 2-1/2C.
500	2:2#250, #2G, 2C.	2:3#250, #2G, 2-1/2C.	2:4#250, #2G, 2-1/2C.	2:4#250, #2G, 2-1/2C.	2:3#250, #2N, #2G, 2-1/2C.
600	2:2#350, #1G, 2C.	2:3#350, #1G, 2-1/2C.	2:4#350, #1G, 3C.	2:4#350, #1G, 3C.	2:3#350, #1N, #1G, 3-1/2C.
700	3:2#250, #1, 0G, 2C.	3:3#250, #1, 0G, 2-1/2C.	3:4#250, #1, 0G, 2-1/2C.	3:4#250, #1, 0G, 2-1/2C.	3:3#250, #1N, #1G, 2-1/2C.
800	2:2#500, #1, 0G, 2-1/2C.	2:3#500, #1, 0G, 3C.	2:4#500, #1, 0G, 3-1/2C.	2:4#500, #1, 0G, 3-1/2C.	2:3#500, #1N, #1G, 3-1/2C.
1000	3:2#500, #2, 0G, 2-1/2C.	3:3#500, #2, 0G, 3C.	3:4#500, #2, 0G, 3-1/2C.	3:4#500, #2, 0G, 3-1/2C.	3:3#500, #2N, #2G, 3-1/2C.
1200	4:2#350, #3, 0G, 2-1/2C.	4:3#350, #3, 0G, 2-1/2C.	4:4#350, #3, 0G, 3-1/2C.	4:4#350, #3, 0G, 3-1/2C.	4:3#350, #3N, #3G, 3-1/2C.
1500	6:2#350, #4, 0G, 2-1/2C.	6:3#350, #4, 0G, 2-1/2C.	6:4#350, #4, 0G, 3C.	6:4#350, #4, 0G, 3C.	6:3#350, #4N, #4G, 3-1/2C.
2000	6:2#500, #250G, 2-1/2C.	6:3#500, #250G, 3C.	6:4#500, #250G, 3-1/2C.	6:4#500, #250G, 3-1/2C.	6:3#500, #250N, #250G, 3-1/2C.
2500	7:2#500, #350G, 2-1/2C.	7:3#500, #350G, 3C.	7:4#500, #350G, 3-1/2C.	7:4#500, #350G, 3-1/2C.	7:3#500, #350N, #350G, 3-1/2C.
3000	8:2#500, #400G, 3C.	8:3#500, #400G, 3C.	8:4#500, #400G, 3-1/2C.	8:4#500, #400G, 3-1/2C.	8:3#500, #400N, #400G, 3-1/2C.
4000	11:2#500, #500G, 3-1/2C.	11:3#500, #500G, 3-1/2C.	11:4#500, #500G, 3-1/2C.	11:4#500, #500G, 3-1/2C.	11:3#500, #500N, #500G, 3-1/2C.

ONE LINE DIAGRAM

1 CONTRACTOR SHALL PROVIDE SHORT CIRCUIT & OVER CURRENT PROTECTION COORDINATION. COORDINATE WITH LOCAL UTILITY FOR AVAILABLE CURRENTS. SUBMIT STUDY FOR REVIEW BEFORE PURCHASING EQUIP.

Revisions

ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06

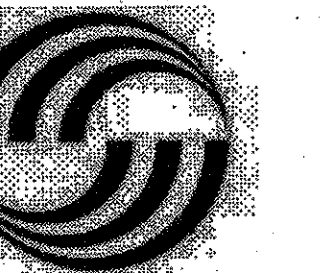
NO.	ISSUE	DATE

ONE LINE DIAGRAM

EQUIPMENT CONNECTION SCHEDULE																		
ITEM NO.	DESCRIPTION	LOCATION	ELECTRICAL CHARACTERISTICS			MAX OCP	BREAKER SIZE	SERVED FROM	LOCAL DISCONNECT FRAME/POLES/TRIP	MOTOR CONTROLLER			FEEDER DESCRIPTION		NOTES			
			VOLTS	PHASE	LOAD	KVA	FLA			SIZE	TYPE	CONTROL	No. Sets	No. & Size, Cond.				
RTU-1	ROOF TOP UNIT	ROOF	480	3	126 AMPS	104.9	126.2	150	150					MDP-19	200/3/150	N	1:3#1/0, #66, 1-1/2C.	
RTU-2	ROOF TOP UNIT	ROOF	480	3	126 AMPS	104.9	126.2	150	150					MDP-20	200/3/150	N	1:3#1/0, #66, 1-1/2C.	
RTU-3	ROOF TOP UNIT	ROOF	480	3	37 AMPS	30.8	37.0	40	40					HP2B-12	60/3/40	N	1:3#8, #106.3/4C.	
VAV-1	VAV	ROOF	480	3	118 AMPS	98.1	118.0	125	125					MDP-25	200/3/125	N	1:3#1/0, #66, 1-1/2C.	
VAV-2	VAV	ROOF	480	3	118 AMPS	98.1	118.0	125	125					MDP-26	200/3/125	N	1:3#1/0, #66, 1-1/2C.	
EF-1	EXHAUST FAN	ROOF	120	1	0.25 HP	0.7	5.6	15	15					LP2B-2	30/2/15	N	1:3#14, #146.3/4C.	
EF-2	EXHAUST FAN	ROOF	120	1	0.25 HP	0.7	5.6	15	15					LP2A-2	30/2/15	N	1:3#14, #146.3/4C.	
EF1-1	EXHAUST FAN	1ST FLOOR	120	1	1.5 AMPS	0.2	1.5	15	15					LP1B-1	30/2/15	N	1:3#14, #146.3/4C.	
EF1-2	EXHAUST FAN	1ST FLOOR	120	1	1.5 AMPS	0.2	1.5	15	15					LP1A-1	30/2/15	N	1:3#14, #146.3/4C.	
EF1-3	EXHAUST FAN	1ST FLOOR	120	1	1.5 AMPS	0.2	1.5	15	15					CLP-2	30/2/15	N	1:3#14, #146.3/4C.	
EF2-1	EXHAUST FAN	2ND FLOOR	120	1	1.5 AMPS	0.2	1.5	15	15					LP2B-8	30/2/15	N	1:3#14, #146.3/4C.	
EF2-2	EXHAUST FAN	2ND FLOOR	120	1	1.5 AMPS	0.2	1.5	15	15					LP2A-4	30/2/15	N	1:3#14, #146.3/4C.	
SS1-1	SPLIT SYSTEM AC	1ST FLOOR	120	1	0.48 AMPS	0.1	0.5	15	15					CLP-9	30/2/15	N	1:3#14, #146.3/4C.	
SS1-2	SPLIT SYSTEM AC	1ST FLOOR	120	1	0.48 AMPS	0.1	0.5	15	15					CLP-6	30/2/15	N	1:3#14, #146.3/4C.	
SSCU1-1	SPLIT SYSTEM COND	ROOF	208	1	8.4 AMPS	1.7	8.4	15	15					LP2B-3	30/2/15	N	1:3#14, #146.3/4C.	
SSCU1-2	SPLIT SYSTEM COND	ROOF	208	1	8.4 AMPS	1.7	8.4	15	15					CLP-1	30/2/15	N	1:3#14, #146.3/4C.	
CRAC-1	COMPUTER ROOM AC	1ST FLOOR	480	3	51.8 AMPS	42.9	51.8	60	60					CDP-1	60/3/60	N	1:3#6, #106.3/4C.	9
CRAC-2	COMPUTER ROOM AC	1ST FLOOR	480	3	51.8 AMPS	42.9	51.8	60	60					CDP-2	60/3/60	N	1:3#6, #106.3/4C.	9
ACCU-1	COMPUTER ROOM COND	ROOF	480	3	4.2 AMPS	3.5	4.2	15	15					CDP-7	30/3/15	N	1:3#14, #146.3/4C.	
ACCU-2	COMPUTER ROOM COND	ROOF	480	3	4.2 AMPS	3.5	4.2	15	15					CDP-8	30/3/15	N	1:3#14, #146.3/4C.	
VAV CTRL	VAV CONTROLLER	1ST FLOOR	120	1	4.2 AMPS	0.5	4.2	20	20					LP1B-3	30/2/20	N	1:3#12, #126.3/4C.	
VAV CTRL	VAV CONTROLLER	2ND FLOOR	120	1	4.2 AMPS	0.5	4.2	20	20					LP2B-7	30/2/20	N	1:3#12, #126.3/4C.	
SD1-L01	VAV	1ST FLOOR	120	1										LP1B-7B		N		8
SD1-L02	VAV	1ST FLOOR	120	1										LP1B-7B		N		8
SD1-L03	VAV	1ST FLOOR	120	1										LP1B-7B		N		8
SD1-L04	VAV	1ST FLOOR	120	1	3.8 AMPS	1.0	3.6	15	15					HP1B-2	30/2/15	N	1:3#14, #146.3/4C.	
SD1-U01	VAV	2ND FLOOR	120	1												N		8
SD2-L01	VAV	1ST FLOOR	120	1										LP1A-33		N		8
SD2-L02	VAV	1ST FLOOR	120	1										LP1A-35		N		8
SD2-L03	VAV	1ST FLOOR	120	1										LP1A-33		N		8
FP1-L01	FAN POWERED TB	1ST FLOOR	277	1	20.5 AMPS	5.7	20.5	30	30					HP1B-11	30/2/30	N	1:3#10, #106.3/4C.	
FP1-L02	FAN POWERED TB	1ST FLOOR	277	1	8.3 AMPS	2.3	8.3	15	15					HP1B-5	30/2/15	N	1:3#14, #146.3/4C.	
FP1-L03	FAN POWERED TB	1ST FLOOR	277	1	14.8 AMPS	4.1	14.8	20	20					HP1B-1	30/2/20	N	1:3#12, #126.3/4C.	
FP1-L04	FAN POWERED TB	1ST FLOOR	277	1	20.5 AMPS	5.7	20.5	30	30					HP1B-3	30/2/30	N	1:3#10, #106.3/4C.	
FP1-L05	FAN POWERED TB	1ST FLOOR	277	1	20.5 AMPS	5.7	20.5	30	30					HP1B-4	30/2/30	N	1:3#10, #106.3/4C.	
FP1-L06	FAN POWERED TB	1ST FLOOR	277	1	17 AMPS	4.7	17.0	25	25					HP1B-7	30/2/25	N	1:3#10, #106.3/4C.	
FP1-L07	FAN POWERED TB	1ST FLOOR	277	1	20.5 AMPS	5.7	20.5	30	30					HP1B-6	30/2/30	N	1:3#10, #106.3/4C.	
FP1-L08	FAN POWERED TB	1ST FLOOR	277	1	11.9 AMPS	3.3	11.9	15	15					HP1B-8	30/2/15	N	1:3#14, #146.3/4C.	
FP1-L09	FAN POWERED TB	1ST FLOOR	277	1	20.5 AMPS	5.7	20.5	30	30					HP1B-9	30/2/30	N	1:3#10, #106.3/4C.	
FP1-U01	FAN POWERED TB	1ST FLOOR	480	3	30.1 AMPS	25.0	30.1	40	40					HP2B-9	60/3/40	N	1:3#8, #106.3/4C.	
FP1-U02	FAN POWERED TB	1ST FLOOR	277	1	27.8 AMPS	7.7	27.8	35	35					HP2B-8	60/2/35	N	1:3#8, #106.3/4C.	
FP1-U03	FAN POWERED TB	1ST FLOOR	277	1	11.9 AMPS	3.3	11.9	15	15					HP2B-10	30/2/15	N	1:3#14, #146.3/4C.	
FP1-U04	FAN POWERED TB	1ST FLOOR	277	1	11.9 AMPS	3.3	11.9	15	15					HP2B-4	30/2/15	N	1:3#14, #146.3/4C.	
FP1-U05	FAN POWERED TB	1ST FLOOR	277	1	13.4 AMPS	3.7	13.4	20	20					HP2B-2	30/2/20	N	1:3#12, #126.3/4C.	
FP1-U06	FAN POWERED TB	1ST FLOOR	480	3	33.7 AMPS	28.0	33.7	45	45					HP2B-1	60/3/45	N	1:3#8, #106.3/4C.	
FP1-U07	FAN POWERED TB	1ST FLOOR	277	1	24.2 AMPS	6.7	24.2	35	35					HP2B-7	60/2/35	N	1:3#8, #106.3/4C.	
FP1-U08	FAN POWERED TB	1ST FLOOR	277	1	8.3 AMPS	2.3	8.3	15	15					HP2B-8	30/2/15	N	1:3#8, #106.3/4C.	
FP2-L01	FAN POWERED TB	2ND FLOOR	277	1	20.5 AMPS	5.7	20.5	30	30					HP1A-9	30/2/30	N	1:3#14, #146.3/4C.	
FP2-L02	FAN POWERED TB	2ND FLOOR	277	1	11.9 AMPS	3.3	11.9	15	15					HP1A-10	30/2/15	N	1:3#14, #146.3/4C.	
FP2-L03	FAN POWERED TB	2ND FLOOR	277	1	11.9 AMPS	3.3	11.9	15	15					HP1A-8	30/2/15	N	1:3#14, #146.3/4C.	
FP2-L04	FAN POWERED TB	2ND FLOOR	277	1	11.9 AMPS	3.3	11.9	15	15					HP1A-7	30/2/15	N	1:3#14, #146.3/4C.	
FP2-L05	FAN POWERED TB	2ND FLOOR	480	3	18.7 AMPS	15.5	18.7	25	25					HP1A-2	30/3/25	N	1:3#10, #106.3/4C.	
FP2-L06	FAN POWERED TB	2ND FLOOR	277	1	17 AMPS	4.7	17.0	25	25					HP1A-3	30/2/25	N	1:3#10, #106.3/4C.	
FP2-L07	FAN POWERED TB	2ND FLOOR	277	1	20.5 AMPS	5.7	20.5	30	30					HP1A-1	30/2/30	N	1:3#10, #106.3/4C.	
FP2-L08	FAN POWERED TB	2ND FLOOR	277	1	11.9 AMPS	3.3	11.9	15	15					HP1A-5	30/2/15	N	1:3#14, #146.3/4C.	
FP2-L09	FAN POWERED TB	2ND FLOOR	277	1	17 AMPS	4.7	17.0	25	25					HP1B-10	30/2/25	N	1:3#10, #106.3/4C.	
FP2-U01	FAN POWERED TB	2ND FLOOR	480	3	27.7 AMPS	23.0	27.7	35	35					HP2A-10	60/3/35	N	1:3#8, #106.3/4C.	
FP2-U02	FAN POWERED TB	2ND FLOOR	277	1	11.9 AMPS	3.3	11.9	15	15					HP2A-9	30/2/15	N	1:3#14, #146.3/4C.	
FP2-U03	FAN POWERED TB	2ND FLOOR	277	1	11.9 AMPS	3.3	11.9	15	15					HP2A-8	30/2/15	N	1:3#14, #146.3/4C.	
FP2-U04	FAN POWERED TB	2ND FLOOR	277	1	8.3 AMPS	2.3	8.3	15	15					HP2A-4	60/2/35	N	1:3#8, #106.3/4C.	
FP2-U05	FAN POWERED TB	2ND FLOOR	277	1	24.2 AMPS	6.7	24.2	35	35					HP2A-7	30/2/35	N	1:3#8, #106.3/4C.	
FP2-U06	FAN POWERED TB	2ND FLOOR	277	1	20.5 AMPS	5.7	20.5	30	30					HP2A-7	30/2/30	N	1:3#10, #106.3/4C.	
FP2-U07	FAN POWERED TB	2ND FLOOR	480	3	33.7 AMPS	28.0	33.7	45	45					HP2A-1	60/3/45	N	1:3#8, #106.3/4C.	
LH-1	UNIT HEATER	1ST FLOOR	480	3	6.1 AMPS	5.1	6.1	15	15					HP1B-12	NOT RECD SEE NOTES	N	1:3#14, #146.3/4C.	1
EWH-1	WATER HEATER	1ST FLOOR	208	1	28.8 AMPS	6.0	28.8	40	40					LP1B-2	NOT RECD	N	1:3#8, #106.3/4C.	
EWH-2	WATER HEATER	1ST FLOOR	208	1	14.4 AMPS	3.0	14.4	20	20					LP1A-3	NOT RECD	N	1:3#12, #126.3/4C.	
EWH-2	WATER HEATER	2ND FLOOR	208	1	14.4 AMPS	3.0	14.4	20	20					LP2B-4	NOT RECD	N	1:3#12, #126.3/4C.	
EWH-3	WATER HEATER	1ST FLOOR	208	1	7.2 AMPS	1.5	7.2	20	20					LP1A-2	NOT RECD	N	1:3#12, #126.3/4C.	
ELEV	ELEVATOR		480	3	25 HP	28.3	34.0	70	70					CDP-14	100/3/70	N	1:3#6, #86.3/4C.	

KEYED NOTES

- 1 MAKE CONNECTIONS VIA STARTER/DISCONNECT FURNISHED WITH EQUIPMENT.
- 2 POWER FOR CONTROL CIRCUITS SHALL BE EXTENDED FROM LOCATIONS DESIGNATED ON THE DRAWINGS FOR ALL DEVICES AS REQUIRED.
- 3 PROVIDE RECEPTACLE FOR EQUIPMENT. PROVIDE CORD AND PLUG IF NOT FURNISHED WITH EQUIPMENT.
- 4 MAKE CONNECTIONS VIA VFD/DISCONNECT FURNISHED WITH EQUIPMENT.
- 5 OVERCURRENT PROTECTION FOR FIRE PUMP CIRCUITS SHALL BE PROVIDED BY MOLDED CASE MCP WITH SHORT CIRCUIT TRIP SET AT 400 AMPS.
- 6 PROVIDE LOCAL DISCONNECT SWITCH



PANELBOARD SCHEDULE - ELP. Main: 60 AMP, 3 POLE, MAIN BREAKER. Location: ELECTRIC ROOM. Includes table with columns for Code, Breaker, Load, Phase, and Description. Includes summary table for Lighting, Receptacle, Mech. Heat, Mech. Motor, Cooking, Water HTR, and Appliance.

PANELBOARD SCHEDULE - HP1A. Main: 225 AMP, MAIN LUGS ONLY. Location: ELECTRIC ROOM. Includes table with columns for Code, Breaker, Load, Phase, and Description. Includes summary table for Lighting, Receptacle, Mech. Heat, Mech. Motor, Cooking, Water HTR, and Appliance.

PANELBOARD SCHEDULE - LP1A - (SECTION 2). Main: 225 AMP, MAIN LUGS ONLY. Location: ELECTRIC ROOM. Includes table with columns for Code, Breaker, Load, Phase, and Description. Includes summary table for Lighting, Receptacle, Mech. Heat, Mech. Motor, Cooking, Water HTR, and Appliance.

PANELBOARD SCHEDULE - HP1B. Main: 225 AMP, MAIN LUGS ONLY. Location: ELECTRIC ROOM. Includes table with columns for Code, Breaker, Load, Phase, and Description. Includes summary table for Lighting, Receptacle, Mech. Heat, Mech. Motor, Cooking, Water HTR, and Appliance.

PANELBOARD SCHEDULE - HP2A. Main: 225 AMP, MAIN LUGS ONLY. Location: ELECTRIC ROOM. Includes table with columns for Code, Breaker, Load, Phase, and Description. Includes summary table for Lighting, Receptacle, Mech. Heat, Mech. Motor, Cooking, Water HTR, and Appliance.

PANELBOARD SCHEDULE - LP2A. Main: 225 AMP, 3 POLE, MAIN BREAKER. Location: ELECTRIC ROOM. Includes table with columns for Code, Breaker, Load, Phase, and Description. Includes summary table for Lighting, Receptacle, Mech. Heat, Mech. Motor, Cooking, Water HTR, and Appliance.

PANELBOARD SCHEDULE - HP2B. Main: 400 AMP, MAIN LUGS ONLY. Location: ELECTRIC ROOM. Includes table with columns for Code, Breaker, Load, Phase, and Description. Includes summary table for Lighting, Receptacle, Mech. Heat, Mech. Motor, Cooking, Water HTR, and Appliance.

PANELBOARD SCHEDULE - LP1A. Main: 225 AMP, 3 POLE, MAIN BREAKER. Location: ELECTRIC ROOM. Includes table with columns for Code, Breaker, Load, Phase, and Description. Includes summary table for Lighting, Receptacle, Mech. Heat, Mech. Motor, Cooking, Water HTR, and Appliance.

PANELBOARD SCHEDULE - LP2A - (SECTION 2). Main: 225 AMP, MAIN LUGS ONLY. Location: ELECTRIC ROOM. Includes table with columns for Code, Breaker, Load, Phase, and Description. Includes summary table for Lighting, Receptacle, Mech. Heat, Mech. Motor, Cooking, Water HTR, and Appliance.

Revisions table with columns for Issue No., Issue Date, and Description of changes.

Bulletin No. 6

Sheet Information table with columns for Date, Job Number, Drawn, Checked, and Approved.

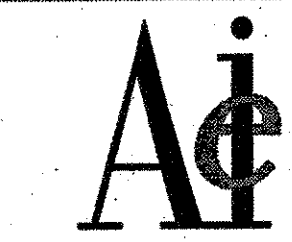
ELECTRICAL SCHEDULES

RECEIVED

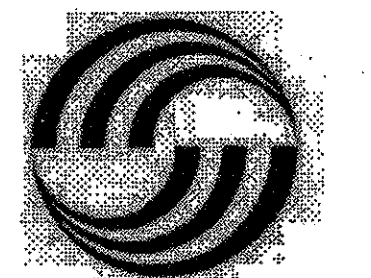
AUG 01 2006

HOAR CONSTRUCTION FIELD OFFICE

E-902



11500 Natchez Road  
Suite 110  
Glen Allen, VA 23060-6507  
Telephone 804.674.7800  
Facsimile 804.674.6822



AIRBUS

Engineering  
Center

1801 S. Broad St., Mobile, AL 36615

Mobile Airport  
Authority

1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

Airbus North America  
Holdings, Inc.

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486

Revisions table with columns: Issued For, Date, Description. Includes design development, permit set, and construction dates.

Electrical Schedules  
Received  
AUG 01 2006  
HOAR CONSTRUCTION FIELD OFFICE

Sheet Information  
Date: 03/27/2006  
Job Number: 25069  
Checked  
Approved  
Title

PANELBOARD SCHEDULE - LP1B

PANELBOARD SCHEDULE - LP1B table with columns: Description, Breaker, Load, Phase, Location. Includes lighting, receptacles, and various equipment loads.

PANELBOARD SCHEDULE - LP2B - (SECTION 2)

PANELBOARD SCHEDULE - LP2B - (SECTION 2) table with columns: Description, Breaker, Load, Phase, Location. Includes systems furniture, refrigeration, and other loads.

PANELBOARD SCHEDULE - LP1B - (SECTION 2)

PANELBOARD SCHEDULE - LP1B - (SECTION 2) table with columns: Description, Breaker, Load, Phase, Location. Includes kitchen equipment like dishwashers and ovens.

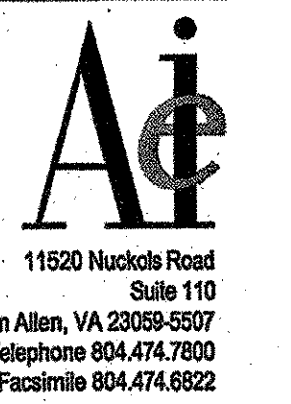
PANELBOARD SCHEDULE - MDP

PANELBOARD SCHEDULE - MDP table with columns: Description, Breaker, Load, Phase, Location. Includes various electrical components and equipment.

PANELBOARD SCHEDULE - LP2B

PANELBOARD SCHEDULE - LP2B table with columns: Description, Breaker, Load, Phase, Location. Includes lighting, receptacles, and other loads.

Vertical text on the left margin, possibly a project identifier or drawing number.



**Engineering  
Center**

1801 S. Broad St., Mobile, AL 36615

CLIENT  
**Mobile Airport  
Authority**

1801 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TEWANT

**Airbus North America  
Holdings, Inc.**

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486

**ELECTRIC WATER HEATER SCHEDULE**

UNIT NO.	TYPE	LOCATION	STORAGE GAL.	HTG. ELEMENT KW		ELECTRIC			MANUFACTURER & MODEL NO.	REMARKS
				LOWER	UPPER	V	PH	HZ		
EMH-1	ELECTRIC, STORAGE	JAN. CLOSET 1ST FLOOR	40	6	6	208	1	60	A.O. SMITH; DEL-40	PROVIDE SUPPORT STAND (14" HIGH) FOR INSTALLING ON FLOOR. SET T'STAT AT 110°F, PROVIDE WITH WATTS BRV COMBINATION BALL VALVE AND RELIEF VALVE, T&P RELIEF VALVE.
EMH-2	ELECTRIC, STORAGE	ABV CLG IN LUNCH RM. (LOWER LEVEL) IN BASE CABINET IN PANTRY (UPPER LEVEL)	20	3	-	208	1	60	A.O. SMITH; DEL-10	PROVIDE MOUNTING HARDWARE FOR MOUNTING ONE UNIT ABOVE CEILING. SET T'STAT AT 110°F, PROVIDE WITH WATTS BRV COMBINATION BALL VALVE AND RELIEF VALVE, T&P RELIEF VALVE AND DRAIN PAN.
EMH-3	ELECTRIC, STORAGE	ABV CLG 1ST FL TOIL.	5	1.5	-	120	1	60	A.O. SMITH; DEL-5	PROVIDE MOUNTING HARDWARE FOR MOUNTING ABOVE CEILING. SET T'STAT AT 110°F, PROVIDE WITH WATTS BRV COMBINATION BALL VALVE AND RELIEF VALVE, T&P RELIEF VALVE AND DRAIN PAN.

**PLUMBING LEGEND**

	SANITARY (OR STORM) SEWER ABOVE FLOOR
	SANITARY (OR STORM) SEWER BELOW FLOOR
	VENT (V)
	DOMESTIC COLD WATER (OCW)
	DOMESTIC HOT WATER (DHW)
	BACKFLOW PREVENTER
	UNION
	BALL VALVE
	CHECK VALVE
	WATER HAMMER ARRESTOR
	CONDENSATE DRAIN
	TRAP PRIMER
	ELBOW, TURNED UP
	ELBOW, TURNED DOWN
	FLOOR DRAIN
	CLEANOUT
	HOSE BIBB / WALL HYDRANT
	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
	FIRE SERVICE
	SPRINKLER PIPE
	OUTSIDE STEM & YOKE W/ TS

**ABBREVIATIONS**

AAV	AIR ADMITTANCE VALVE
ABV	ABOVE
AD	ACCESS DOOR
AFG	ABOVE FINISHED GRADE
AFF	ABOVE FINISHED FLOOR
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
CCO	CEILING CLEANOUT
CO	CLEANOUT
COTG	CLEANOUT TO GRADE
CW	COLD WATER
DFU'S	DRAINAGE FIXTURE UNITS
DCV	DOUBLE CHECK VALVE
DN	DOWN
DWG	DRAWING
ELEV	ELEVATION
EWI	ENTERING WATER TEMPERATURE
FOO	FLOOR CLEANOUT
FDC	FIRE DEPARTMENT CONNECTION
FP	FIRE PROTECTION LINE
FT	FEET
FU'S	FIXTURE UNITS
GPM	GALLON PER MINUTE
HB	HOSE BIBB
HP	HORSEPOWER
HUB	HARD UNDER BEAM
HW	HOT WATER
IN	INCH, INCHES
INV	INVERT (ELEVATION)
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
NOM	NOMINAL
PG	PRESSURE GAUGE
PH	PHASE
QTY	QUANTITY
RD	ROOF DRAIN
RPZ	REDUCED PRESSURE ZONE
RSN	SANITARY
SFU	SUPPLY FIXTURE UNITS
TP	TRAP PRIMER
TS	TAMPER SWITCH
TYP	TYPICAL
V	VENT
V	VENT
VTR	VENT TO ROOF
W/	WITH
WCO	WALL CLEANOUT
WH	WALL HYDRANT

**PLUMBING NOTES**

- GENERAL NOTES:
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL CODE REQUIREMENTS INCLUDING BUT NOT LIMITED TO:
  - CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND SHALL ARRANGE FOR ALL INSPECTIONS AS REQUIRED.
  - THE DRAWINGS ARE DIAGRAMMATIC AND SHOULD NOT BE SCALED TO ESTABLISH LOCATION OF WORK. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND MAKE ADJUSTMENTS AS NECESSARY TO COMPLETE THE WORK.
  - THE PLUMBING/MECHANICAL CONTRACTOR SHALL FULLY COORDINATE ALL WORK WITH OTHER TRADES TO ASSURE ALL WORK CAN BE PROPERLY INSTALLED WITHOUT INTERFERENCE OR DELAY.
  - PROVIDE ACCESS PANELS FOR ALL VALVES AND MECHANICAL EQUIPMENT.
  - ALL EQUIPMENT INSTALLED ABOVE THE CEILING PLENUM SHALL HAVE MAXIMUM FLAME SPREAD/SMOKE DEVELOPED RATING OF 25/50 IN ACCORDANCE WITH ASTM E84.
  - CLEAN UP ALL WASTE AND DEBRIS AT THE END OF EACH WORKING DAY AND AT THE COMPLETION OF THE JOB.
  - THE PLUMBING/MECHANICAL CONTRACTOR SHALL NOT CORE DRILL CONCRETE SLABS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE STRUCTURAL ENGINEER AND THE BUILDING OWNER.
  - ALL SPECIFIED EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
  - THE PLUMBING/MECHANICAL CONTRACTOR SHALL VERIFY ALL CONDITIONS PRIOR TO COMMENCING WORK AND SHALL NOTIFY THE ARCHITECT AND/OR ENGINEER IF A CONDITION EXISTS WHICH PREVENTS THE CONTRACTOR FROM ACCOMPLISHING THE INTENT OF THESE PLANS.
- PLUMBING:
- ALL PIPING SHALL BE PROVIDED WITH SECTIONAL SHUT-OFF VALVES AND ACCESS PANELS FOR ALL CONCEALED VALVES. PROVIDE ISOLATION VALVES FOR ALL PLUMBING FIXTURES.
  - ALL HORIZONTAL DRAINAGE PIPING TO BE SLOPED AS FOLLOWS (UNLESS OTHERWISE NOTED):  
SIZE (INCHES) MIN. SLOPE (INCHES PER FT.)  
2 1/2 OR LESS 1/4"  
3 TO 6 1/8"  
8 OR LARGER 1/16"
  - ALL HORIZONTAL BRANCH VENTS SHALL BE SLOPED AT 2% MAXIMUM.
  - ALL DOMESTIC WATER PIPING SHALL BE TYPE "L" COPPER ASTM A137, 438, OR 439 AND ALL PIPING WITHIN WALLS SHALL BE INSTALLED WITH 3/8" POLYETHYLENE FOAM PIPE INSULATION. PIPE SHALL BE CONCEALED IN WALL AS MUCH AS POSSIBLE.
  - ALL BELOW FLOOR DOMESTIC WATER PIPE SHALL BE TYPE "K" SOFT COPPER TUBING AND SHALL BE INSULATED WITH 1/2" WALL CLOSED CELL (AWALTEX) INSULATION. THERE SHALL BE NO JOINTS IN UNDER GROUND DOMESTIC WATER.
  - DOMESTIC WATER PIPING INSIDE EXTERIOR WALL CONSTRUCTION SHALL BE INSTALLED ON THE "INSIDE" (BUILDING SIDE) OF WALL INSTALLATION.
  - ALL SANITARY, WASTE, VENT AND STORM PIPING ABOVE FLOOR SHALL BE NO-HUB CAST IRON.
  - PLUMBING CONTRACTOR TO PROVIDE CONDENSATE PIPING FROM AHU'S. CONTRACTOR SHALL COORDINATE CONDENSATE PIPE SIZE AND EXACT UNIT LOCATION WITH MECHANICAL CONTRACTOR.
  - ALL AIR ADMITTANCE VALVES SHALL BE TYPE "A" AND MEET REQUIREMENT OF ASSE 1051. VALVES SHALL BE ACCESSIBLE FOR INSPECTION & MAINTENANCE.

**PLUMBING DESIGN INFORMATION**

TOTAL PLUMBING SANITARY FIXTURE UNITS =	180 DFU ±
TOTAL PLUMBING WATER SUPPLY FIXTURE UNITS =	240 SFU ±
TOTAL DOMESTIC WATER DEMAND =	100 GPM ±

**DRAWING INDEX**

SHT. NO.	SHEET TITLE
P-001	PLUMBING FIXTURE SCHEDULE, SYMBOLS, ABBREVIATIONS & NOTES
P-201	PLUMBING - LOWER LEVEL PLAN
P-202	PLUMBING - UPPER LEVEL PLAN
P-203	PLUMBING - ROOF PLAN
P-601	PLUMBING - LARGE SCALE PLANS
P-701	PLUMBING DETAILS
P-801	PLUMBING SANITARY RISER DIAGRAMS
P-802	PLUMBING DOMESTIC WATER RISER DIAGRAMS

**FLOW TEST DATA**

FLOW TEST DATE AND TIME:	(UNKNOWN)	MOBILE, ALABAMA
TEST LOCATION:	(UNKNOWN)	FIRE MARSHAL'S (MAWSS) FLOW
STATIC PRESSURE:	78 PSI	REQUIREMENTS: 1,500 GPM
RESIDUAL PRESSURE:	38 PSI	
FLOW:	1,180 GPM	

FLOW TEST DATA IS GIVEN AS A GENERAL REFERENCE ONLY. THE FIRE PROTECTION CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATION REGARDING WATER SUPPLIES. CONTRACTORS RELYING ON THE ABOVE DATA DO SO AT THEIR OWN RISK. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR CONTRACTOR'S FAILURE TO DETERMINE EXISTING HYDRAULIC CONDITIONS.

**PLUMBING FIXTURE SCHEDULE**

FIXTURE	FIXTURE TYPE	WASTE	VENT	CW	HW	MANUFACTURER & MODEL NO.	REMARKS
P-1	PUBLIC WATER CLOSET, FLUSH VALVE, WALL HUNG	4"	2"	1"	-	AMERICAN STD. "AFWALL" - MODEL # 2257.103, WALL HUNG, ELONGATED, FLUSH VALVE	SLOAN REGAL PRO MODEL 110, CHROME PLATED AND OLSONITE #95 OPEN FRONT SEAT LESS COVER. PROVIDE FLOOR MOUNTED CARRIER INSTALL RIM AT 15" AFF
P-1A	PUBLIC WATER CLOSET, FLUSH VALVE, WALL HUNG	4"	2"	1"	-	AMERICAN STD. "AFWALL" - MODEL # 2257.103, WALL HUNG, ELONGATED, FLUSH VALVE	SLOAN REGAL PRO MODEL 110, CHROME PLATED, AND OLSONITE #95 OPEN FRONT SEAT LESS COVER. PROVIDE FLOOR MOUNTED CARRIER. INSTALL RIM AT 17" ABOVE FINISHED FLOOR
P-2	URINAL	2"	1-1/2"	3/4"	-	AMERICAN STD. "ALLBROOK" - MODEL # 6541.132, 1.0 URINAL, WHITE WALL HUNG, VITREOUS CHINA	PROVIDE WITH SLOAN REGAL PRO MODEL 186-1, CHROME PLATED FLUSH VALVE, INSTALL WITH FRONT RIM AT 24" AFF
P-2A	URINAL ADA (COMPLIANT)	2"	1-1/2"	3/4"	-	AMERICAN STD. "ALLBROOK" - MODEL # 6541.132, 1.0 URINAL, WHITE WALL HUNG, VITREOUS CHINA	PROVIDE WITH SLOAN REGAL PRO MODEL 186-1, CHROME PLATED FLUSH VALVE, INSTALL WITH FRONT RIM AT 24" AFF
P-3	PUBLIC LAVATORY UNDER COUNTER	1-1/2"	OR 2"	1/2"	1/2"	AMERICAN STD. "MONTEREY" WIDESPREAD FAUCET, MODEL # 6502.140 (LEVER HANDLE)	AMERICAN STD. "MONTEREY" WIDESPREAD FAUCET, MODEL # 6502.140 (LEVER HANDLE) PROVIDE HW/CW SUPPLIES WITH STOPS, 17GA, 1-1/2" CHROME PLATED P-TRAP.
P-3A	PUBLIC LAVATORY, UNDER COUNTER, (ADA COMPLIANT)	1-1/2"	OR 2"	1/2"	1/2"	AMERICAN STD. "MONTEREY" WIDESPREAD FAUCET, MODEL # 6502.140 (LEVER HANDLE)	AMERICAN STD. "MONTEREY" WIDESPREAD FAUCET, MODEL # 6502.140 (LEVER HANDLE) PROVIDE HW/CW SUPPLIES WITH STOPS, 17GA, 1-1/2" CHROME PLATED P-TRAP. PROVIDE COVER ASSEMBLY FOR ADA COMPLIANT
P-4	MOP BASIN	3"	2"	1/2"	1/2"	FIAT, MODEL # MSB-2424, MOLDED STONE, WITH CAST BRONZE STRAINER	24"x24"x12" HIGH. PROVIDE FIAT # 8304A FAUCET WITH VACUUM BREAKER, 8324M HOSE BRACKET, 889C MOP HOOK, HW/CW SUPPLIES WITH ANGLE STOP
P-5	CASEWORK SINK SINGLE COMP. WITH DISPOSER	1-1/2"	2"	1/2"	1/2"	ELKAY #LRAD 2219, 22" x 19-1/2" x 6-1/2" DEEP SELF-RIMMING, 18 GA STAINLESS STEEL, SOUND-DEADENED	PROVIDE ELKAY #LK 2423BH TWO-HANDLE FAUCET AND NO. LKR 208513 SINK LEVER FAUCET FOR FILTERED WATER DISPENSER LOCATE AS DIRECTED BY ARCHITECT (WITH LEVER ON RIGHT OR LEFT SIDE)
EW-C-1	ELEC. WATER COOLER, DUAL HEIGHT (ADA COMPLIANT)	1-1/2"	1-1/2"	1/2"	-	ELKAY MANUFACTURING #ERPMB-28C PRECISION PLUMBING PRODUCTS	STAINLESS STEEL DUAL LEVEL ELECTRIC WATER COOLER WITH RECESSED COMPRESSOR UNIT IN WALL CABINET, INCLUDING SUPPORT FRAME WALL ASSEMBLY, COMPLETE AS CATALOGUED. PROVIDE CW SUPPLY WITH STOP, 17GA, 1-1/2" CHROME PLATED P-TRAP AND WASTE (INSIDE CABINET)
TP	TRAP PRIMER	-	-	1/2"	-	"PRIME-RITE" MODEL #NWBED 200	PROVIDE DISTRIBUTION MANIFOLD ASSEMBLY FOR MULTIPAL, FLOOR DRAINS OR OPEN SITE DRAINS
AAVB	AIR ADMITTANCE VALVE	-	1-1/2"	-	-		PROVIDE GUY GRAY WALL BOX FOR ACCESS IN WALLS.
CMB	COFFEE MAKER BOX	-	-	1/2"	-	GUY GRAY MODEL #BMB75, PAINTED STEEL	PROVIDE BACKFLOW PREVENTER, SEE DETAIL FOR INSTALLATION REQUIREMENTS
IMB	ICE MAKER BOX	-	-	1/2"	-	GUY GRAY MODEL #BMB75, PAINTED STEEL	PROVIDE BACKFLOW PREVENTER, SEE DETAIL FOR INSTALLATION REQUIREMENTS
WF-1	WATER FILTER UNIT	-	-	3/4"	-	FILTRINE MODEL NO. GPF-02, POLYPROPYLENE PARTICLE FILTER	PROVIDE CW SUPPLY SHUT-OFF AND HB DRAIN (AFTER SHUT-OFF), UNION CONNECTIONS ON BOTH ENDS. EXTEND 3/4" FILTERED CW TO ICEMAKER, CW DISPENSER ON P-5 & 1/2" TO CMB, INSTALL UNDER SINK, SECURED TO SIDEWALL OF CABINET AT 45 ANGLE (FOR EASE OF SERVICE)
HB	HOSE BIBB (PUBLIC TOILETS)	-	-	3/4"	-	WOODFORD MODEL #24P-3/4", CHROME PLATED, LOOSE-KEY OPERATED	UNIT SHALL HAVE A NON-REMOVABLE HOSE THREAD VACUUM BREAKER
WH	WALL HYDRANT (EXTERIOR)	-	-	3/4"	-	WOODFORD MODEL #65-EP, CHROM-PLATED, POLISH BRASS FINISH, LOOSE-KEY OPERATED	WALL HYDRANT SHALL HAVE INTEGRAL 3/4" HOSE THREAD VACUUM BREAKER
FOO	FLOOR CLEANOUT	SEE PLAN	-	-	-	ZURN - MODEL # Z-1400	"LEVEL-TROL" ADJUSTABLE FLOOR CLEANOUT. DURA-COATED CAST IRON BODY WITH GAS AND WATERTIGHT ABS TAPERED THREAD PLUG AND ROUND SCORATED BRONZE TOP ADJUSTABLE TO FINISHED FLOOR
WCO	WALL CLEANOUT	SEE PLAN	-	-	-	ZURN - MODEL # Z-1446	INSTALL CLEANOUTS 12" MIN. AFF TO CLEAR BASEBOARDS.
3FD	TOILET ROOMS FLOOR DRAIN	3"	2"	-	-	J.R., SMITH # 2005-U-P050	COATED CAST IRON, BODY WITH BOTTOM OUTLET, ROUND TOP AND REMOVABLE ANTI TILTING VANDAL-RESISTANT, NICKEL-BRONZE GRATE. PROVIDE WITH "P" TRAP & TRAP PRIMER
3FD-A	KITCHEN FLOOR DRAIN	3"	2"	-	-	J.R., SMITH # 2005-U-F37-P050	PROVIDE SAME AS FOR 3" FD, EXCEPT WITH RECESSED GRATE. INSTALL OUT OF FOOT TRAFFIC UNDER EQUIPMENT
RD	ROOF DRAIN	SEE PLAN	-	-	-	ZURN - MODEL # Z100, WITH SUMP RECEIVER & UNDERDECK CLAMPS	DURA-COATED CAST IRON BODY WITH COMBINATION MEMBRANE FLASHING CLAMP/GRVEL GUARD AND LOW SILHOUETTE CAST IRON DOME. PROVIDE ADJUSTABLE EXTERIOR/FLASHING COLLAR AS REQUIRED
ERD	EMERGENCY OVERFLOW ROOF DRAIN	SEE PLAN	-	-	-	ZURN - MODEL # Z100-AW, WITH SUMP RECEIVER & UNDERDECK CLAMPS	DURA-COATED CAST IRON BODY WITH COMBINATION MEMBRANE FLASHING CLAMP/GRVELGUARD AND ADJUSTABLE WATER LEVEL REGULATOR, PROVIDE ADJUSTABLE EXTERIOR/FLASHING COLLAR AS REQUIRED
WHA	WATER HAMMER ARRESTER	-	-	SEE PLAN	SEE PLAN	JOSAM - 75000-S SERIES	"ABSORPTION II" SHOCK ABSORBER WITH WROUGHT COPPER SHELL, HYDRO-PNEUMATIC AIR CUSHION, TRIPLE O-RING SEALED PISTON, WROUGHT COPPER ADAPTER AND MALE THREADED CONNECTION.

NOTE: CONTRACTOR SHALL PROVIDE ALL REQUIRED COMPONENTS FOR FIXTURE ROUGH-IN; SUPPLIES, STOPS, TRAPS, CARRIERS, GRID DRAINS, FUNNELS, TAIL PIECE, ETC.

**FIRE PROTECTION NOTES**

- A. GENERAL
- THE BUILDING SHALL BE PROTECTED BY SPRINKLER FIRE SUPPRESSION SYSTEM.
  - THE FIRE PROTECTION CONTRACTOR SHALL DESIGN, SUPPLY AND INSTALL THE FIRE PROTECTION SPRINKLER SYSTEM IN ACCORDANCE WITH CRITERIA STIPULATED IN THE SPECIFICATION MANUAL.
1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 13 AND NFPA 14.
2. THE SPRINKLER CONTRACTOR SHALL PERFORM FLOW TEST TO OBTAIN TEST DATA PRIOR TO DESIGN & INSTALLATION OF FIRE PROTECTION SPRINKLER SYSTEMS.
3. DESIGN DENSITY
- IN LIGHT HAZARD AREA OCCUPANCIES, DESIGN DENSITY SHALL BE 0.1 GPM/SQ.FT. FOR THE MOST REMOTE 1,500 SQ.FT. AREA OF WATER APPLICATION.
  - IN ORDINARY HAZARD GROUP 1 OCCUPANCIES, DESIGN DENSITY FOR SPRINKLER OPERATION SHALL BE 0.15 GPM/SQ.FT. FOR THE MOST REMOTE 1,500 SQ.FT. AREA OF WATER APPLICATION.
  - IN ADDITION TO "STANDARD" ROOMS/SPACES REQUIRING ORDINARY HAZARD, GROUP ONE PROTECTION, THE SERVER ROOM, TELEPHONE ROOMS AND PRINTER ROOM SHALL BE ORDINARY HAZARD, GROUP ONE OCCUPANCY.
4. SPRINKLER TYPES
- IN LIGHT HAZARD AREAS WITH CEILING, SPRINKLERS SHALL BE RECESSED WITH CHROME ESCUTCHION AND/OR CHROME PLATE. IN FINISHED AREAS WITHOUT CEILING, SPRINKLER HEADS SHALL BE CHROME-PLATED.
  - IN EQUIPMENT ROOMS, SPRINKLERS SHALL BE UPRIGHT, WITH DISCHARGE ORIFICE 1/2", FUSIBLE LINK SETTING OF 165° F AND BRASS FINISH.
  - PROVIDE FREEZE-PROOF CHROME-PLATED SIDEWALL SPRINKLER HEADS AT LOADING DOCK.
  - PROVIDE PRE-ACTION SPRINKLER SYSTEMS FOR COMPUTER SERVER ROOMS & ELEVATOR SHAFT. IN LOW CELL EQUIP. ROOMS, ALL STORAGE ROOMS, AND SIMILAR AREAS.
  - PROVIDE WIRE PROTECTIVE CAGES AT ALL SPRINKLER HEADS WHERE SUBJECT TO DAMAGE, IN LOW CELL EQUIP. ROOMS, ALL STORAGE ROOMS, AND SIMILAR AREAS.
5. LOCATE SPRINKLER HEADS AT CENTER OF CEILING TILES OR CENTER OF CORRIDOR.
- COORDINATE LOCATION OF SPRINKLERS IN ROOMS/SPACES WITH CEILING, WITH LIGHT FIXTURES AND AIR DEVICES.
  - SPRINKLER HEADS SHALL BE LOCATED IN FINISHED CEILING SPACES, IN A NEAT AND ORDERLY PATTERN OR GRID.
  - SPRINKLER HEADS IN OCCUPIED SPACES WITHOUT CEILING SHALL BE UNIFORMLY THROUGH-OUT OPEN-GRID STRUCTURE.
6. IN EQUIPMENT ROOMS AND WHERE EXPZED DUCTWORK AND/OR EQUIPMENT IS 48" AND WIDER, LOCATE SPRINKLER HEADS BOTH ABOVE AND BELOW DUCTWORK.
7. LOCATE SPRINKLER HEADS AT BOTTOM OF ELEVATOR PITS CONTAINING HYDRAULIC FLUIDS AT 2' MAXIMUM ABOVE ELEVATOR PIT FLOOR AS REQUIRED PER NFPA 13 AND THE REQUIREMENTS OF ASME A17.1, SAFETY CODE FOR ELEVATORS AND ESCALATORS.
- B. CERTIFICATION AND APPROVAL
- CONTRACTOR SHALL COMMUNICATE WITH AUTHORITY HAVING JURISDICTION AND OWNER'S INSURANCE UNDERWRITERS AND RECEIVE THE APPROVAL FOR SHOP DRAWINGS AND HYDRAULIC CALCULATIONS PRIOR TO PROCEEDING WITH WORK.
  - CONTRACTOR TO FURNISH CERTIFICATE OF ACCEPTANCE FROM THE OWNER'S INSURANCE UNDERWRITERS UPON COMPLETION OF WORK.
  - CONTRACTOR SHALL HAVE A CERTIFIED FIRE PROTECTION NICET LEVEL III OR GREATER DESIGN, SIGN AND SEAL ALL DRAWINGS AND HYDRAULIC CALCULATIONS.
- C. WORKMANSHIP
- CONTRACTOR TO TEST THE SYSTEM WITH WATER AND/OR AIR AND FURNISH CERTIFICATE OF COMPLIANCE FROM AUTHORITY HAVING JURISDICTION AND LOCAL FIRE DEPARTMENT.
- D. SUBMITTALS
- SEVEN (7) SETS OF SHOP DRAWINGS FOR EQUIPMENT.
  - HYDRAULIC CALCULATIONS AND SHOP DRAWINGS FOR SPRINKLER PIPING IN SEVEN COPIES.
  - COMPLETED AS-BUILT FINAL DRAWINGS.
  - O & M MANUALS IN 3-RING HARD COVER BINDERS IN TRIPLICATE.
  - ONE(1) SET OF COUNTY FIRE MARSHAL'S APPROVED DRAWINGS.

Revisions	
ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06

Sheet Information		
NO.	ISSUE	DATE
Date	03/27/2006	
Job Number	25069	
Drawn	AL	
Checked	ML	
Approved		THB

**PLUMBING FIXTURE  
SCHEDULE, SYMBOLS  
ABBREVIATIONS &  
NOTES**

Sheet

**P-001**



**AIRBUS**

**Engineering  
Center**

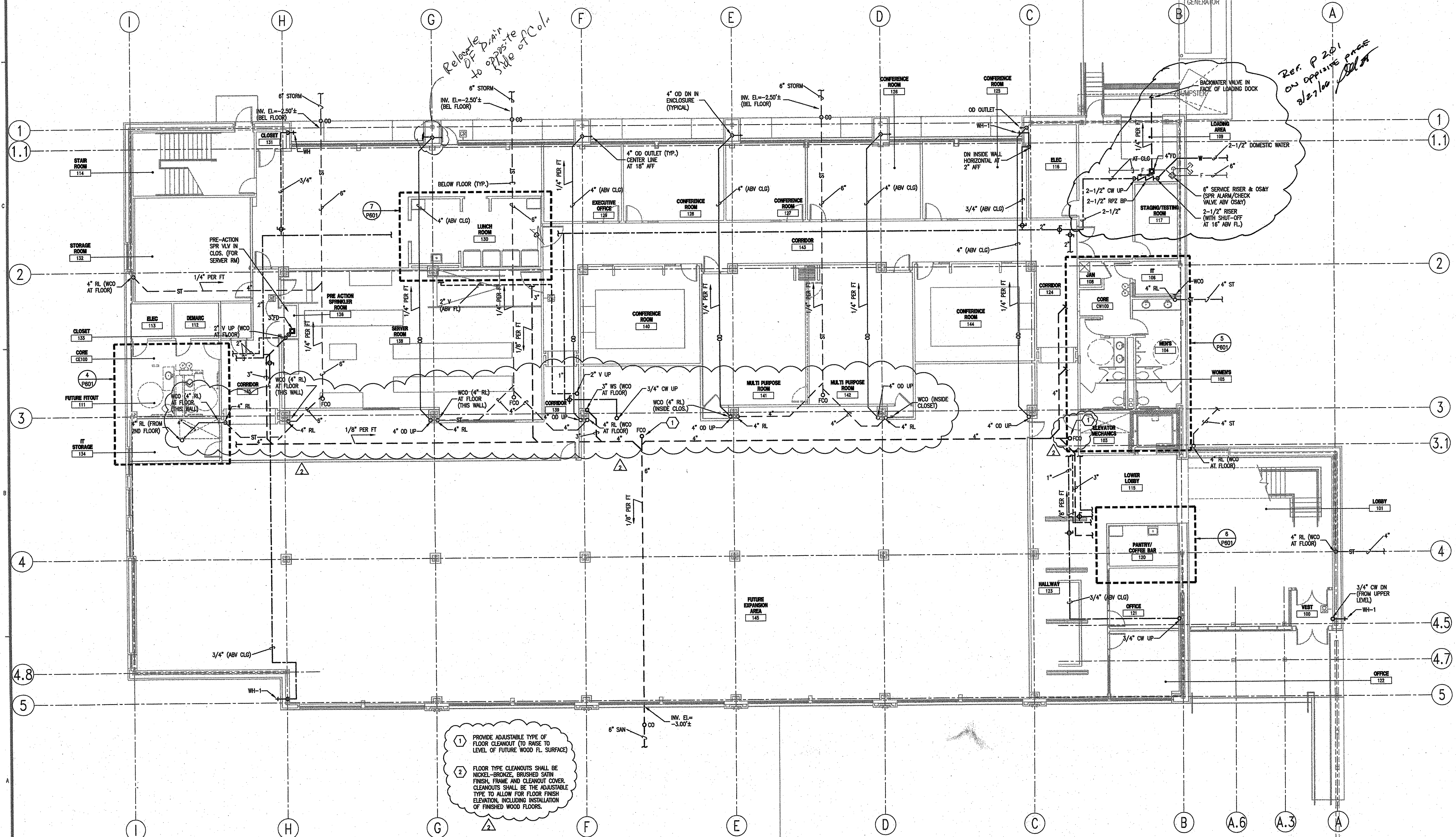
1801 S. Broad St, Mobile, AL 36615

CLIENT  
**Mobile Airport  
Authority**

1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TEWANT  
**Airbus North America  
Holdings, Inc.**

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486



**1 LOWER LEVEL PLAN - PLUMBING**  
SCALE: 1/8" = 1'-0"

**Revisions**

ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06
ADDENDUM #2 INTERIOR CLERESTORIES	05.03.06

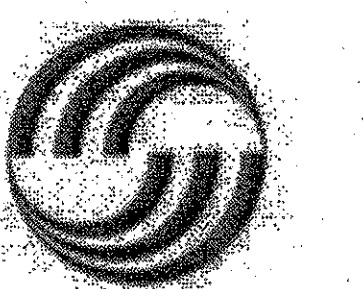
**Sheet Information**

Date	03/27/2006
Job Number	25069
Drawn	AL
Checked	ML
Approved	

**PLUMBING -  
LOWER LEVEL  
PLAN**

Sheet

P-201



**AIRBUS**

**Engineering  
Center**

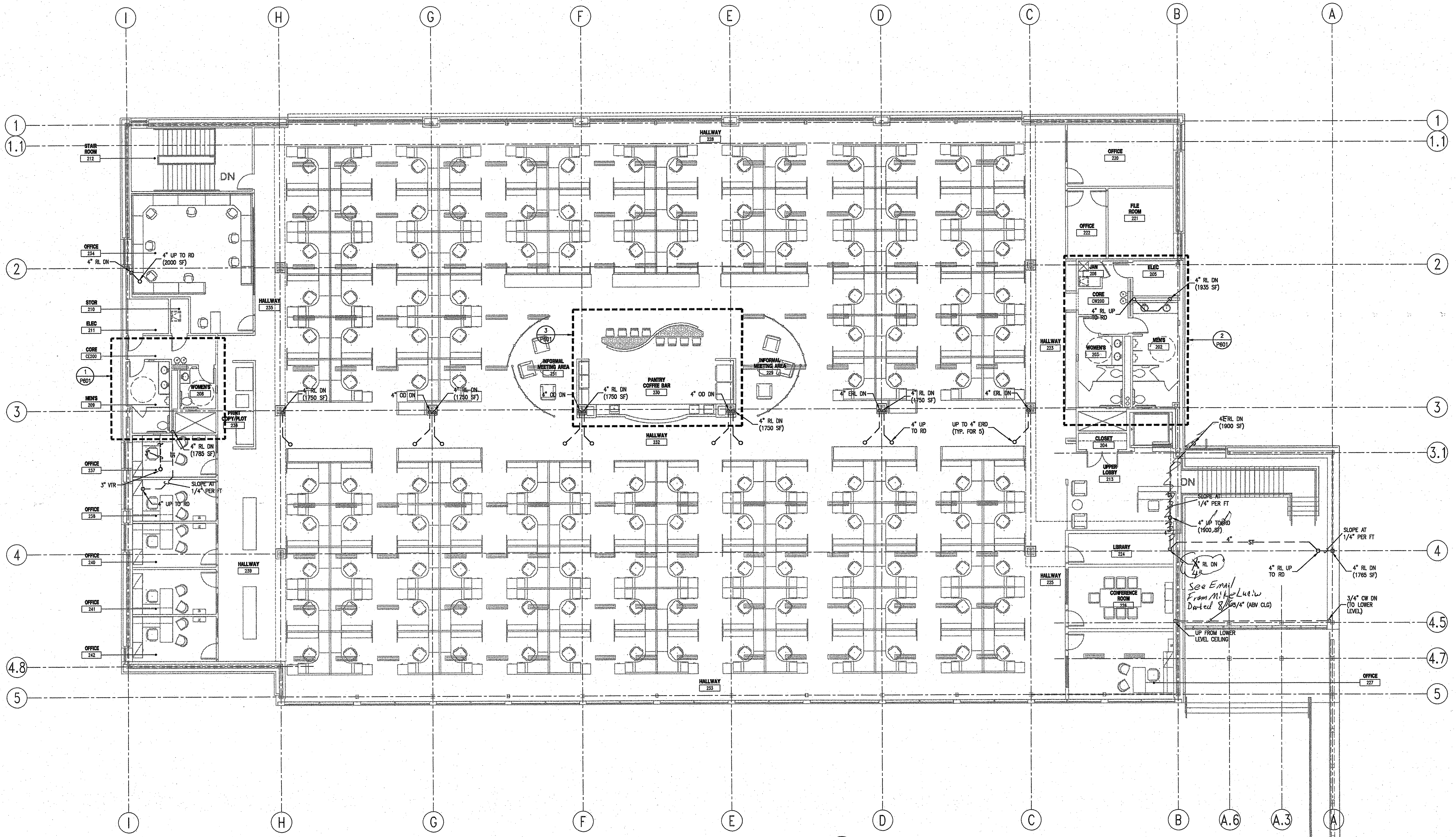
1801 S. Broad St., Mobile, AL 36615

CLIENT  
**Mobile Airport  
Authority**

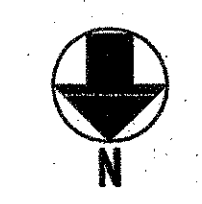
1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TENANT  
**Airbus North America  
Holdings, Inc.**

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.634.3486



**1 UPPER LEVEL PLAN - PLUMBING**  
SCALE: 1/8" = 1'-0"



Revisions		
ISSUED FOR CLIENT REVIEW	01.11.06	
DESIGN DEVELOPMENT	01.23.06	
PERMIT SET	03.20.06	
FOR CONSTRUCTION	03.27.06	

NO.	ISSUE	DATE
<b>Sheet Information</b>		
Date	03/27/2006	
Job Number	25069	
Drawn	AL	
Checked	ML	
Approved	Title	

PLUMBING -  
UPPER LEVEL  
PLAN

Sheet

P-202

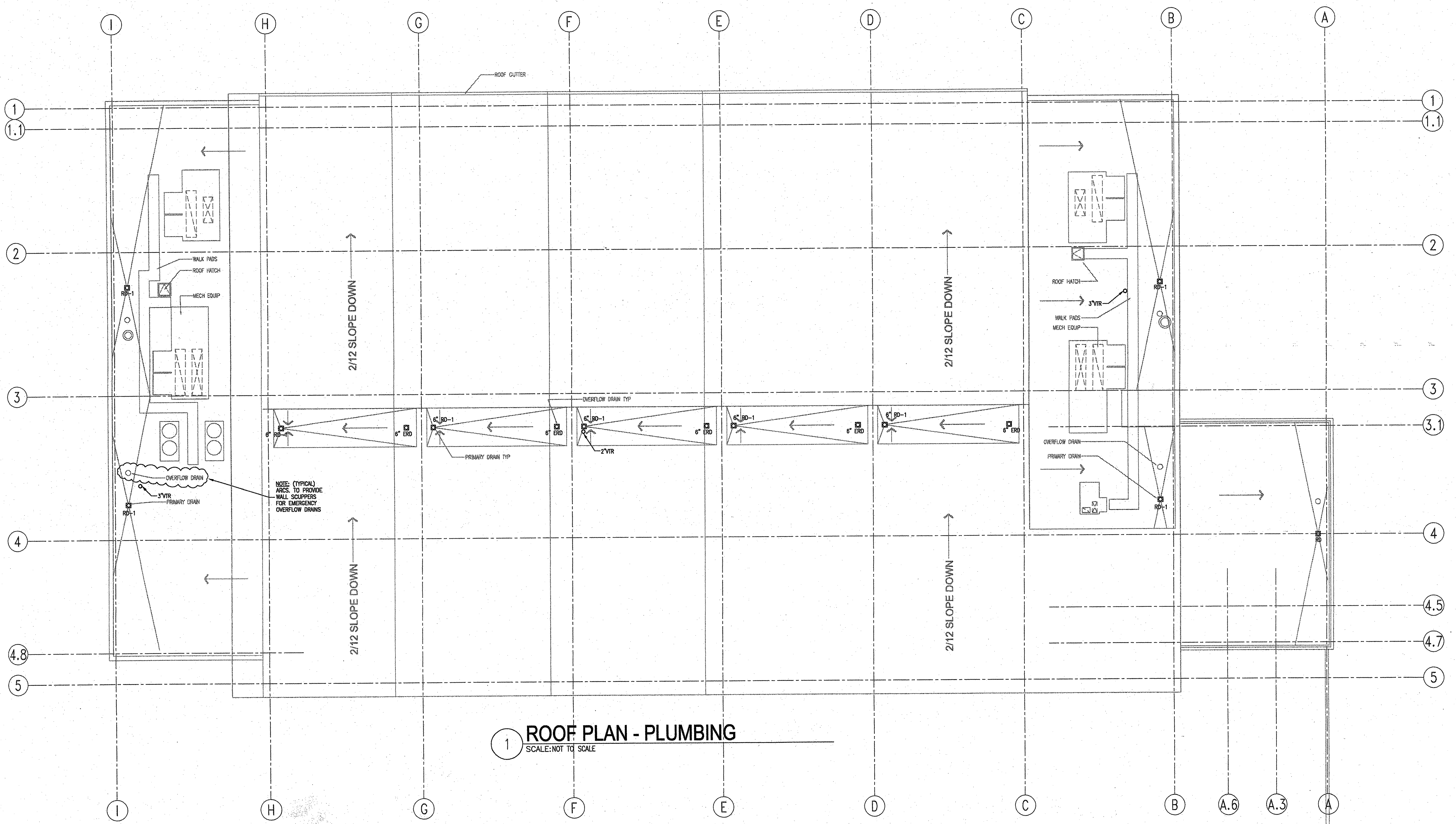




**Engineering  
Center**  
1801 S. Broad St., Mobile, AL 36615

CLIENT  
**Mobile Airport  
Authority**  
1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TEWANT  
**Airbus North America  
Holdings, Inc.**  
188 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3488



**1 ROOF PLAN - PLUMBING**  
SCALE: NOT TO SCALE

Xref J:\RD\2506904\Engineering\Xref\2506905-xref-A-ROOF.dwg

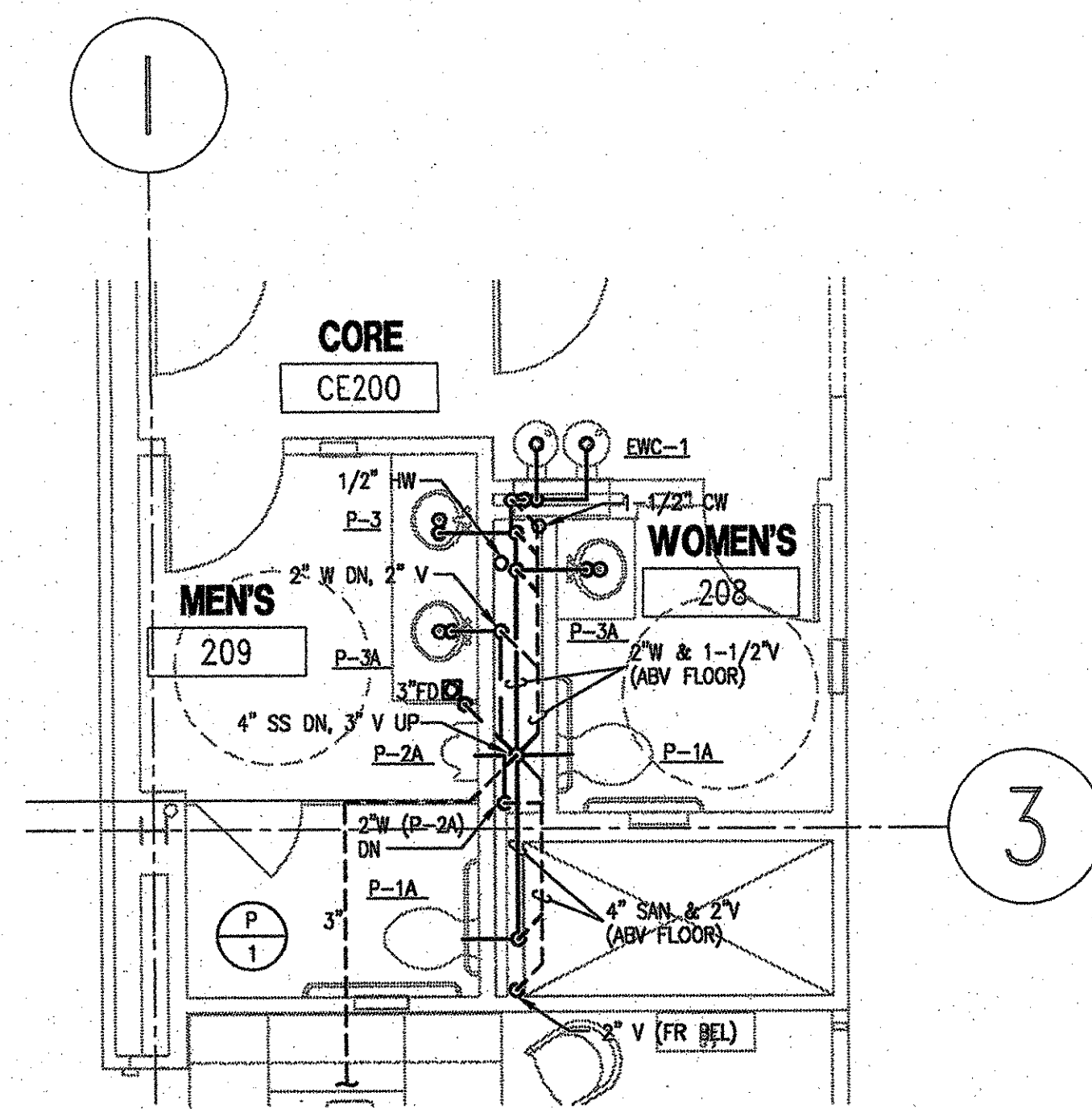
Revisions	
ISSUED FOR CLIENT REVIEW	01.11.08
DESIGN DEVELOPMENT	01.23.08
PERMIT SET	03.20.08
FOR CONSTRUCTION	03.27.08

Sheet Information		
Date	03/27/2008	
Job Number	25069	
Drawn	AL	
Checked	ML	
Approved		
Title		

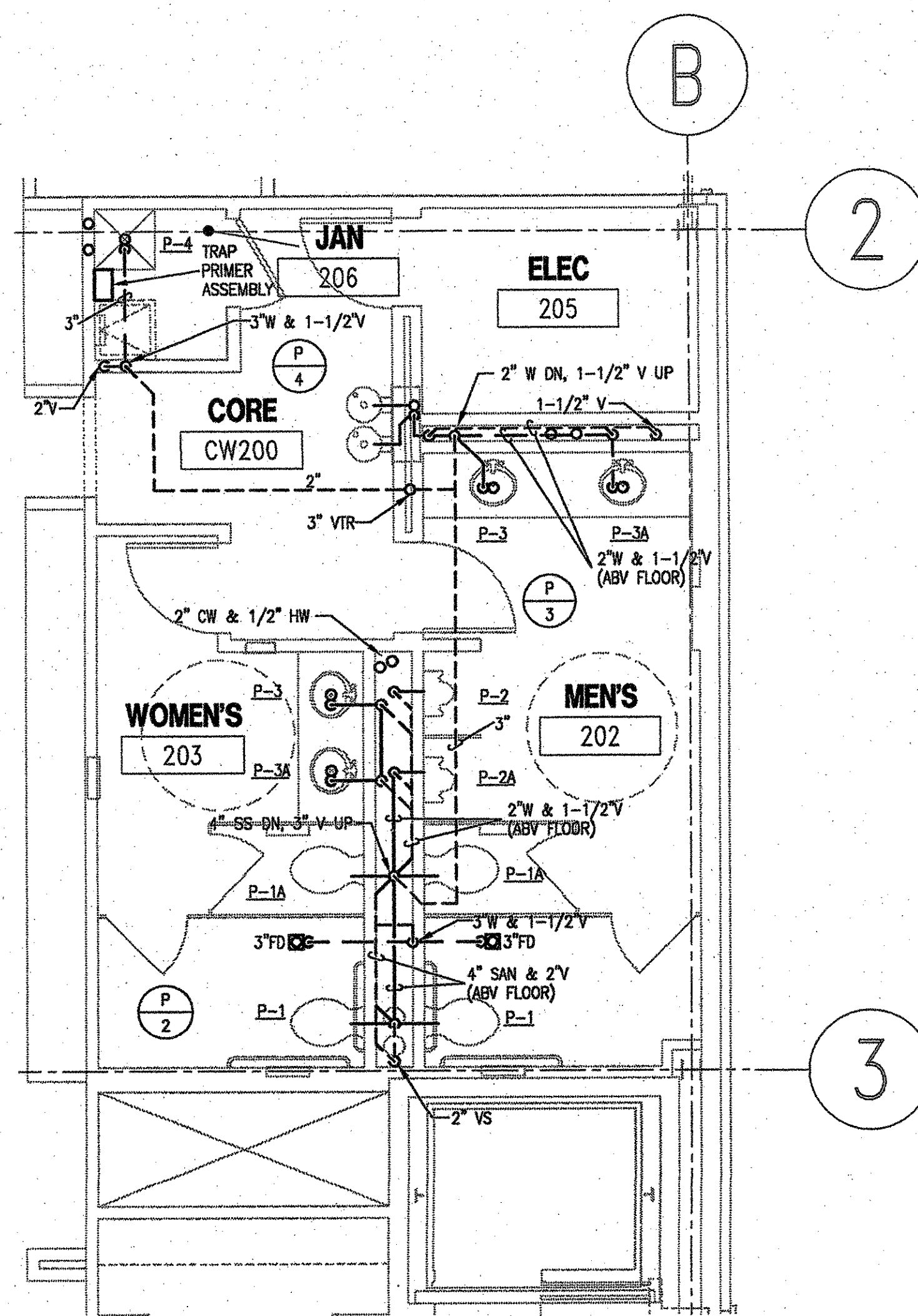
PLUMBING -  
ROOF PLAN

Sheet

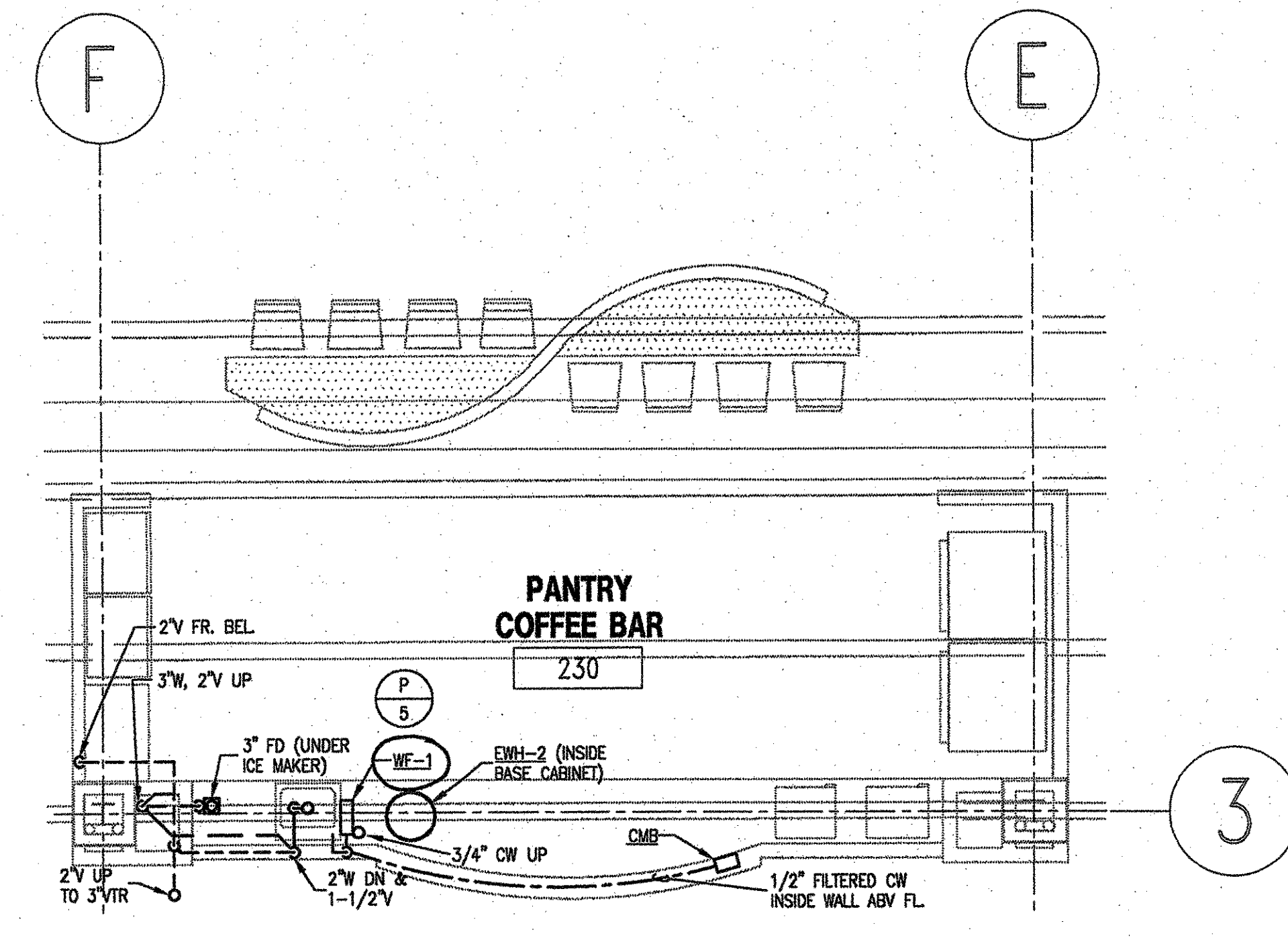
P-203



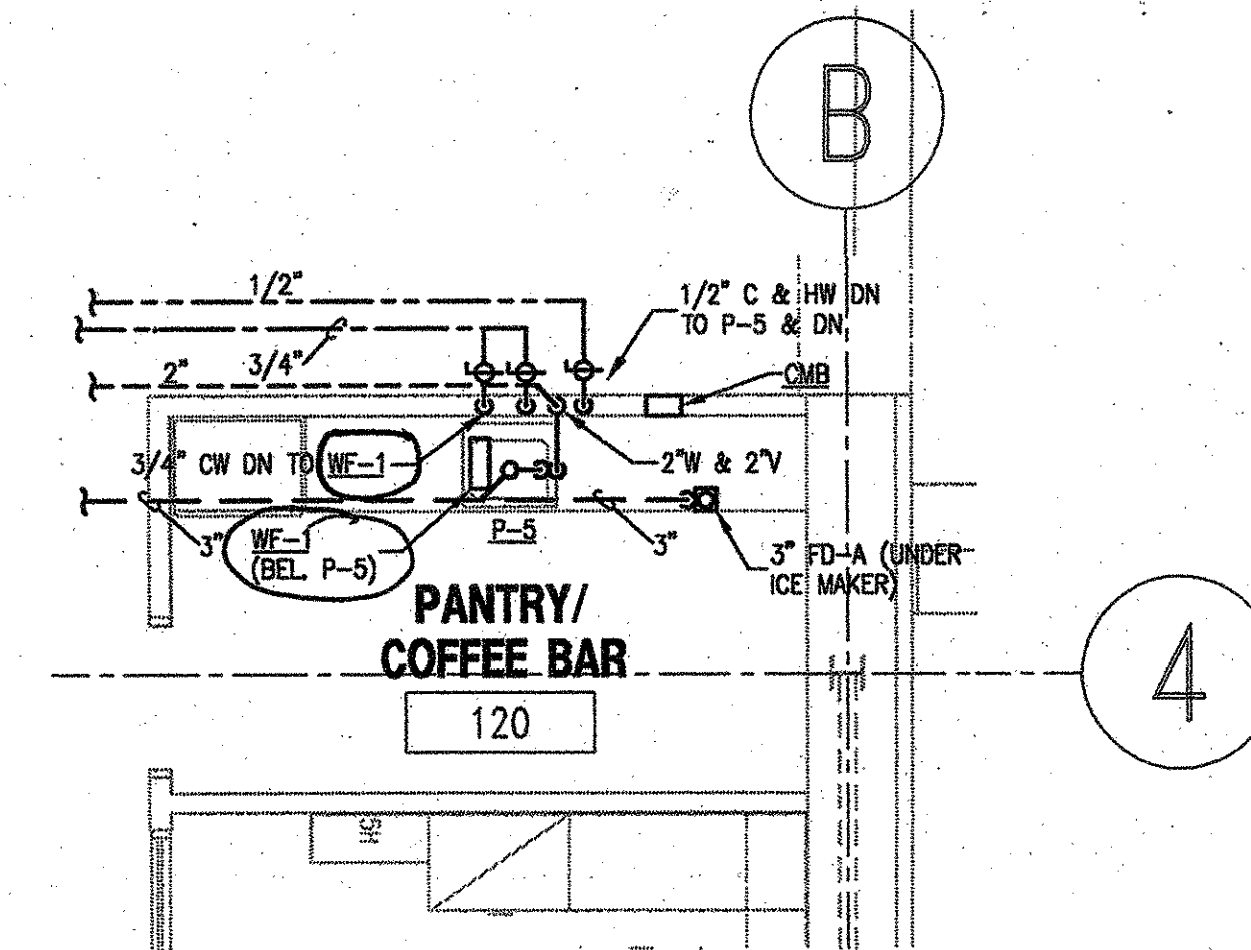
1 PARTIAL PLUMBING PLAN - UPPER LEVEL  
SCALE: 1/4" = 1'-0"



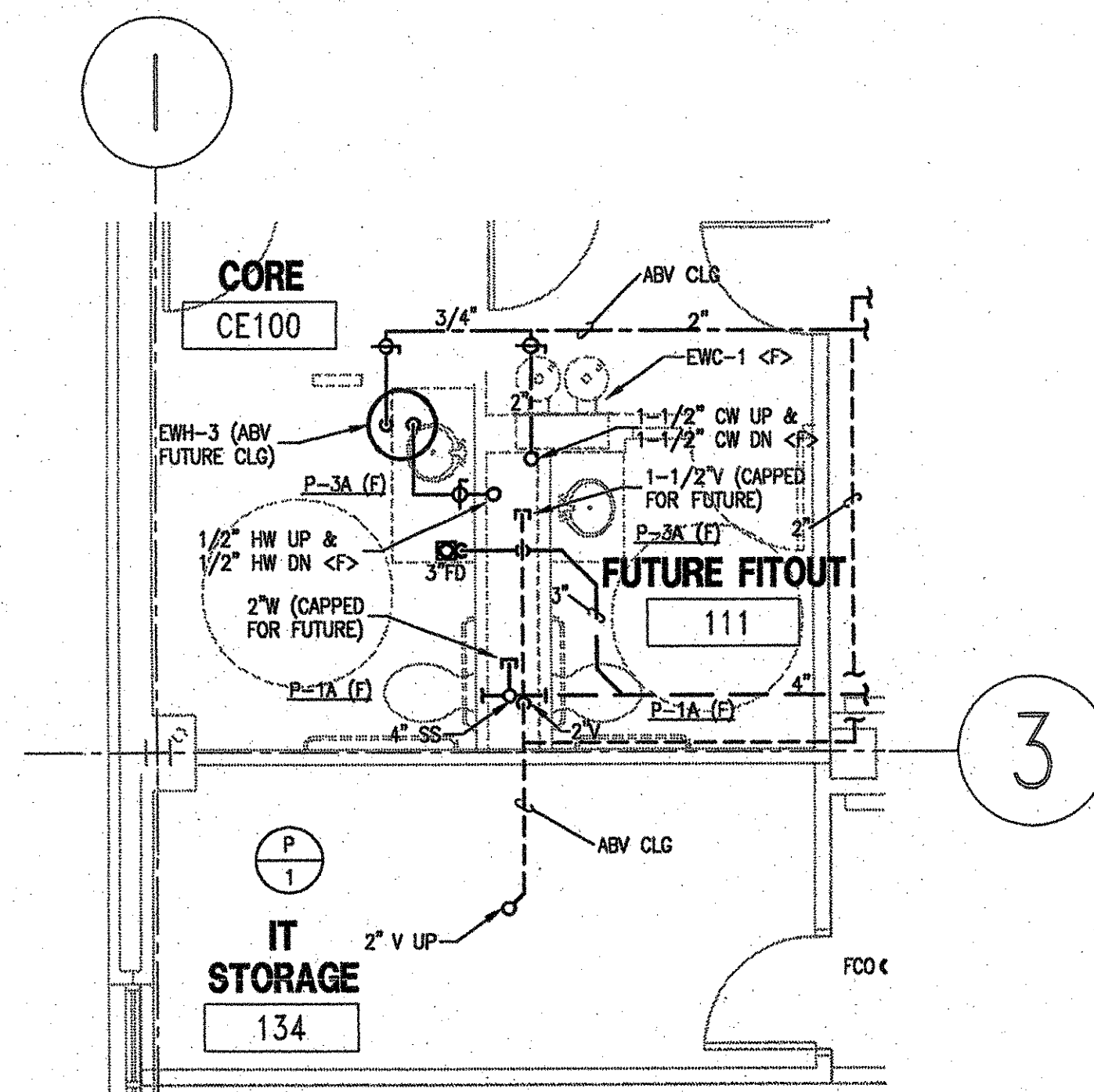
2 PARTIAL PLUMBING PLAN - UPPER LEVEL  
SCALE: 1/4" = 1'-0"



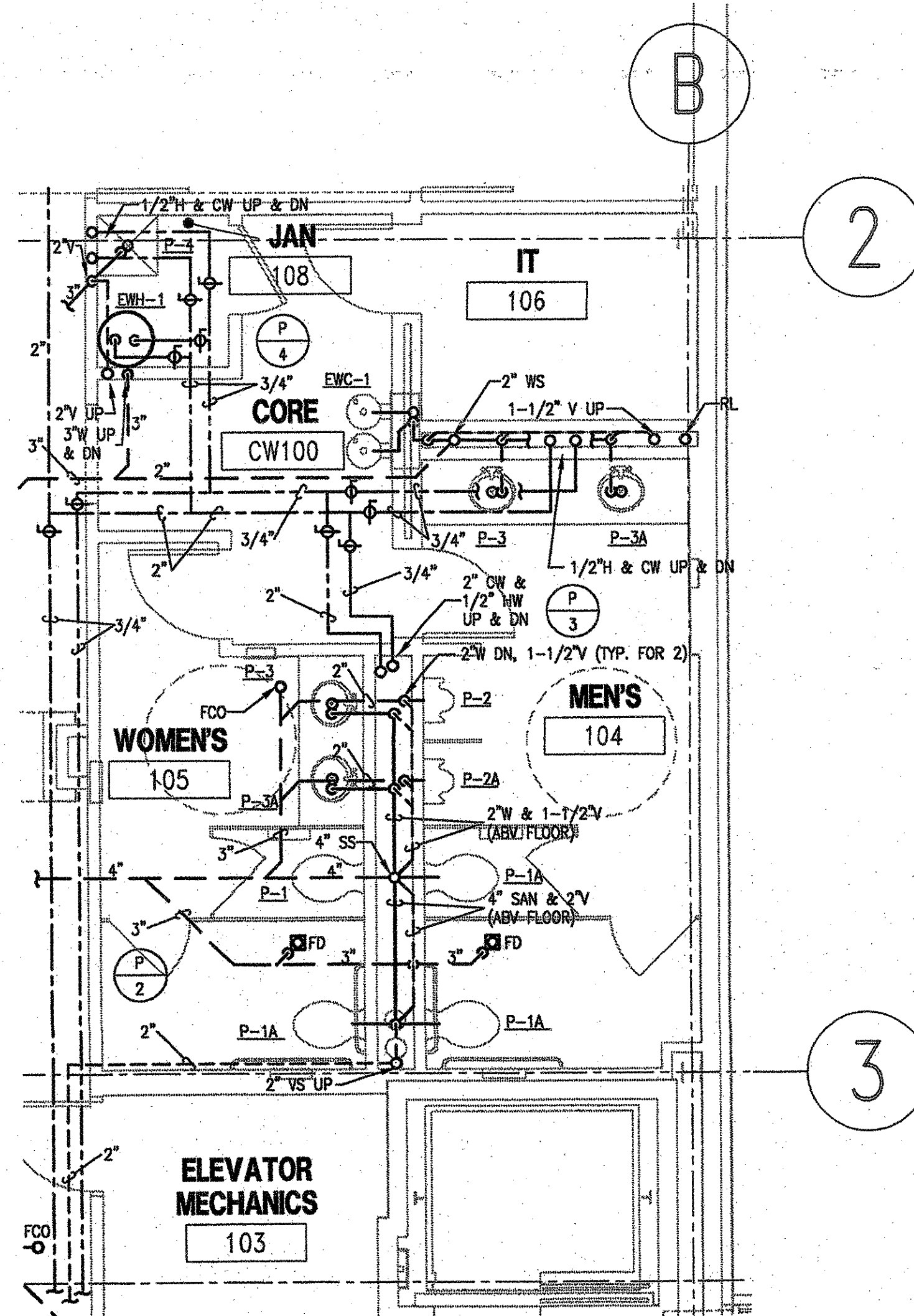
3 PANTRY PLAN - UPPER LEVEL  
SCALE: 1/4" = 1'-0"



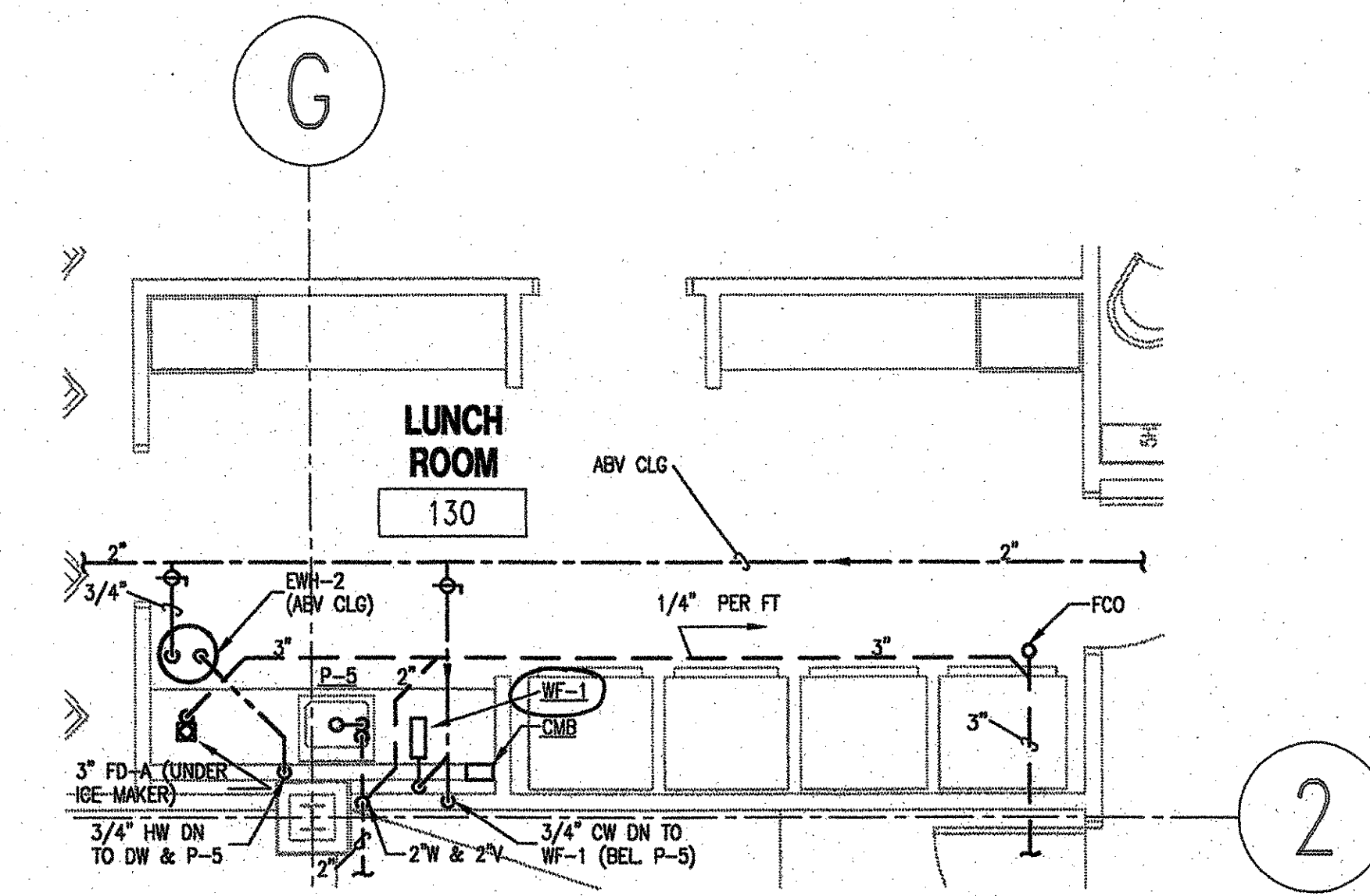
6 PANTRY PLAN - LOWER LEVEL  
SCALE: 1/4" = 1'-0"



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



5 PARTIAL PLUMBING PLAN - LOWER LEVEL  
SCALE: 1/4" = 1'-0"



7 LUNCH ROOM PLAN - LOWER LEVEL  
SCALE: 1/4" = 1'-0"

200 M Street, NW  
Suite 800  
Washington, DC 20007  
Phone 202.737.0200  
Fax 202.223.1570  
www.perkinswill.com

**Ae**  
11500 Nuckolls Road  
Suite 110  
Clair Arden, VA 23099-5507  
Telephone 804.474.7800  
Facsimile 804.474.6822



**Engineering Center**  
1801 S. Broad St., Mobile, AL 36615

CLIENT  
**Mobile Airport Authority**  
1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TENANT  
**Airbus North America Holdings, Inc.**  
198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486

Revisions	
ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06

NO.	ISSUE	DATE
<b>Sheet Information</b>		
Date	03/27/2006	
Job Number	25069	
Drawn	AL	
Checked	ML	
Approved		

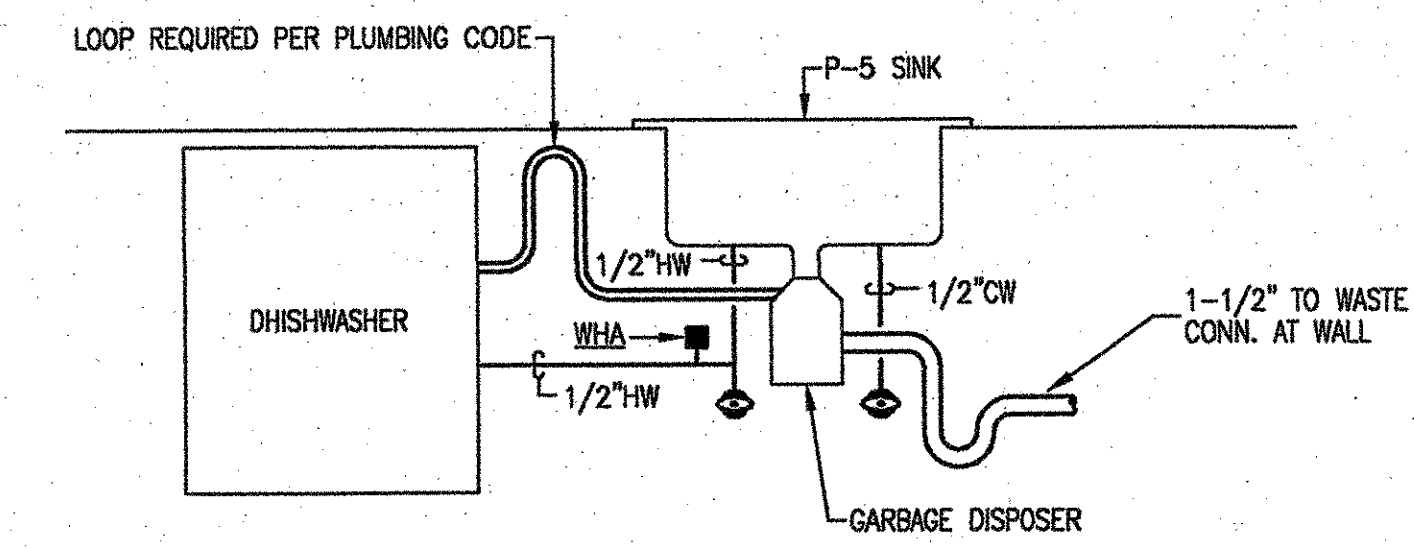
PLUMBING - LARGE SCALE PLANS

Sheet

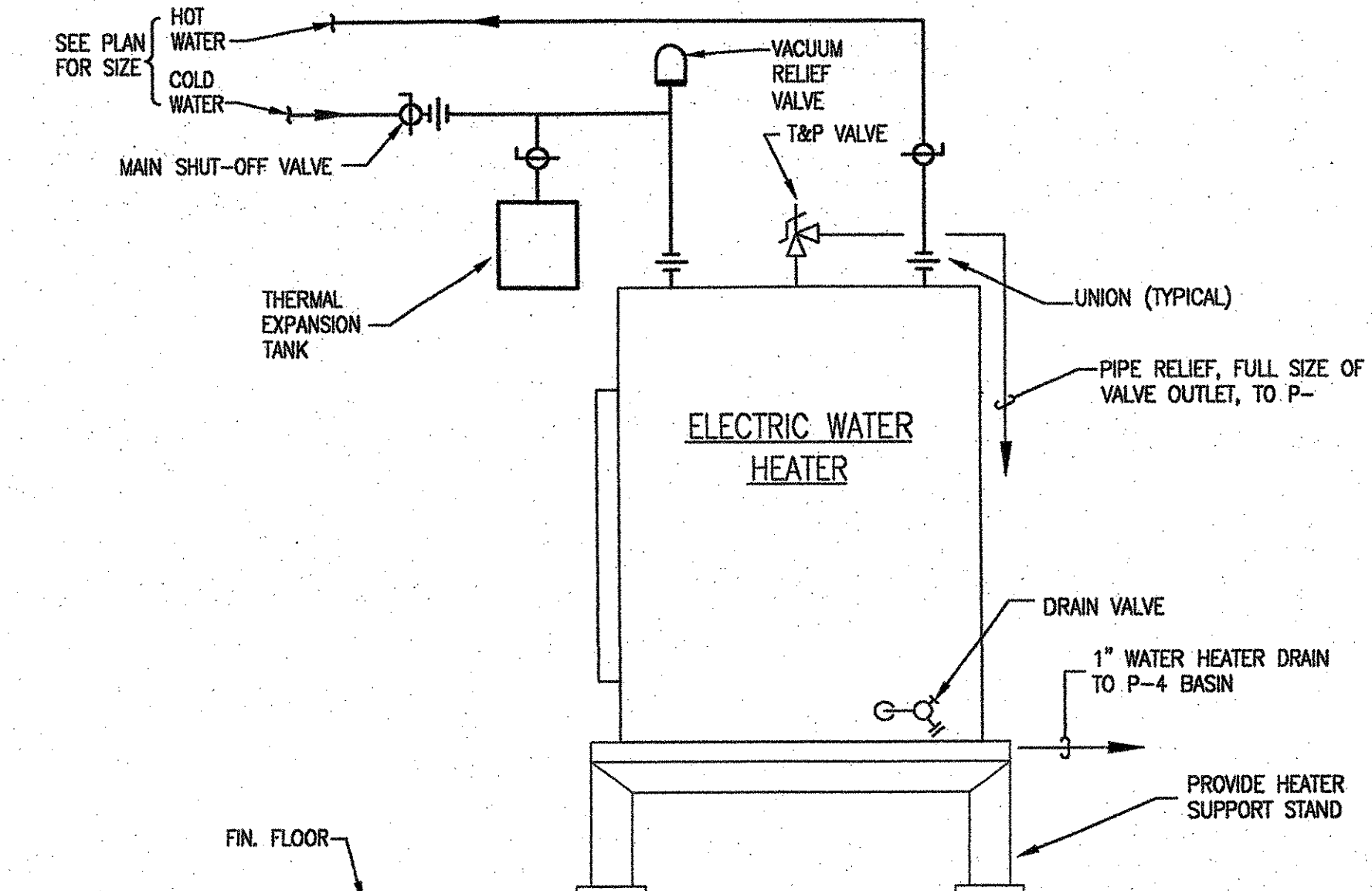
P-601

Copyright © 2005, Perkins+Will

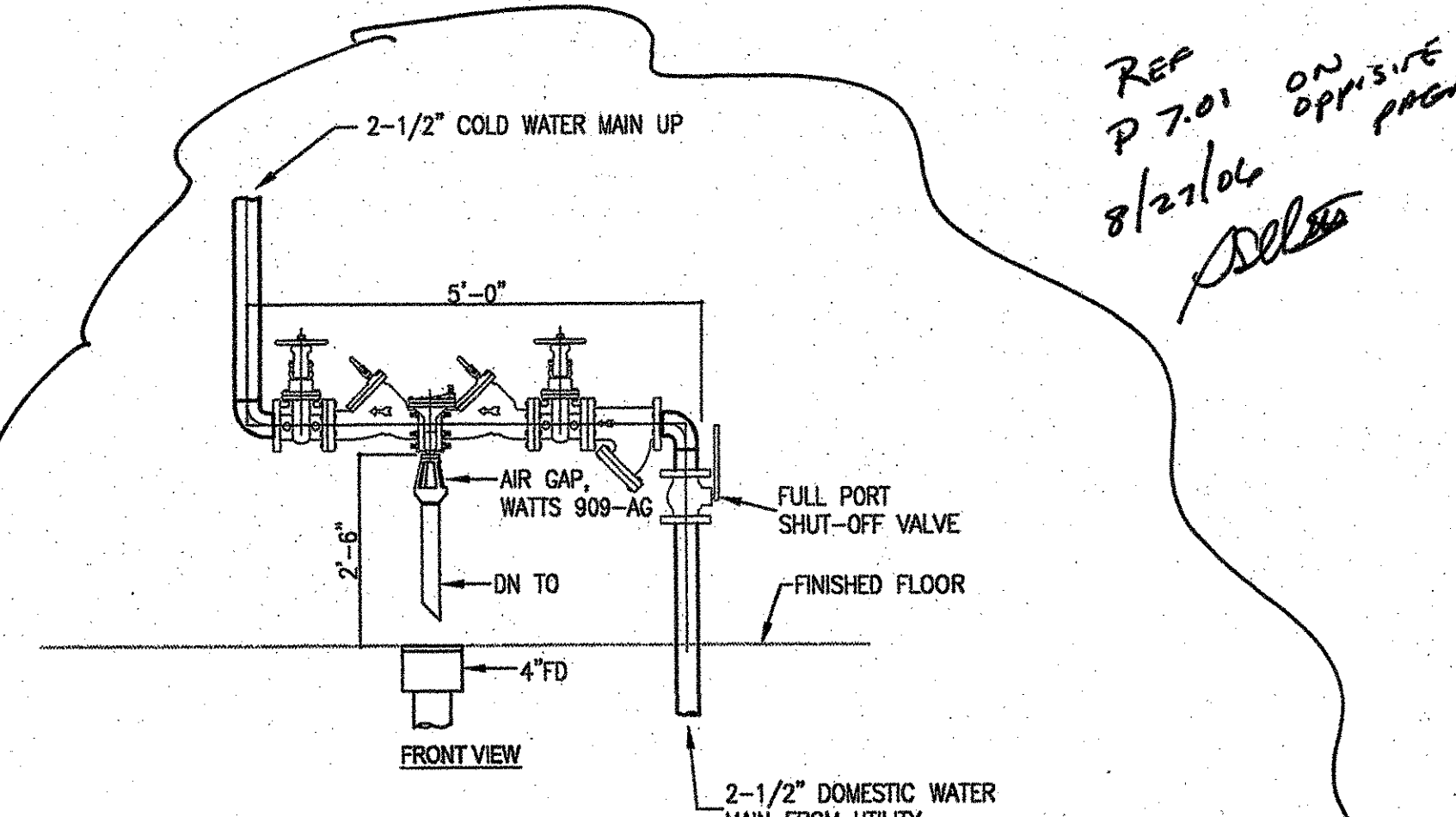
0 1/2" 1" 2"



**1 TYP. DISHWASHER DETAIL**  
SCALE: NTS

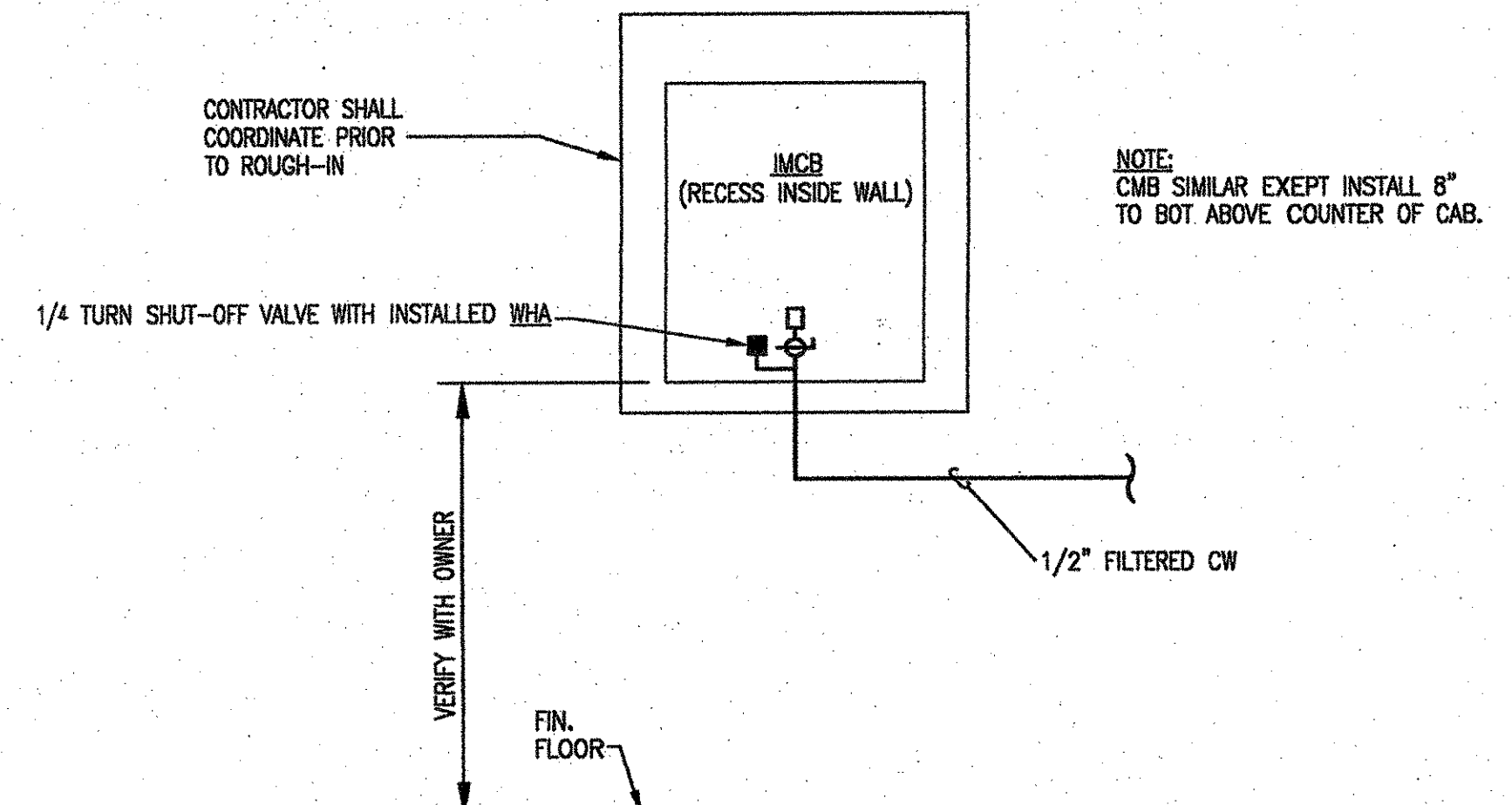


**2 TYPICAL WATER HEATER DETAIL**  
SCALE: NTS

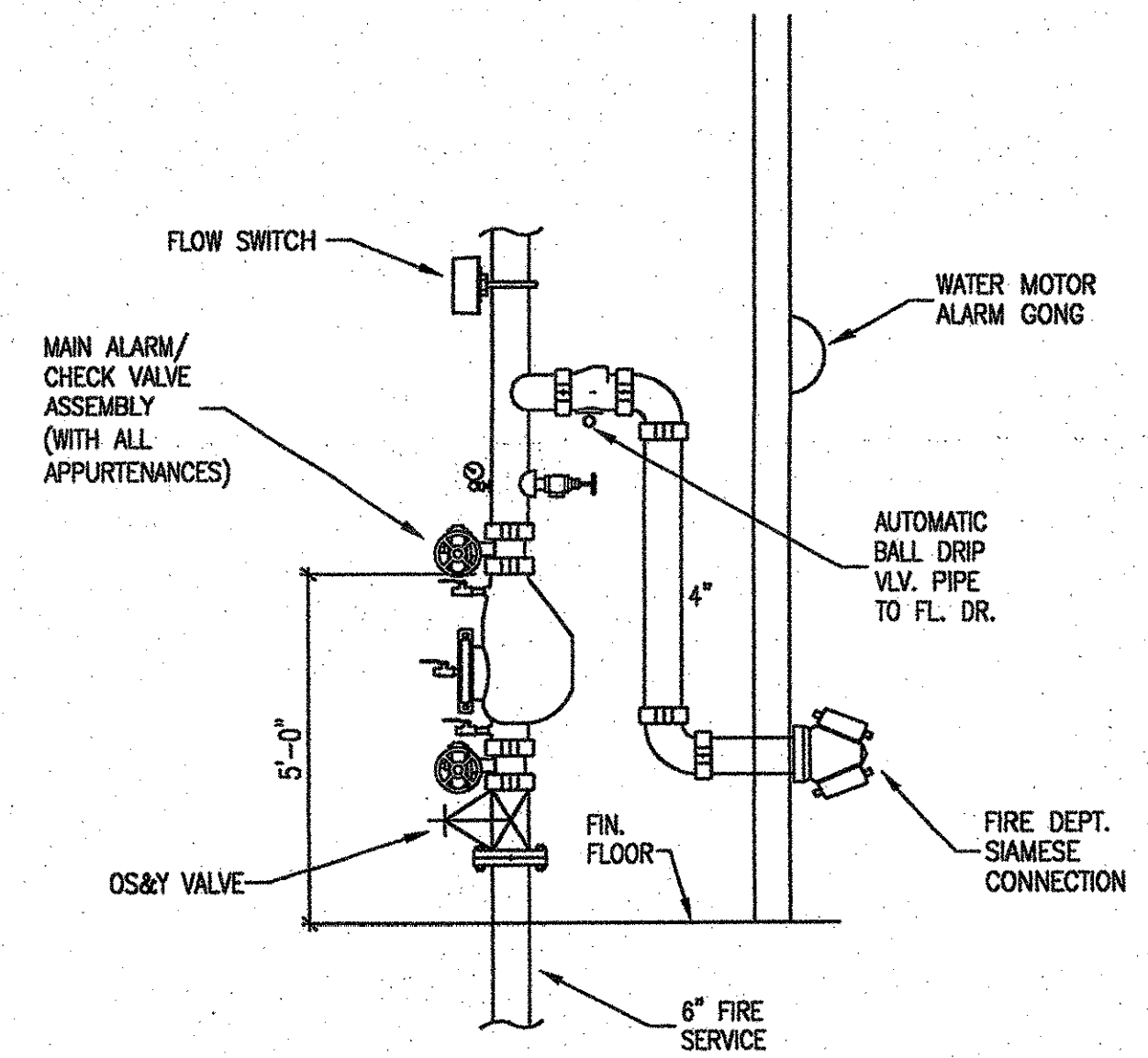


**3 BACKFLOW PREVENTER DETAIL**  
SCALE: NTS

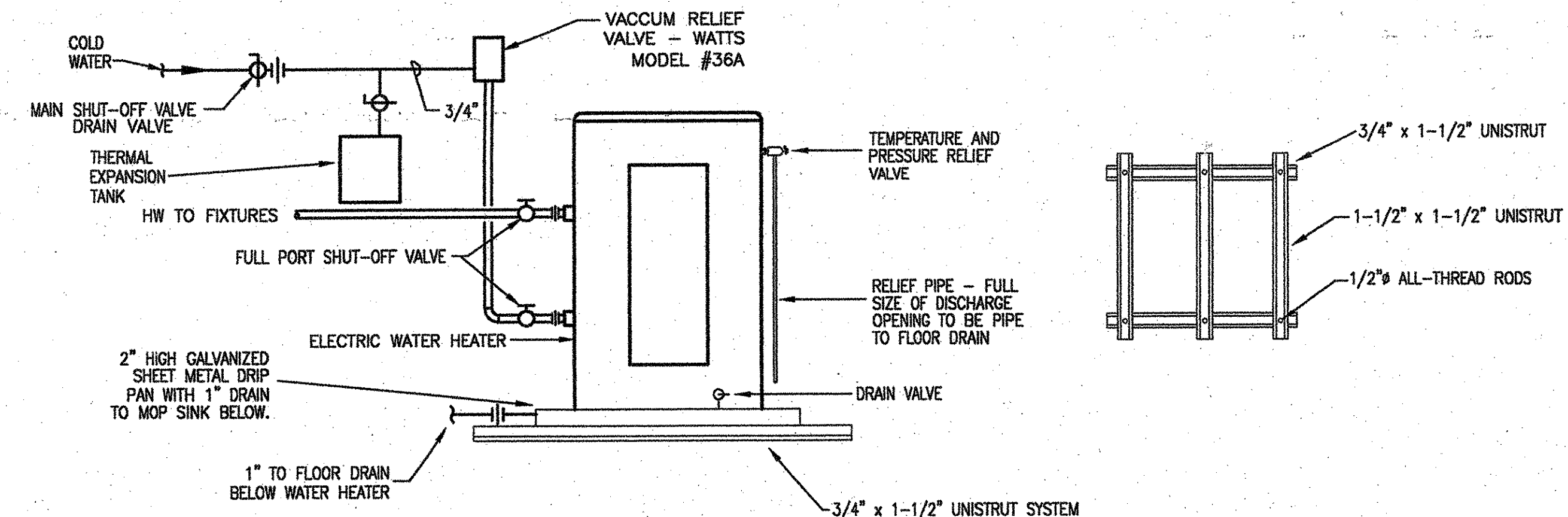
REF  
P 7.01 ON  
8/27/06  
OPPOSITE  
PAGE  
DLS



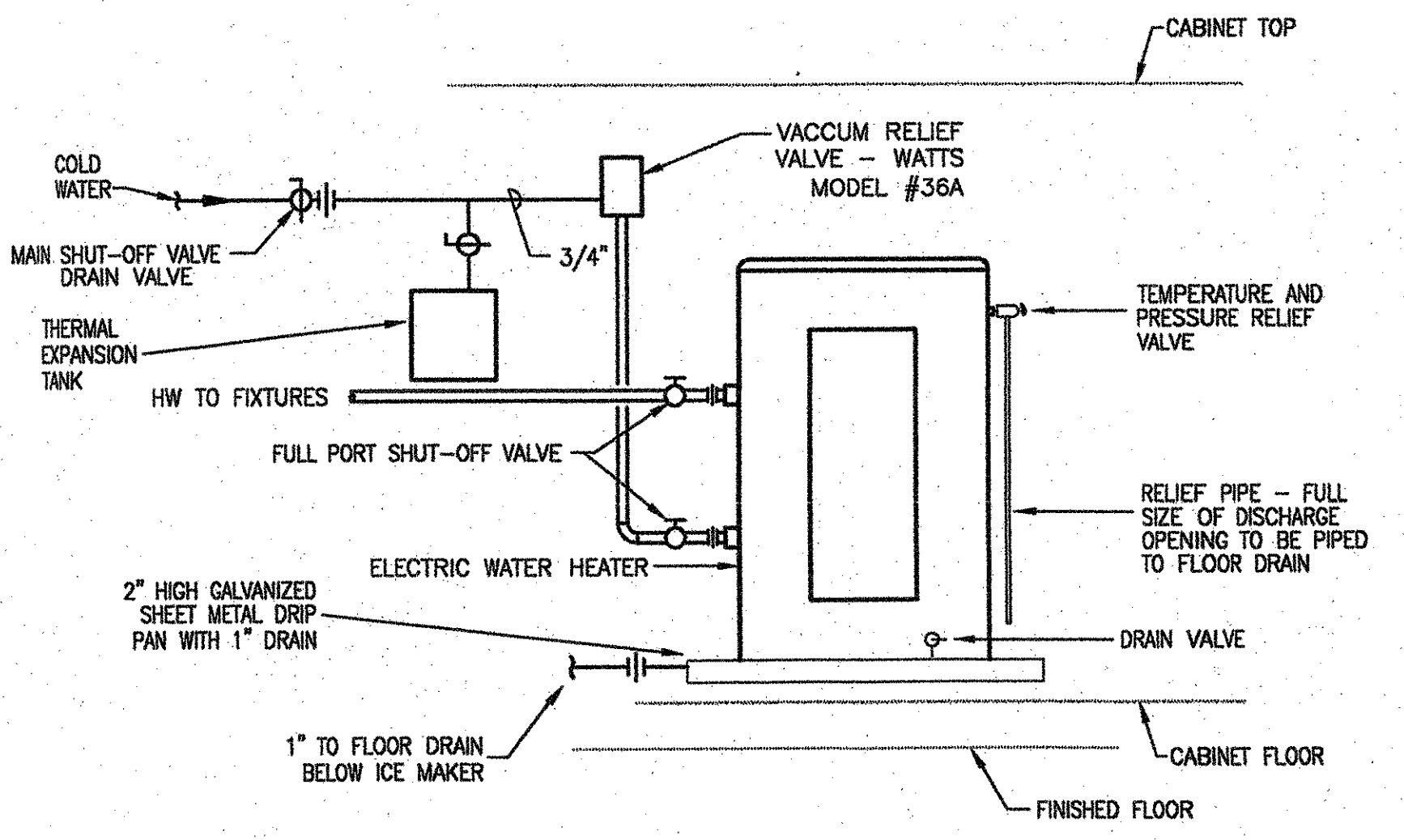
**4 TYP. ICE MAKER CONNECTION BOX DETAIL**  
SCALE: NTS



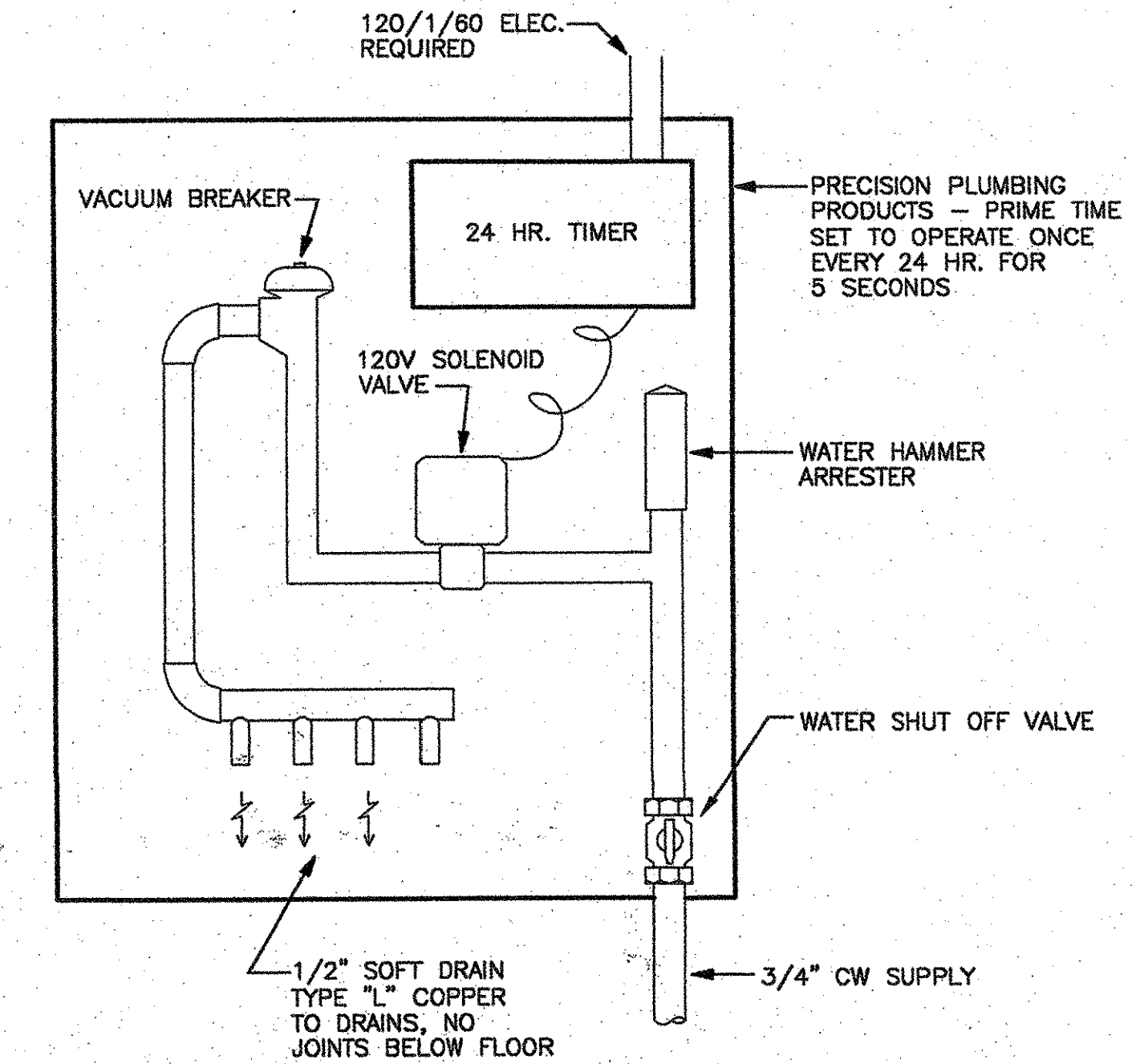
**5 WET RISER DETAIL**  
SCALE: NTS



**6 ELECTRIC WATER HEATER (ABOVE CEILING)**  
SCALE: NTS



**7 ELECTRIC WATER HEATER (INSIDE CABINET)**  
SCALE: NTS



**8 TRAP PRIMER MANIFOLD DETAIL**  
SCALE: NTS

Revisions	
ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06

Sheet Information		
NO.	ISSUE	DATE
Date	03/27/2006	
Job Number	25069	
Drawn	AL	
Checked	ML	
Approved	THe	

PLUMBING DETAILS

Sheet

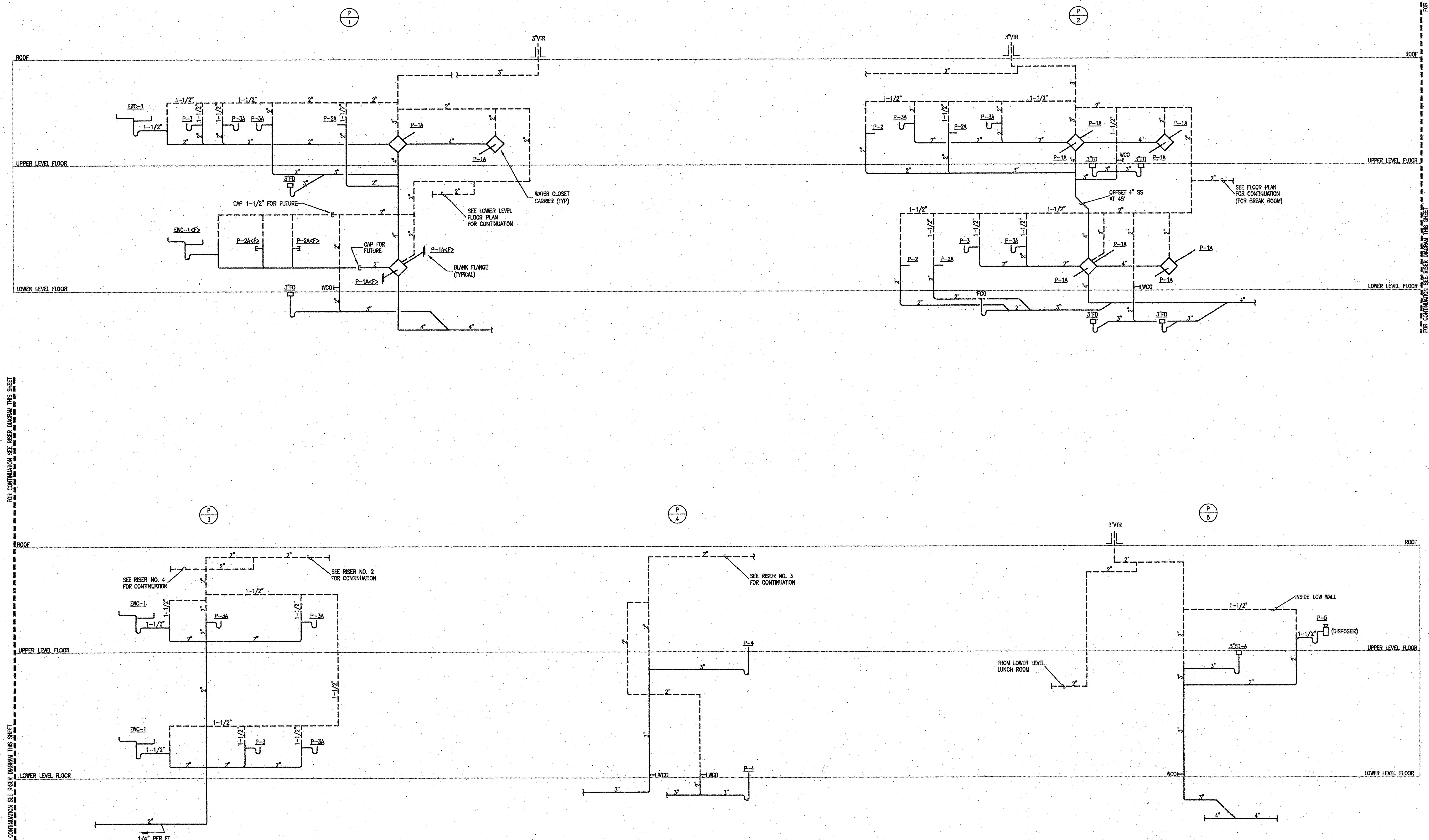
P-701



**Engineering Center**  
 1801 S. Broad St., Mobile, AL 36615

CLIENT  
**Mobile Airport Authority**  
 1891 Ninth Street  
 Mobile, Alabama 36615  
 Brookley Airport Complex  
 T: 251.438.7334

DESIGN  
**Airbus North America Holdings, Inc.**  
 198 Van Buren Street  
 Herndon, VA 20170-5335  
 T: 703.834.3486



**1 SANITARY RISER DIAGRAMS**  
 SCALE: NOT TO SCALE

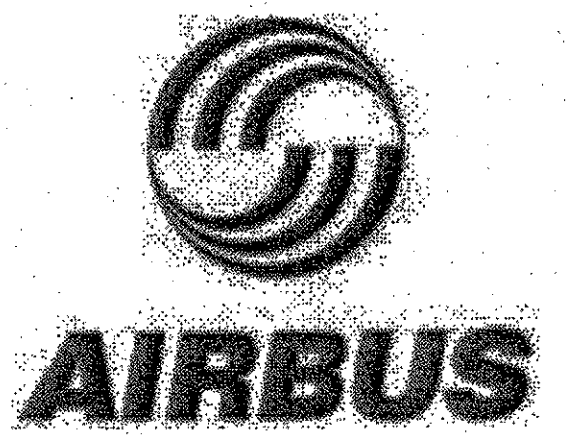
Revisions	
ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06

NO.	ISSUE	DATE
<b>Sheet Information</b>		
Date	03/27/2006	
Job Number	25069	
Drawn	AL	
Checked	ML	
Approved		

PLUMBING SANITARY  
 RISER DIAGRAMS

Sheet

P-801



**Engineering  
Center**

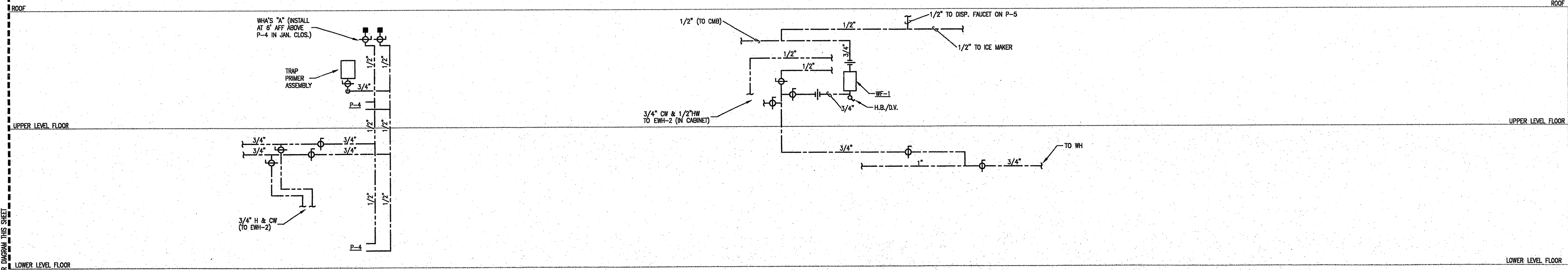
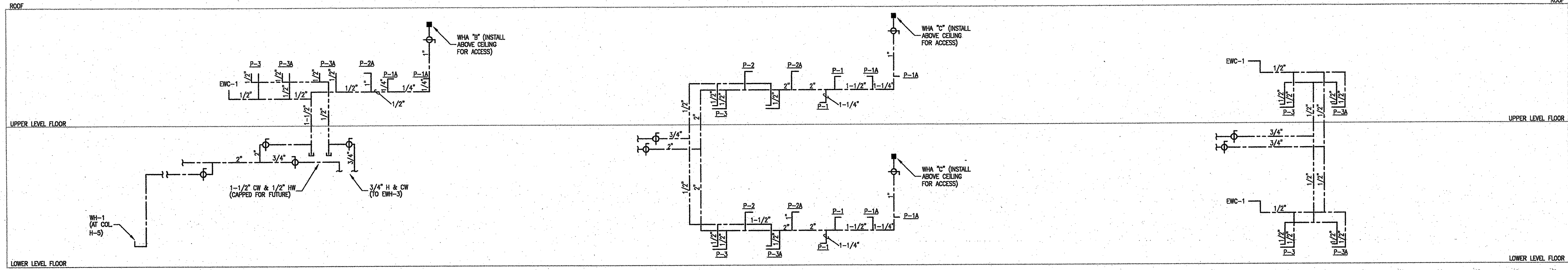
1801 S. Broad St., Mobile, AL 36615

CLIENT  
**Mobile Airport  
Authority**

1891 Ninth Street  
Mobile, Alabama 36615  
Brookley Airport Complex  
T: 251.438.7334

TENANT  
**Airbus North America  
Holdings, Inc.**

198 Van Buren Street  
Herndon, VA 20170-5335  
T: 703.834.3486



**1 WATER RISER DIAGRAMS**  
SCALE: NOT TO SCALE

Revisions	
ISSUED FOR CLIENT REVIEW	01.11.06
DESIGN DEVELOPMENT	01.23.06
PERMIT SET	03.20.06
FOR CONSTRUCTION	03.27.06

NO.	ISSUE	DATE
<b>Sheet Information</b>		
Date	03/27/2006	
Job Number	25069	
Drawn	AL	
Checked	ML	
Approved		

PLUMBING DOMESTIC  
WATER RISER  
DIAGRAMS

Sheet

P-802