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AMENDMENT NO. 008

TO: ALL PROSPECTIVE BIDDERS

**AMENDMENT
ISSUE DATE: August 11, 2021**

**SUBJECT: Solicitation No. DCSC-21-RFP-087
Migration from Gallery Place Modernization**

**PROPOSAL
SUBMISSION
DATE: Monday, August 30, 2021, by 3:00 pm,
Eastern Time**

Question and Answers Round – 6

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED

One (1) copy of this amendment is being sent to all prospective Offerors. The prospective Offeror shall sign below and attach a signed copy of this amendment to each proposal to be submitted to the Courts in response to the subject solicitation or otherwise acknowledge this amendment with the signed offer as stated in the original solicitation documents. Proposals shall be delivered in accordance with the instructions provided in the original solicitation documents.

Geoffrey A. Mack

Geoffrey Mack
Contracting Officer

Acknowledgement of this Amendment, together with the Offeror's proposal, must be received by the District of Columbia Courts as stated in the solicitation no later than the closing date and time specified above for the receipt of proposals.

Failure by the Offeror to properly acknowledge receipt of this Amendment Number #8 may be cause for rejection of the proposal submitted by the Offeror in response to the subject solicitation.

This Amendment Number #08 is acknowledged and is considered a part of the proposal for Solicitation Number DCSC-21-RFP-087 Migration from Gallery Place Modernization.

Signature of Authorized Representative

Date

Name of Authorized Representative

Title of Authorized Representative

Name of Offeror

Please remember to check the DC Courts Website daily for posting of Amendment updates

<https://www.dccourts.gov/about/procurement-contracts-branch>

From: Flor Rivera	Q & A Round: 6
Program: Capital Project Facilities Management Division	Date: August 11, 2021
Email: maria.rivera@dccsystem.com	Pages: 13

cc: Judith.Hill@dccsystem.gov	DC Courts
cc: Clay.McKenna@dcsc.gov	AECOM
cc: Richard.Moore@dcsc.gov	AECOM
cc: Karl.Stewart@aecom.com	AECOM

This Document includes the following:

- Solicitation Questions & Answers Round: 06
- Attachment J.40 Interior Improvements to DC Superior Courts Building ‘B’ dated 2003
- Attachment K- Offer Breakdown Sheet.

SOLICITATION QUESTIONS & ANSWERS: ROUND 06

- Q1. Should the possible bathroom upgrade be priced as an alternate?
A.1 Refer to section C.2.4.1 of the RFP. Verification of code requirements shall be included in the base bid. Should the D-B determine, based on verified code requirements during the pre-construction phase, that bathroom upgrades will be required to support the modernization of the space defined within the program, then Owner will address the additional work as an increase in scope.
- Q.2 For DB projects where the architect is under contract to the general contractor, who fills out the PPQ sheet-the general contractor or the owner who the general contractor built the project for?
A.2 Refer to Answer #1 of Amendment 003. The client section past performance questionnaire for both the Contractor and the Architect/Engineer shall be completed by the Owner.
- Q.3 Please confirm there are no small business or MBE/DBE requirements for this solicitation.
A.3 Confirmed. There are no small business or MBE/DBE requirements.
- Q.4 Can the project look back period be extended to 8 years (vs. the 5 years in the solicitation)?
A.4 Remove: Section L.10.2.1 Basis of Evaluation

The basis of evaluation will include the quality and relevance of Past Performance of the Offeror/Builder and its Lead Design Firm on a variety of Design-Build projects for new construction, repair, and renovation, of general building construction that are similar in scope, size (project dollar value), type, and complexity to the project shown in the statement of work for this solicitation. Provide a minimum of three (3) and maximum of five (5) Design-Build past performance examples the offeror has completed in within the last five (5) years.

Replace with: Section L.10.2.1 Basis of Evaluation

The basis of evaluation will include the quality and relevance of Past Performance of the Offeror/Builder and its Lead Design Firm on a variety of Design-Build projects for new construction, repair, and renovation, of general building construction that are similar in scope, size (project dollar value), type, and complexity to the project shown in the statement of work for this solicitation. Provide a minimum of three (3) and maximum of five (5) Design-Build past performance examples the offeror has completed in within the last **eight (8) years**. At least one past performance example shall have been completed within the last five (5) years.

- Q.5 The following questions relate to the MEP systems requirements in Bid Document J.33. While the rest of the RFP requirements indicate work to take place in specific areas of Building A and B, the J.33 narrative appears to indicate work requirements throughout the entirety of Buildings A and B. We are requesting a clarification of the extent of work for specific building MEP systems outside of the defined program areas of Building A and B. Please advise.
- A.5 The scope of work in Building B is inclusive of building system upgrades included in the J.33 Performance Requirements narrative to meet the indicated performance requirements. MEP systems that support the defined program areas of Building B are included in the scope of work. The building A scope of work is within the defined program area only. No additional building systems work is anticipated. Should the D-B determine during the pre-construction phase that building systems work will be required to support the modernization of the space defined within the program, then Owner will address the additional work as an increase in scope.
- Q.6 The title description of the J.33 Performance Requirements indicates "1.2 BUILDING B (510 4th) - Includes Building A (515 5th) Tenant Improvement Requirements". Please advise if the intent is for ALL of the systems replacements/upgrades in this J.33 attachment are to be duplicated in both Buildings - or - if the intent is to duplicate the work in Building A for those specific paragraphs that reference Building A.
- A.6 System replacements and upgrades indicated in attachment J.33 are applicable to Building B unless specifically noted as Building A.
- Q.7 C2.4.1 -4th Paragraph; refers to toilet modifications or adding toilets that may be required pending D-B team code review. Please advise if the work of providing additional fixtures and toilet room revisions (if required to meet current code) is to be part of the base RFP scope of work.
- A.7 Refer to Question 1 above.
- Q.8 1.2.1.2 para 2 indicates the new equipment to be provided and that the existing hot water pumps are to remain. Do these existing pumps have sufficient capacity (flow/head) to service the renovation?
- A.8 Heating hot water pumps may remain due to acceptable age and condition. Pump capacity must be verified by the Design-Builder per new heating hot water system and equipment requirements as part of the base RFP scope of work.
- Q.9 1.2.1.2 para 3 says - "Replace all remaining steam finned tube radiators (FTR) with heating hot water FTR's" - Please confirm that this replacement is limited to the specific work areas of Building A and B. If not, please advise on number and location of the replacements required if outside of the specific RFP work areas.
- A.9 Replacement of all remaining steam FTRs with HHW FTRs applies to Building B in only areas where modernization is occurring. FTR shall not be replaced in occupied building areas

Restrooms, stairwells, penthouse spaces, and vestibules include steam FTRs. This requirement does not apply to Building A.

- Q.10 1.2.1.2 The scope includes putting the hot water system on emergency power, including controllers and actuators. Does this include the terminal finned tube radiators control valves and associated controls?
- A.10 No.
- Q.11 1.2.1.3 Para 5 of this section requires "Provide new chilled water piping and accessories..." Please confirm that this new piping is limited to the central plant work associated with the provision of new chillers and that replacement of the branch distribution piping is not required.
- A.11 Confirmed. New chilled water piping is limited to the central plant work. Branch distribution piping to AHU chilled water coils is not included.
- Q.12 1.2.1.3 The document states that new chillers, new cooling towers, and new water pumps. Has a test fit been done as part of the bridging effort to confirm that these new components will fit in the existing designated space?
- A.12 No, a test fit has not been done. Equipment layouts shall be determined by the D-B during the Preconstruction Phase. Refer to Section C.4.4.1 for details.
- Q.13 1.2.1.3 - The scope includes performing a payback study for water-side economizer and include the heat exchanger design/installation if the studies justifies the cost. Since this won't be known until the study is complete, (during the design phase), should the design cost for the new system (if required) be a separate design cost change and not part of the base RFP bid?
- A.13 No, the design cost associated with the water-side economizer and heat exchanger design shall be included in the base bid. Indicate associated cost breakout on attachment K, tab K.1.
- Q.14 1.2.1.4 - Para 2 says - "Provide energy code-compliant insulation on supply air ductwork from (6) air handling units located in basement and penthouse mechanical rooms." Please clarify the extent of the insulation work required. Is it limited to the rooms where the air handlers are located or is the intent to provide new insulation on all areas fed by these units, even in areas outside of the specific work areas of the RFP?
- A.14 Provide insulation on supply ductwork in rooms where air handlers are located. The intent is to install supply ductwork insulation in major areas of work, including mechanical spaces and specific work areas identified in the RFP. Occupied areas outside the scope of renovation are not included.
- Q.15 1.2.1.4 Please provide an indication of the anticipated / budgeted quantity of flexible duct upgrades to medium pressure hard duct connections? Again - is the intent to limit this replacement to the specific work areas of the RFP, or is it required throughout the building?
- A.15 In the case of converting flexible duct to rigid duct at fan powered box inlets, the intent is to perform the replacement for the full building including areas outside of the renovation scope. Flexible duct at fan powered box inlets are prone to failure and shall be replaced throughout. It is estimated that 90% of fan powered boxes in Building B are installed in this condition.

- Q.16 1.2.1.4 -Para 4 - regarding the attic hot water heating and ventilating air handling unit - Is it desired to have a H&V unit or simply hot water unit heaters in order to maintain the attic minimum temperature?
- A.16 The requirement is to provide a heating and ventilating (H&V) unit. Should the D-B determine during the preconstruction phase that a different approach is more beneficial to the Owner, then the D-B shall bring that to the Owner's attention for consideration.
- Q.17 1.2.1.5 Is a new BAS required for Bldg A as well as Bldg B?
- A.17 No. Major system replacements, such as the BAS replacement, apply to Building B only.
- Q.18 1.2.1.5 For area of the bldg(s) that are not under the scope of work; are the existing HVAC terminals to be converted to this new BAS under this scope of work?
- A.18 Existing terminal unit controllers are DDC-type. The requirement is to connect the existing HVAC terminals for the entire building, including areas within and outside of the areas of work. Design-Builder shall verify that HVAC terminals can be connected to the new BAS without replacement during the pre-Construction Phase and included in design accordingly.
- Q.19 1.2.1.5 - Confirm that the utility meters (natural gas, water, electric) are existing that need to be connected to the BAS or are they new and to be provided under the scope of this project?
- A.19 Utility meters are currently not connected to the BAS, and it is unknown if existing meters are compatible with BAS monitoring. D-B shall assume the provision of new meters as part of the base RFP scope.
- Q.20 1.2.1.6 - Para 3 indicates two design options for FTR+VAV or VAV only. Please confirm that this selection will be decided at the initial phase of the project and that the intent is NOT to provide full CD level documentation of both options.
- A.20 Confirmed.
- Q.21 1.2.2.2 - Provide information regarding the extent of the sanitary waste and vent piping that needs to be replaced under the scope of this project. Will this impact any currently occupied / functioning areas?
- A.21 The sanitary waste/vent piping replacement scope applies to the specific work areas identified in the RFP. Any riser connections to the work area are included in the scope of work. Work should only impact occupied functioning areas if it is necessary to provide a fully functioning system within the work areas.
- Q.22 1.2.2.2 - when the gas service and gas regulator is installed, will it require direct access for Washington Gas to service new system as is usual per code.
- A.22 Yes.
- Q.23 1.2.2.2 - the historic drinking fountains don't meet ADA or ABAAS criteria. The restoration of drinking fountains to be fully functional will also trigger the requirement that they are fully accessible. Recommendation is accessible fountains be added to the scope in addition to the restored fountains. Please advise.
- A.23 The Design-Builder shall determine during the Pre-Construction phase if additional water fountains are required, existing fountains need to be modified, and/or historic fountains need to be restored to meet code. The Courts' will adhere to the D-B's approved Design Submission Schedule and provide a decision on the timeline required for inclusion in the design.

Q.24 1.2.3.2 para 1 indicates "20 percent spare load growth at 100 percent demand will be provided throughout the electrical system)" Please advise if this is applicable to the entirety of Buildings A and B or is limited to the specific work areas of the RFP.

A.24 This requirement is applicable to all new work that would occur within the specific work areas of the RFP.

Q.25 1.2.3.3 para 1 - Please identify which equipment to be relocated. Again, is this limited to the specific work areas of the RFP or is it for the entirety of Buildings A and B?

A.25 The requirement is to relocate all equipment, within the specific work areas of the RFP only, that is violating working clearance or dedicated space requirements.

Q.26 1.2.3.4 Is acceptable that the new generator be provided with belly tank and not a separate fuel oil storage / circulation system

A.26 The fuel tank shall be sized to satisfy NFPA 110 and codes listed in section 1.2.3.1 for new generator rating.

Q.27 1.2.3.4 Confirm that the new generator is for Bldg B only.

A.27 Confirmed for Building B only.

Q.28 1.2.3.4 para 2 - please advise on the specifics of the Optional Standby loads and requirements of the DC Courts.

A.28 Design-Builder shall verify loads requiring generator backup, but not permitted to be served or connected to emergency and legally required energy distribution. D-B shall provide load calculations for standby distribution and new generator ratings and detail impacts to major systems/equipment, to determine the optimal design.

Q.29 1.2.3.4 Does the replacement of the generator to meet all load requirements and current standards fit within the confines of the current room?

A.29 D-B shall determine generator rating required for code compliant supply of emergency, legally required, and standby supply to new and existing loads. New loads include but are not limited to, fire pump and optional standby distribution. Design-Builder shall evaluate new generator requirements to determine suitability of existing generator room for code compliance.

Q.30 1.2.3.5 Electrical Metering- please confirm that the metering system requirements are limited to the specific work areas of the RFP.

A.30 D-B shall provide new metering for areas of work and new systems installed by D-B, which may be located outside of the specific areas of work.

Q.31 1.2.3.11 - Interior Lighting Confirm that the light replacement (LED) is only for the spaces under the scope of this project and not the balance of the bldgs A and B.

A.31 Confirmed.

Q.32 1.2.3.12 - Interior Lighting Controls - Confirm that the lighting controls are for the areas of the building that are associated with the scope of work and not the complete / balance of the buildings.

A.32 Confirmed.

Q.33 1.2.3.13 Ext Lighting Controls - Please clarify the scope of work / extent for exterior lighting upgrades/replacements and associated controls. Is this part of the scope of work for this project?

A.33 No. Exterior lighting controls are not part of the scope of work.

- Q.34 Will this project be required to achieve any LEED certification or other sustainability certifications?
- A.34 No.
- Q.35 1.2.4.1 Please confirm that modifications to the existing fire alarm system are only related to the specific work areas of the RFP. Confirm that the intent is not to upgrade the entirety of the system throughout buildings A and B to meet the referenced code requirements.
- A.35 New, replacement, and relocated fire alarm devices shall be provided as required for a code-compliant system in the Buildings A and B areas of work only.
- Q.36 1.2.4.2 Please confirm that the modifications to the existing fire suppression systems are only related to the specific work areas of the RFP. Confirm that the intent is not to upgrade the entirety of the systems throughout buildings A and B to meet the referenced code requirements.
- A.36 Modifications in Building A are limited to the area of work and adjacent areas as necessary to support the area of work (such as tie-ins to existing mains outside the immediate area of work). Modifications in Building B are limited to the area of work and the additional scope noted in the scope of work Paragraph 1.2.4.2, "Additional Building B Scope".
- Q.37 1.2.4.2 Is the current plan in the RFP that all site investigations occur within 21 days of NTP? If so, the pipe corrosion analysis and investigations referenced in 1.2.4.2 will require additional time added to the schedule. Please advise.
- A.37 Pipe corrosion analysis shall be completed within 90 days of NTP.
- Q.38 1.2.5.5 - digital signage - Is the list provided sufficient or is a survey required to determine whether signage is in fact compliant with ADA.
- A.38 The provided list is sufficient for displays not currently compliant with ADA as of April 2021. The D-B shall verify compliance during the pre-Construction Phase.
- Q.39 1.2.5.6 para 2 - "where new courtrooms or hearing rooms are planned" is this applicable to this Scope of Work? In reading the RFP it does not appear that new courtrooms or hearing rooms are being planned.
- A.39 Refer to the limited scope of work and plans for Building A in attachment J.23.
- Q.40 1.2.6.3 - please confirm that structured cabling is limited to the areas of Work (unoccupied).
- A.40 Horizontal structured cabling is limited to the areas of work, some areas which are unoccupied now and other areas that will be vacated prior to the start of demolition/construction activities.
- Q.41 1.2.6.3 - please confirm that backbone cabling is being replaced in its entirety for both building A and B. what implications might this have on occupied architectural space?
- A.41 All COMM Rooms in Building B and the one (1) COMM Room supporting the renovated areas in Building A shall be upgraded with new backbone cabling. Any existing pathways that need to be accessed in occupied space to support this upgrade will need to be coordinated with DC Courts. Intent to replace all in Building B? D-B shall determine if possible.
- Q.42 1.2.6.3 Para 7 Please confirm that the Cat6 cabling replacement is limited to the specific work areas of the RFP.
- A.42 Category 6A cabling replacement is limited to the specific work areas identified in the RFP.
- Q.43 "1.2.6.5 para 3 - ""DC Courts shall provide a wireless design based on the final architectural and furniture design of any renovated space"" - what is the scope of work for the Design Builder?"

- A.43 D-B is responsible for providing pathways, Category 6A cabling and installing the OFCI wireless access points based on the DC Courts wireless design.
- Q.44 1.2.6.6 para 3 - "DC Courts installed new Cisco Catalyst 9300 48-port UPOE switches throughout building B in January 2021 as the new standard. Additional network electronics may be required to support the new renovated spaces depending on requirements and density of work area outlets." Please clarify the specific extent of the work required so that the proper design scope can be included.
- A.44 Provide an allowance for (1) additional new switch per COMM Closet that supports the areas of work identified in the RFP.
- Q.45 1.2.7.1 - This standard references "detention grade areas". Please confirm that there are no detention grade areas included in the scope of work. If so, provide the extent of work envisioned for these areas.
- A.45 Confirmed. There are no detention grade areas included in the scope of work.
- Q.46 1.2.7.2 -Has the bridging design determined whether there is sufficient space nearby to accommodate a new larger security equipment room in the Lower Level? What is the process for approval of the location of this new room?
- A.46 The performance requirements address security systems, not a new larger security equipment room in the lower level. Based on the preliminary assessment, there appears to be sufficient space to accommodate the equipment room in the lower level, however, the D-B shall confirm feasibility during the Pre-Construction Phase and include it for discussion during DID development, should it be of benefit to the Owner.
- Q.47 1.2.7.3 para 1 - "In support of IP architectures, provide distributive architecture for security systems by providing distributive security technology spaces (similar to telecom rooms) throughout the facility." Confirm that the SOW includes a full new security system.
- A.47 Design-Builder shall design a new network architecture that supports a security system upgrade by the Courts' electronics security vendor, who will install security cabling and equipment. The design shall include primarily new security closets, network and equipment racks, cable trays in corridors and fiber optic backbone cabling from the new security equipment room to each of the security closets. During the pre-Construction Phase, the Design-Builder shall validate electronic security systems design requirements with Courts' security team to ensure distributive architecture design meets those requirements.
- Q.48 1.2.7.4 para 1 "Provide accessible cable tray in corridors on all floors to support cable management." Did the bridging study confirm that there is sufficient space in the corridors above finished ceilings to support new cable trays? Please confirm. What requirements does the Government have for access to cable trays (via access panels).
- A.48 No. The D-B shall evaluate and confirm sufficient space to determine design, placement, and routing of new cable trays.
- Q.49 1.2.7.5 para 1 "Review potential for PIV (Personal Identity Verification) or Smart card initiatives to eventually eliminate the use of proximity-based systems. New systems should consider credential upgrades and will likely require a multi-phased process." what is the process for getting to consensus with stakeholders? how is the schedule going to accommodate the workshops necessary to provide consensus and direction for the PIV system?
- A.49 Enabling use of PIV or smart credential has been an ongoing discussion with Courts' security and other stakeholders. The Courts' anticipates that the D-B will validate the PIV requirement(s)

during the pre-Construction Phase design process and advise on system infrastructure requirement feasibility and cost. The Courts' will adhere to the D-B's approved Design Submission Schedule and provide a decision on the timeline required for inclusion in the design.

Q.50 J.33 - 1.2.7.5 para 5 "Exterior Video Camera Coverage" section: If exterior light poles are to be included as part of this building renovation, include low-voltage conduit infrastructure between all pole bases with into two (2) building entry points that connect to the main security room." Confirm if exterior lighting is required for this scope of work.

A.50 Exterior lighting is not in the scope of work.

Q.51 "The Program of Requirements Attachment J.25, Page 2, para 2 indicatees ""The personnel projections and space requirements provided in this POR have not been reviewed by the stakeholder groups prior to issuance of this document and should be verified before proceeding with design.""

A.51 The D-B shall validate/verify ALL requirements provided as part of the RFP and provide a Program Verification Report per Section C.4.2.6. Per Section C.4.3.1, the D-B shall revise and provide the Program Verification Report through the conclusion of the DID development process. Should the final version of the Program Verification Report identify any changes to requirements provided in the RFP that have scope, cost or schedule impacts, those will be addressed prior to the D-B progressing to the Concept Design (35%) Submission.

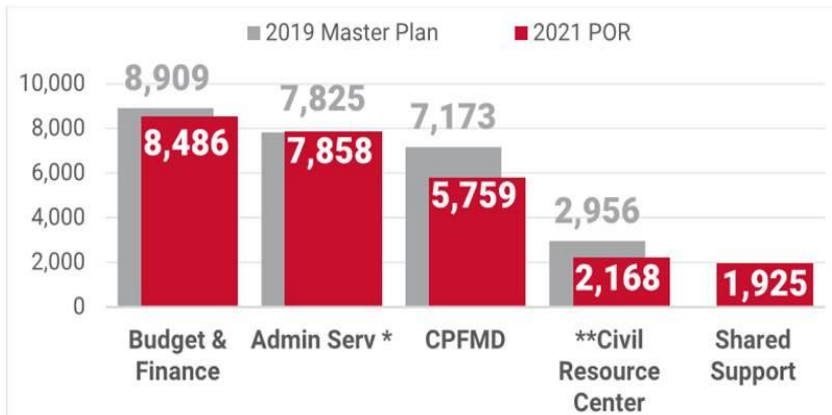
Q.52 Please advise - if there is the need to confirm personnel projections, and when will these be confirmed or edited by stakeholders as it relates to the NTP and Schedule? What, if any, support is anticipated being needed by the Design-Build team during DID1 to memorialize projections. If projections change, how does that translate into a revised POR? Is a revised POR necessary for the SOW for this project? (note, that there is continued emphasis on uncertainty of the personnel projections on page 5, section 3 and page 16, section 6 as well)."

A.52 Speaking specifically about "personnel projections," there is no requirement for the D-B to confirm "projections." The Courts' does not anticipate any personnel changes to the POR provided with the RFP, however, verification of ALL requirements is required (see A.51) with the intent that the D-B will comprehensively identify any discrepancies, contradictions, issues, changes, etc. to the requirements prior to developing a concept design and moving to design development.

Q.53 Program of Requirements- Attachment J.25 - As a similar question to #47 - the Masterplan of 2019 from the POR document indicates slightly larger space requirements than the current 2021 POR. Please confirm that the POR 2021 is to be followed. (see graphic below)

A.53 The D-B shall verify the 2021 POR data, as it is the most recent and is based on recent interviews with the End Users. The 2019 Master Plan was based on limited data available in 2018, therefore the 2021 POR data that was collected in 2021 supersedes it.

Figure 6. POR USF Compared to the 2019 Master Plan



Q.54 Please confirm that the required permits referenced in RFP C.5.7.4 is limited to trade permits. Please clarify the the specific Authority Having Jurisdiction over the project for the purposes of permits and inspections - will DCRA be involved in any permitting for the project. Will the D-B be required to obtain building permits in addition to trade permits?

A.54 Design-Builder shall acquire building permits and all applicable trade permits. See A.65

Q.55 "Per RFP C.4.2.4.3 -""As-Built Drawings. As-Built drawings that will be provided by Owner at the Pre-Bid Conference shall be verified for the D-B for accuracy prior to the start of design. It is the responsibility of the D-B to familiarize themselves with the existing conditions, verify all measurements, confirm existing structural and MEP capacities throughout and impacting the Work area, and collect all relevant data needed to produce the required design and construction documentations for a complete execution and construction of the Project in accordance with all contract requirements.

As part of the design effort, D-B shall verify existing utilities, capacity, location and connections. If Owner-provided as-built drawings do not match field conditions, D-B's design and specifications shall document and provide correct size, capacity, location, and connections to meet the Project performance requirements. Any necessary modifications to the existing systems shall be determined during the development of design and included in the D-B's design submissions. D-B shall also identify any recommended testing or monitoring that would be beneficial to advance the Project to meet the required Substantial Completion date.""

The RFP Schedule on page 8 has all of the above to be completed within 14 days of NTP and submittal of a full report 21 days after NTP. The question here is that, while it may be possible to identify some areas of the as-built documents that deviate from existing conditions, the design implications may not be known until the design progresses and program requirements are clarified and their effect on the design MEP/architectural systems is determined. Given the extent of the verification necessary and the effect on the design process, please advise if additional time can be provided in the schedule for the work required per C.4.2.4.3."

A.55 Section C.4.2.4.3 is not referenced on page 8 and is not required within 14 days of NTP. The Existing Site Survey and Existing Site Survey Report are referenced on page 8, detailed in Section C.4.2.4.2., and required within 14 and 21 days after NTP. Should the D-B require more time to complete both, then D-B shall bring it to the attention of the Courts for consideration after award. The Courts' will consider extending the timeline if it will not impact the delivery of the Corrected Final Design no later than (NLT) 30 April 2022.

Q.56 RFP C.4.3.4.3 - Please advise on the accessibility of the building to perform the Verification of Existing Conditions -can the site survey be performed during normal working hours or will all site investigations have to be performed off hours.

A.56 The site survey may be performed during normal working hours.

Q.57 RFP C.4.2.4.3 - Please advise if selective demolition can be performed in support of the existing conditions assessment. It is highly likely that this will be required due to existing concealed conditions that may affect the ability to verify the as-built conditions.

A.57 Yes, selective demolition can be performed in support of the existing conditions assessment. D-B shall follow all DCRA regulations.

Q.58 RFP - B.7 Please confirm that design costs for the Options 1-3 are not to be included in the fixed price for Preconstruction (Phase One) Services.

A.58 Confirmed.

Q.59 RFP C.4.4.1.4 -Please advise if current hydrant flow data is available for the design effort - or - if the Preconstruction Services should include the costs to perform a hydrant flow test.

A.59 No hydrant flow data is available. Design-Builder shall perform a hydrant flow test during the Pre-Construction Phase.

Q.60 "RFP Section L.10.4.1. indicates: ""Proposed Subcontractors. Per Section L.10.4 above, provide information pertaining to proposed subcontractors. At a minimum the offeror shall include Mechanical, Electrical, Plumbing, IT and AV subcontractors."" –

A.60 Refer to Answer 61.

Q.61 Please confirm the intent is to provide details related to design subcontractors (subconsultants), not trade subcontractors."

A.61 Confirmed. Provide design subconsultants in response to L.10.4.1.

Q.62 Does the court have specifications for the existing materials/ finishes we assume we will be required to match?

A.62 Refer to attachment J.37 Design Standards for existing material and finish specifications.

Q.63 Will the court allow the design team full access to affected areas for existing conditions' survey? Will that need to take place during off hours?

A.63 The Design-Builder will have full access to perform the existing conditions survey. The survey may be performed during normal working hours.

Q.64 Please verify how much detail is required for the construction schedule.

A.64 Refer to section L.10.5 of the RFP. All items listed in L.10.5.8 are required.

Q.65 Is a permit required through DCRA and if yes is a 3rd party inspection required?

A.65 Yes, a permit is required through DCRA. Design-Builder shall acquire building permits and all applicable trade permits. DCRA certified inspectors are required for all inspections. The Design-Builder shall determine if 3rd party inspections are used. All inspection requirements shall be determined prior to negotiating construction phase.

Q.66 Are there existing condition drawings available for review? Are they from the last renovation or original documents?

A.66 Refer to attachment J.40 Interior Improvements to DC Superior Courts Building 'B' dated 2003. No major improvements have been made to the building since.

Q.67 Section L.10.4.1 requires proposed subcontractors. Are you looking for sub-consultants (designers) or sub-contractors (builders)?

If subcontractors, it will be difficult to get the requested information because we need to go through a pre-qualification effort that we normally wouldn't do until we have plans to share with them. At this point in the process, I don't think I would be providing a lot of relevant information. Can this requirement be eliminated or modified?

A.67 Refer to Answer 61.

Q.68 Is the DB responsible for the design, specification, and installation of new furniture?

A.68 No. Furniture shall be furnished and installed by the Courts. The Design-Builder shall coordinate per sections C.3.4.1 and C.3.5.

Please remember to check the DC Courts Website daily for posting of Amendment updates

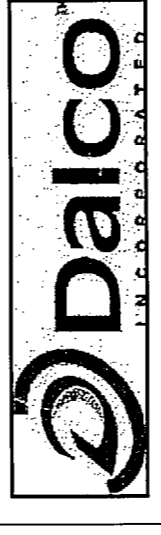
<https://www.dccourts.gov/about/procurement-contracts-branch>

Interior Improvements to
DC Superior Courts Building 'B'
409 E Street, NW
Washington, DC 20001

CONSTRUCTION PACKAGE

US General Services
GSA Administration

301 7TH Street, SW, Room 2021
Washington, DC 20407



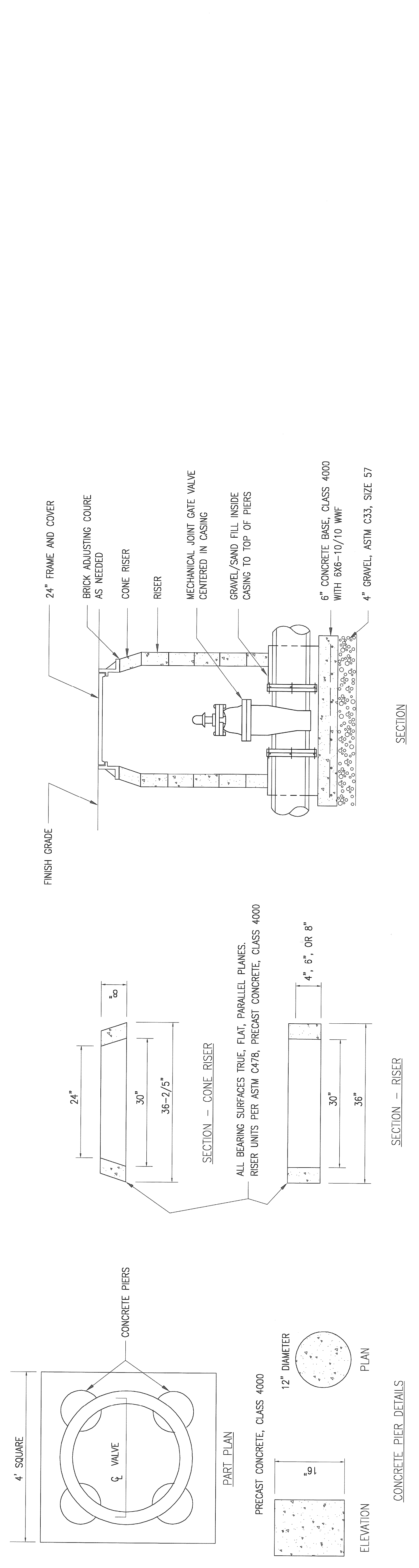
Construction Management and
Commercial General Contractor
10005 Old Columbia Road, Suite L261
Columbia, MD 21046
Tel : (410) 290-8827

ISSUED FOR CONSTRUCTION
(FINAL) - APRIL 8, 2003

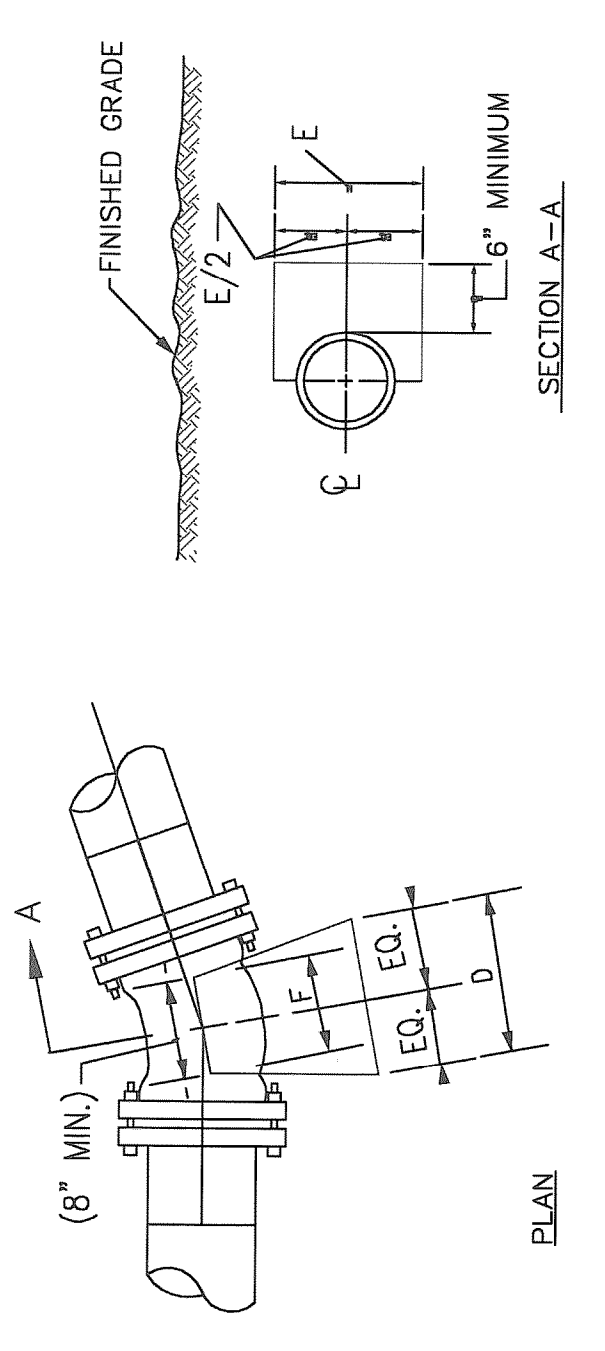
LEO A DALY

PLANNING
ARCHITECTURE
ENGINEERING
INTERIORS
EST. 1918
ATLANTA
AUSTIN
BALTIMORE
DALLAS
HONG KONG
HONOLULU
LOS ANGELES
LOS VEGAS
MADRID
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WASHINGTON, DC

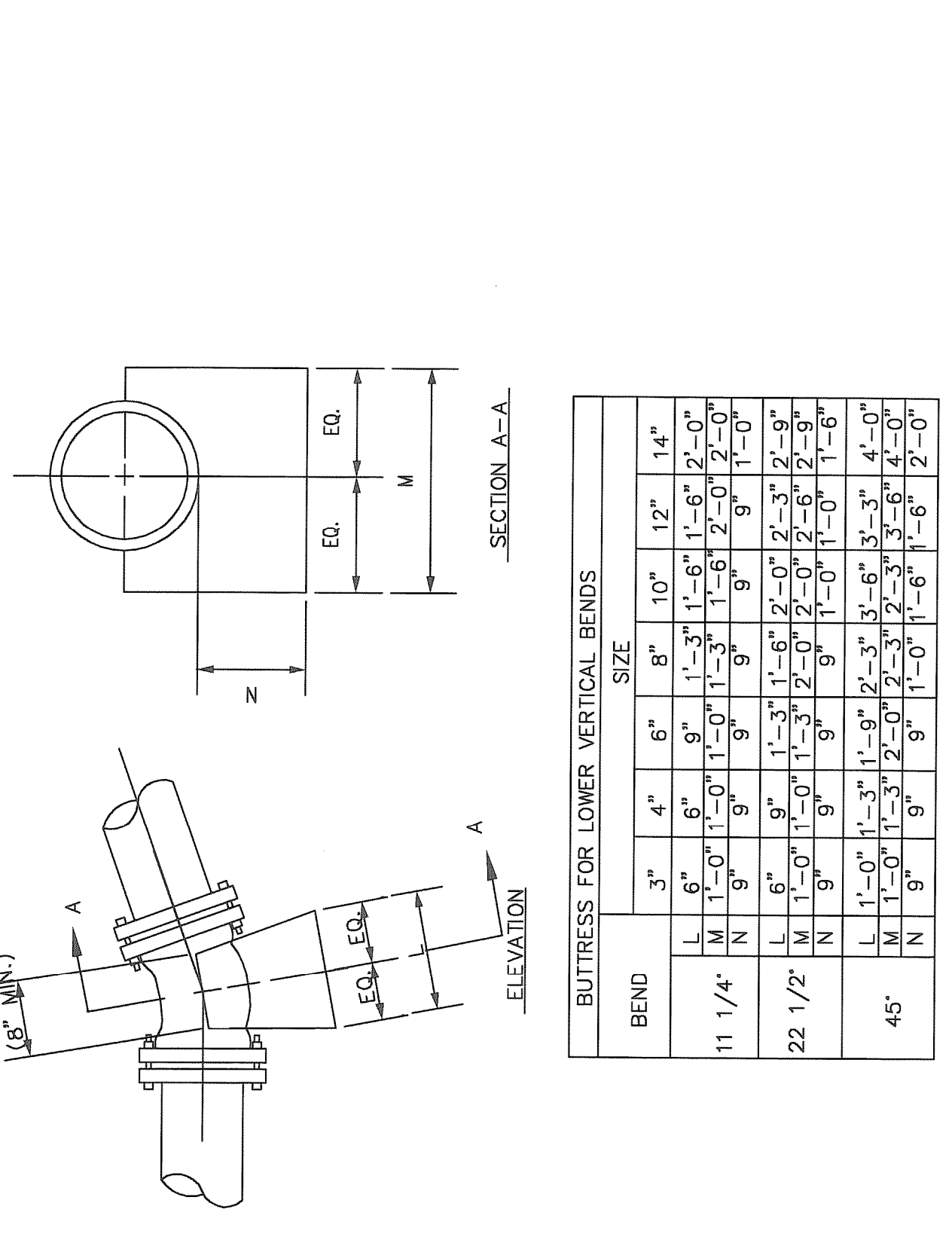




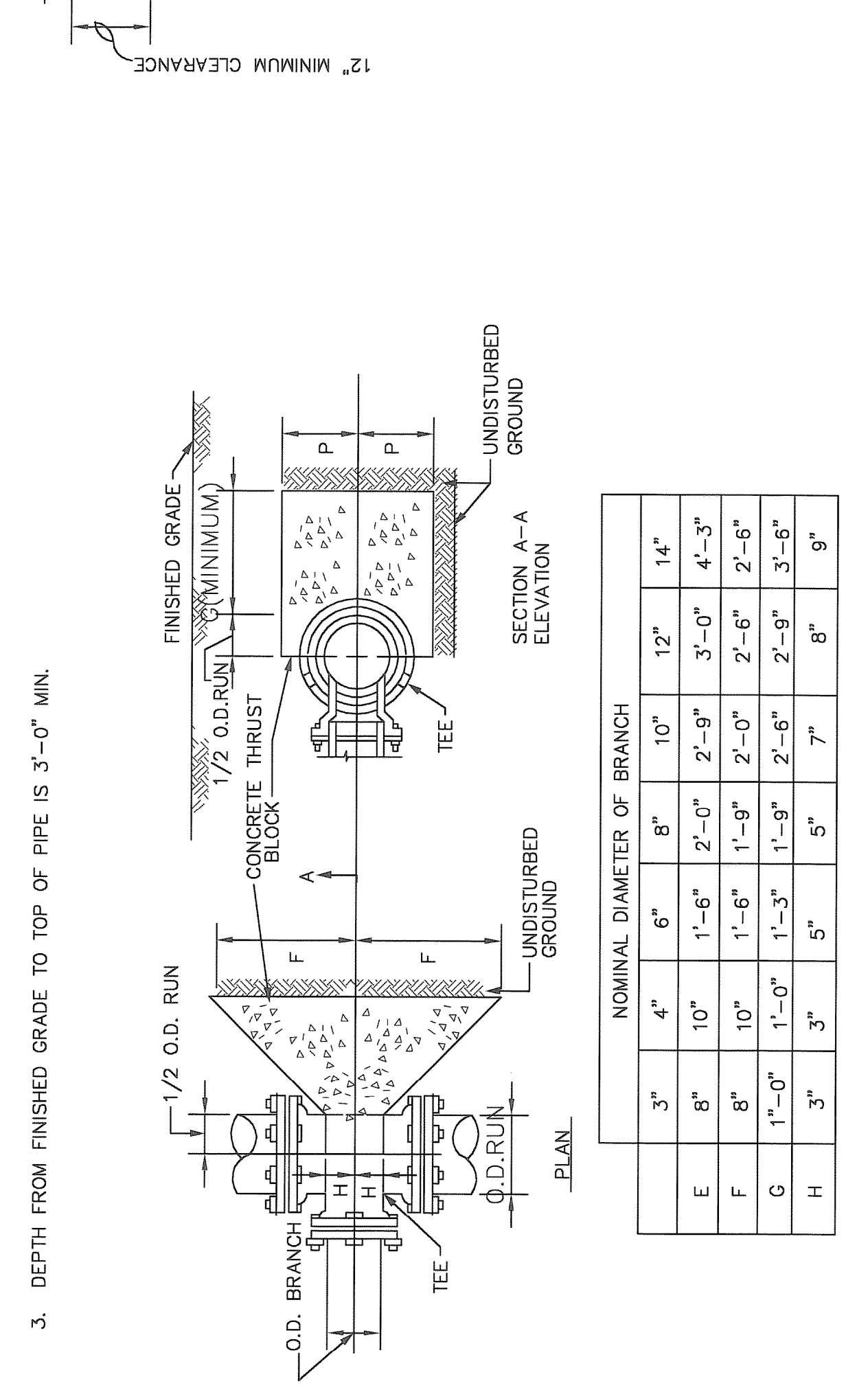
SECTION
VALVE CASING
SECTION - RISER
SECTION - CONE RISER
CONCRETE PIER DETAILS



BEND TYPE	PIPE DIAMETER INCH	THRUST BLOCK DIMENSIONS						
		D	E	F	G	H	I	
1 3/2 [11 1/4]	4,6 AND 8	1'-6"	1'-6"	0'-8"	1'-0"	1'-0"	1'-0"	1'-0"
	10,12 AND 14	2'-6"	2'-6"	1'-0"	2'-6"	2'-6"	1'-0"	2'-6"
1 18 [24 1/2]	4,6 AND 8	1'-9"	1'-6"	0'-8"	1'-0"	1'-0"	1'-0"	1'-0"
	10 AND 12	3'-6"	2'-6"	1'-0"	3'-6"	3'-6"	1'-0"	3'-6"
1 8 [49]	14	5'-3"	2'-6"	1'-0"	5'-3"	5'-3"	1'-0"	5'-3"
	4,6 AND 8	2'-8"	2'-0"	0'-8"	2'-8"	2'-8"	1'-0"	2'-8"
1 14 [90]	10	7'-0"	2'-0"	1'-0"	7'-0"	7'-0"	1'-0"	7'-0"
	12	7'-0"	3'-0"	1'-0"	7'-0"	7'-0"	1'-0"	7'-0"
1 4 [14]	14	7'-0"	3'-6"	1'-0"	7'-0"	7'-0"	1'-0"	7'-0"
	4	2'-6"	1'-6"	0'-8"	2'-6"	2'-6"	1'-3"	2'-6"
1 14 [90]	6	5'-0"	2'-0"	1'-0"	5'-0"	5'-0"	1'-0"	5'-0"
	8	6'-0"	3'-0"	1'-0"	6'-0"	6'-0"	1'-0"	6'-0"
1 10 [70]	10	8'-0"	3'-0"	1'-3"	8'-0"	8'-0"	1'-3"	8'-0"
	12	10'-0"	3'-6"	1'-6"	10'-0"	10'-0"	1'-6"	10'-0"
1 14 [90]	14	11'-0"	4'-0"	2'-0"	11'-0"	11'-0"	2'-0"	11'-0"
	4	2'-6"	1'-6"	0'-8"	2'-6"	2'-6"	1'-3"	2'-6"

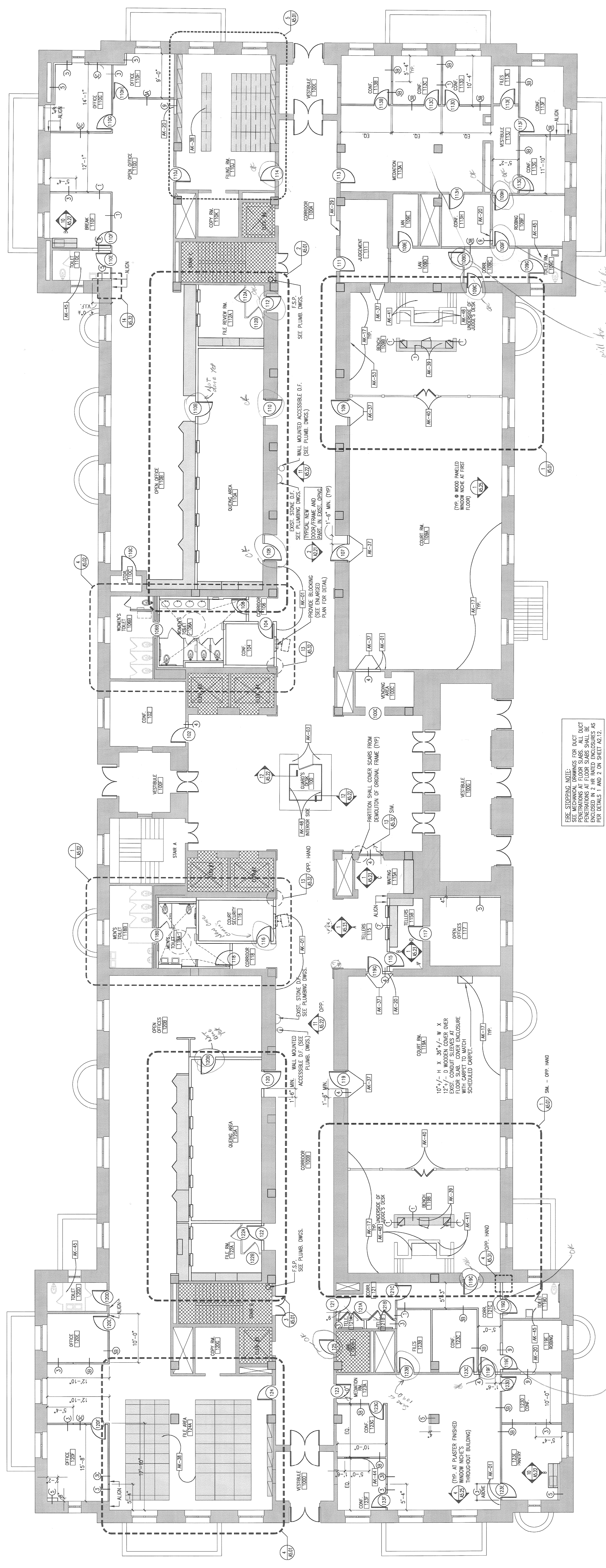


BEND	SIZE			
	3"	4"	6"	8"
11 1/4	L	1'-6"	2'-3"	3'-0"
	N	1'-6"	2'-3"	3'-0"
22 1/2	L	2'-0"	2'-9"	3'-6"
	N	2'-0"	2'-9"	3'-6"
45	L	2'-3"	2'-6"	3'-3"
	N	2'-3"	2'-6"	3'-3"



BEND	SIZE			
	3"	4"	6"	8"
11 1/4	L	1'-6"	2'-3"	3'-0"
	N	1'-6"	2'-3"	3'-0"
22 1/2	L	2'-0"	2'-9"	3'-6"
	N	2'-0"	2'-9"	3'-6"
45	L	2'-3"	2'-6"	3'-3"
	N	2'-3"	2'-6"	3'-3"

- GENERAL NOTES FOR THRUST BLOCKS**
1. CONCRETE STRENGTH: 3000 PSI AT 28 DAYS
 2. BOTTOM SURFACE AND FRONT FACE OF BLOCK (E.D.B.C.) SHALL REST AGAINST UNDISTURBED GROUND OR AGAINST A COMPACTED STRUCTURAL FILL.
 3. DEPTH FROM FINISHED GRADE TO TOP OF PIPE IS 3'-0" MIN.



USE CROSSING NOTE:
SEE MECHANICAL DRAWINGS FOR DUCT
PENETRATIONS AT FLOOR SLABS - ALL DUCT
ENCLOSURES IN 2 HR RATED ENCLOSURES AS
PER DETAILS 1 AND 2 ON SHEET A2.12.

will be
done as per
C-101

will provide a
push button

1 FIRST FLOOR PLAN
A1.01 SCALE: 1/8" = 1'-0"

Contractor
Address

KEY PLAN

ISSUES / REVISIONS

FILE LOG

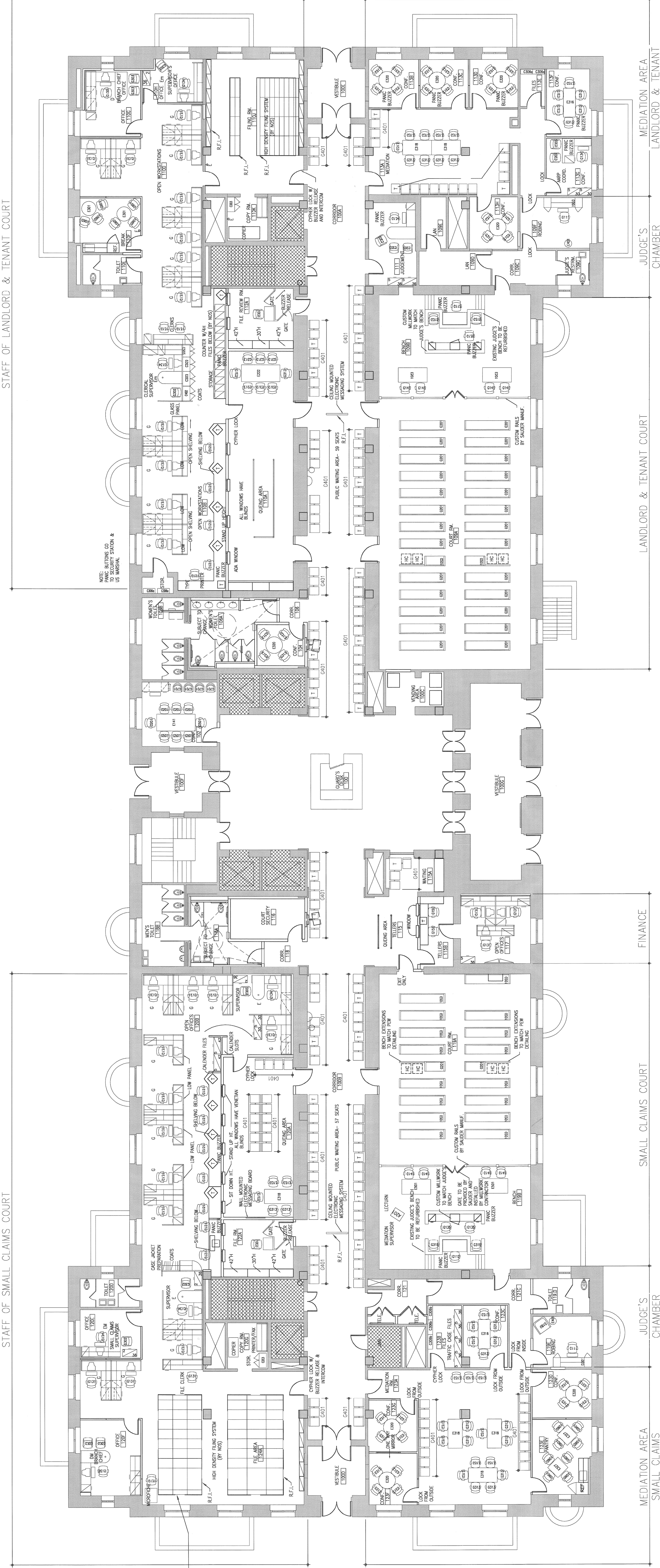
JOB No 5201 0300

CONSTRUCTION PACKAGE

ISSUED FOR CONSTRUCTION
(FINAL) APRIL 8, 2003

FIRST FLOOR FURNITURE PLAN

A1.21



- NOTES:
1. FURNITURE IS NOT IN CONTRACT.
 2. THIS DRAWING IS INCLUDED FOR REFERENCE ONLY.
 3. LEO A DALY ASSUMES NO RESPONSIBILITY FOR THE ACCURACY AND COMPLETENESS OF THIS DRAWING.

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

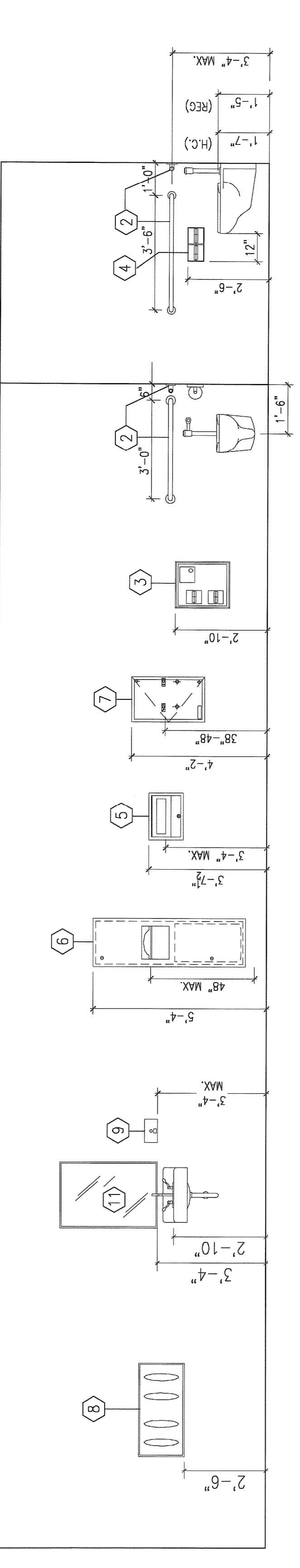
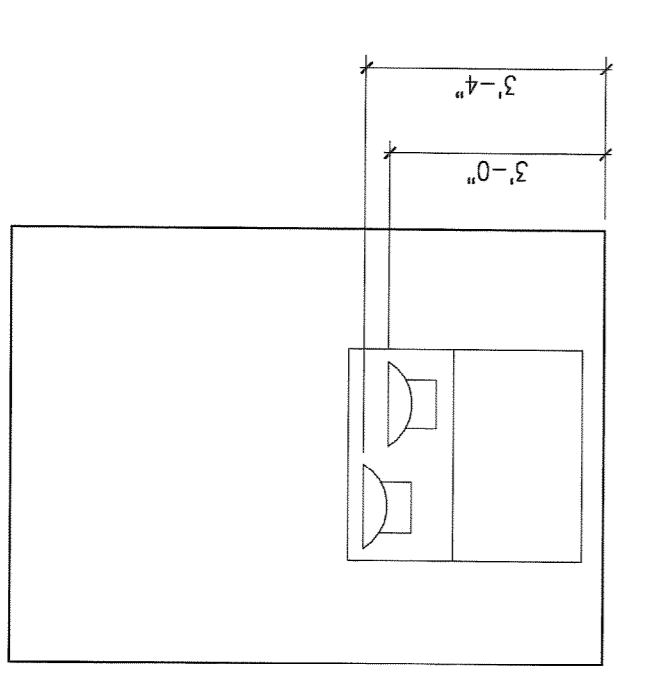
NOTES

- * MAXIMIZE MIRROR SIZE. TWO PIECES OF GLASS IN ONE-PIECE STAINLESS STL. FRAME MAY BE REQ.
- ** INSTALL ANCHOR PLATES

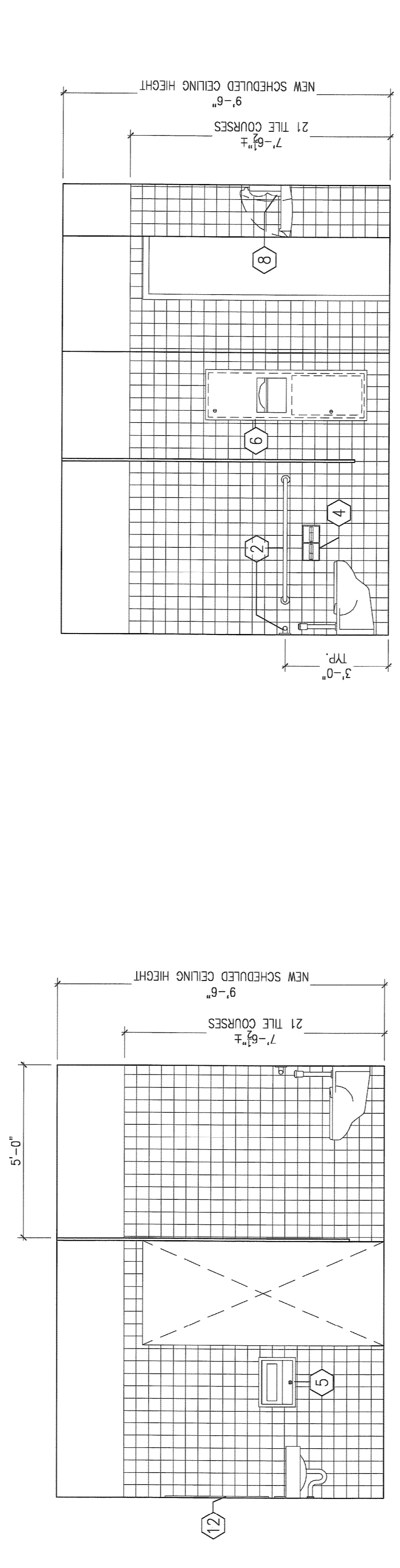
TOILET ROOM ACCESSORY SCHEDULE

NO.	DESCRIPTION	BOBRIK CATALOG NO.	MOUNTING HT.
1	SOAP DISPENSER	B-6221	
2	GRAB BARS - TOILET**	B-550 + 36"/42"	36" G.
3	T.S., T.P., & SAN. IMP. DISP.	B-3570 B-35709	34" TOP
4	TOILET PAPER DISPENSER	B-6999	30" TOP
5	T.S. DISP.	B-3013	43 1/2" TOP
6	PAPER TOWER DISP./WASTE	B-3904	59 1/2" TOP
7	SANIT MARKING VENDOR	B-3500	50" TOP
8	DAMPEN CHANGING STATION	B-2230	45" TOP
9	SOAP DISPENSER	B-2112	40" BOTTOM
10	MIRROR	FRAMELESS MIRROR	SEE DWG.
11	MIRROR	TOP&BOTTOM FRAME 24"x36"	40" BOTTOM
12	MIRROR	TOP&BOTTOM FRAME 48"x36"	40" BOTTOM
13	ROBE HOOK	B-2116	54" TOP

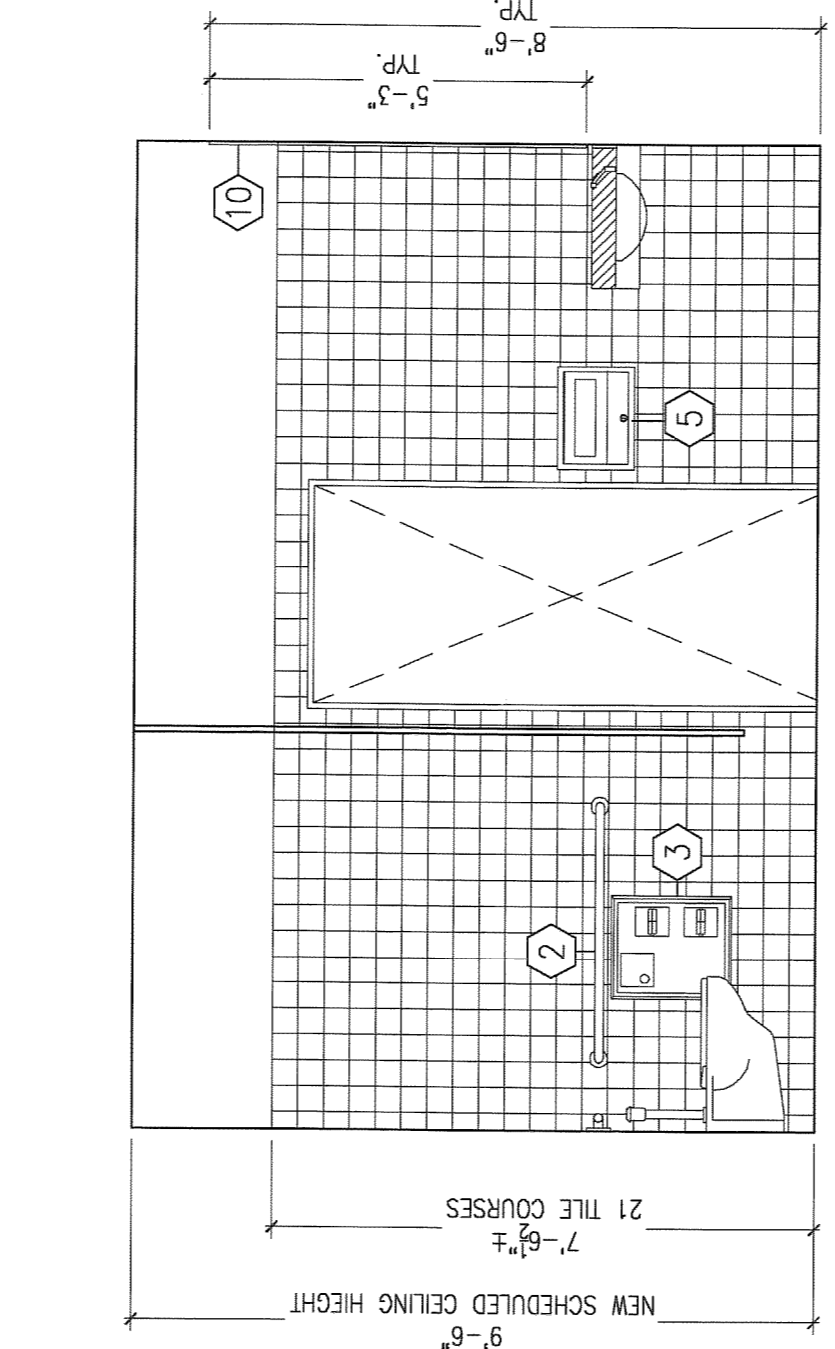
2 TYPICAL DRINKING FOUNTAIN MOUNTING HEIGHT
A5.11 SCALE: 3/8" = 1'-0"



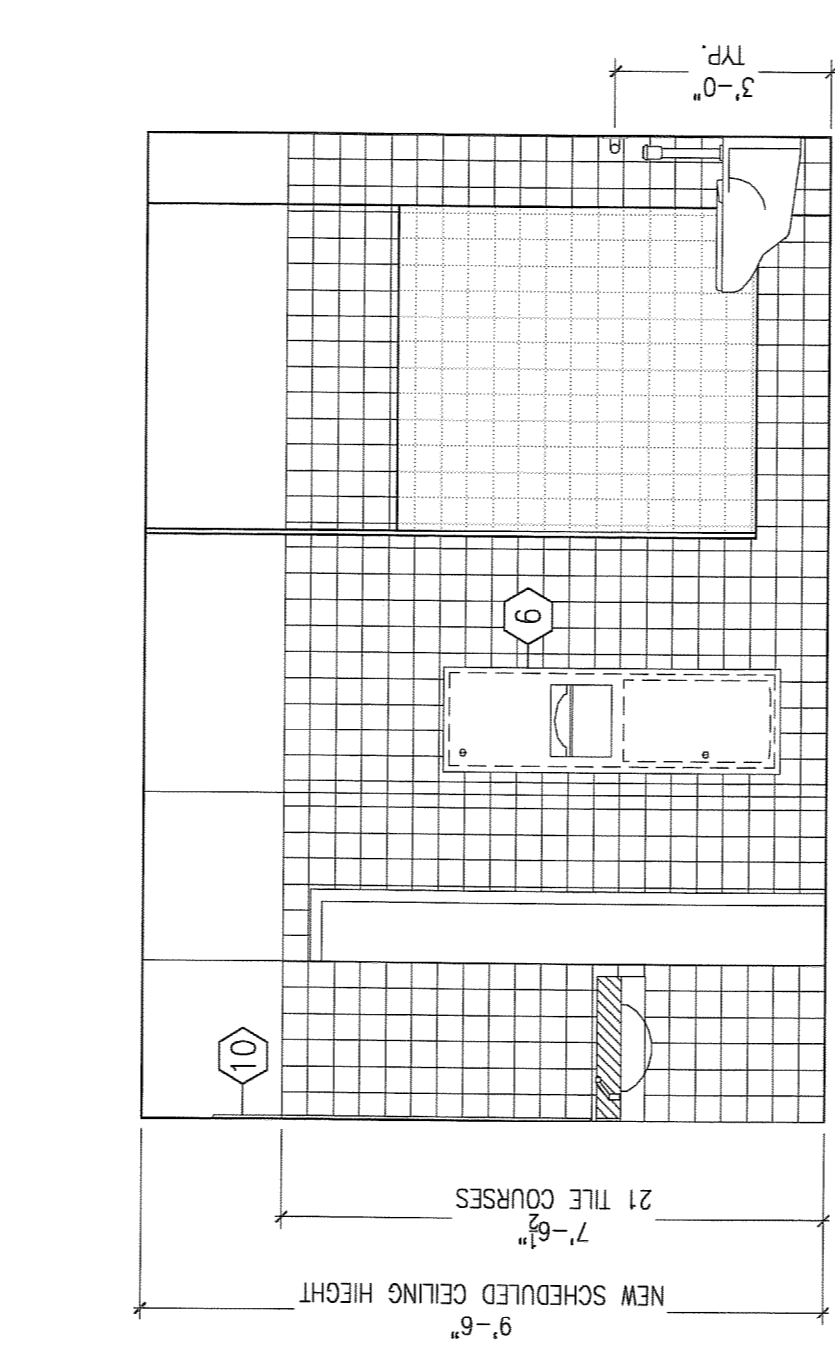
1 TYPICAL TOILET FIXTURE MOUNTING HEIGHT
A5.11 SCALE: 3/8" = 1'-0"



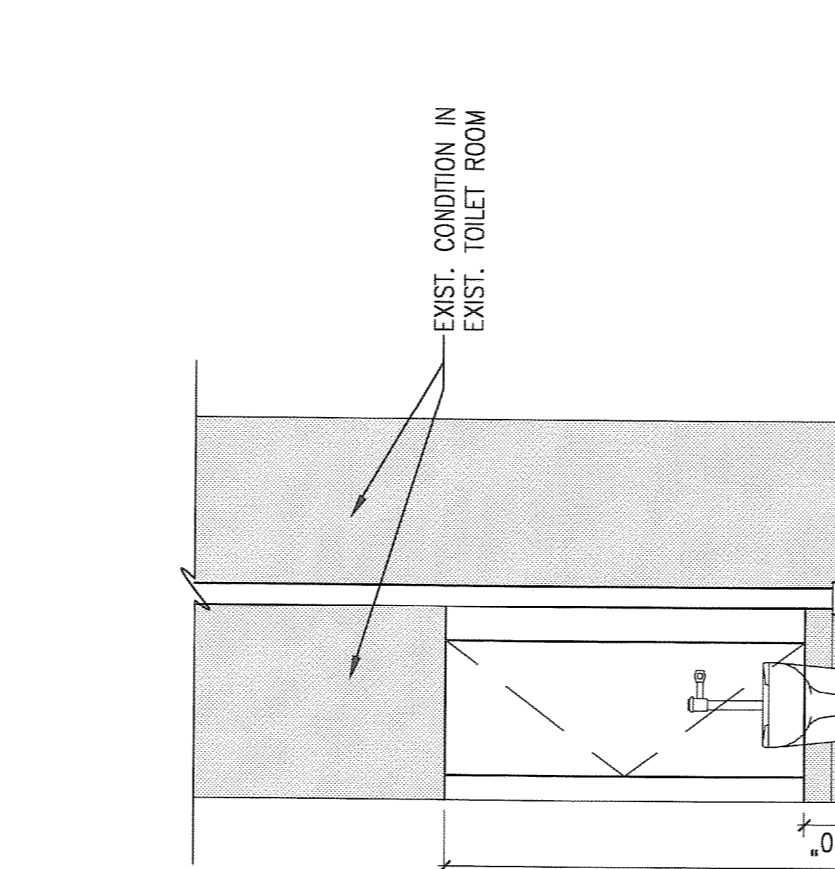
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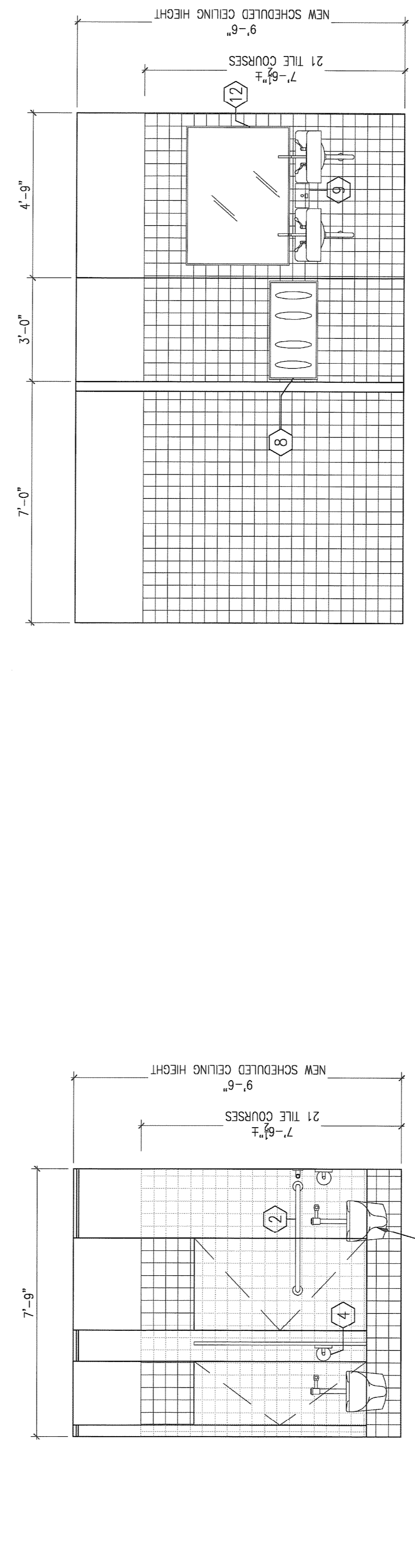
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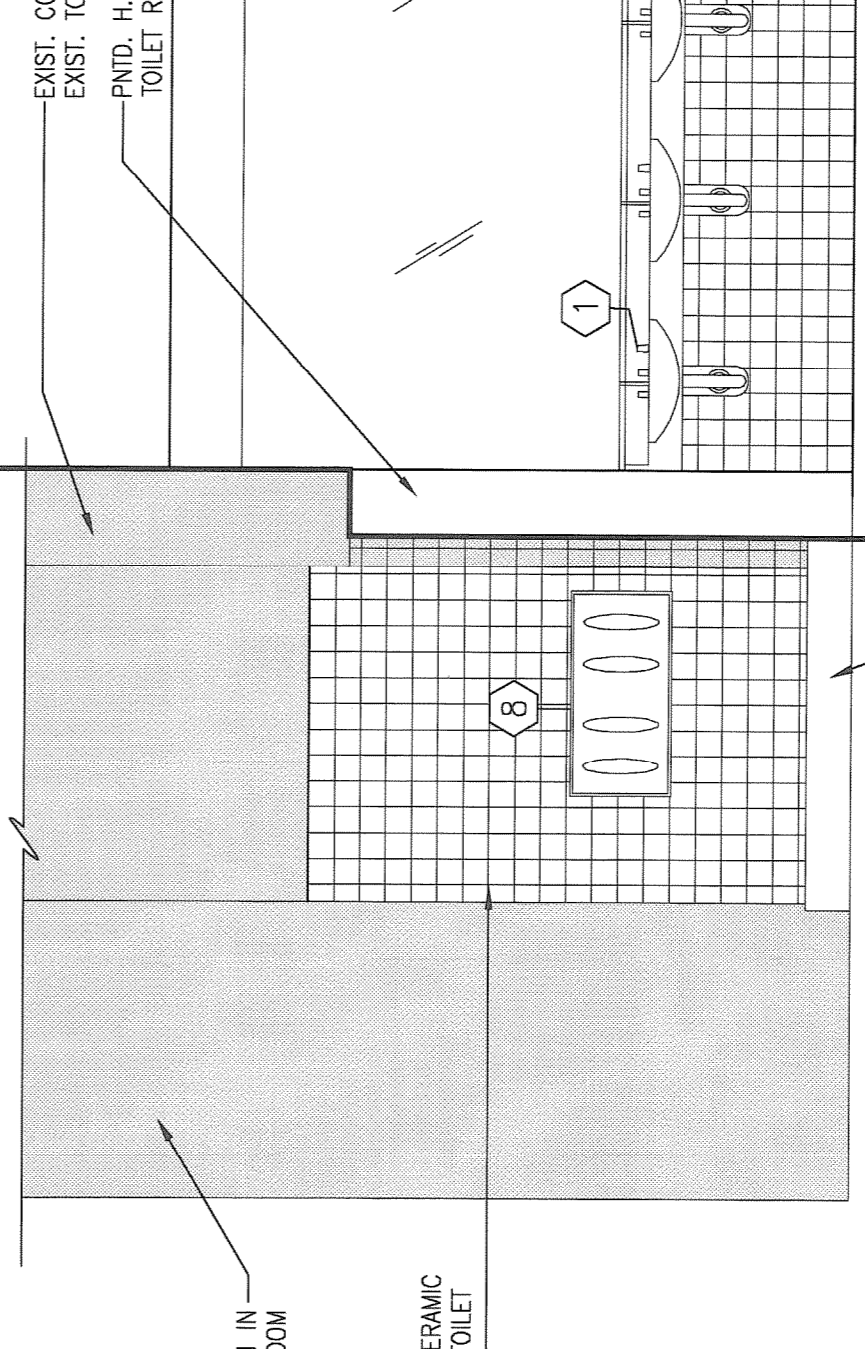
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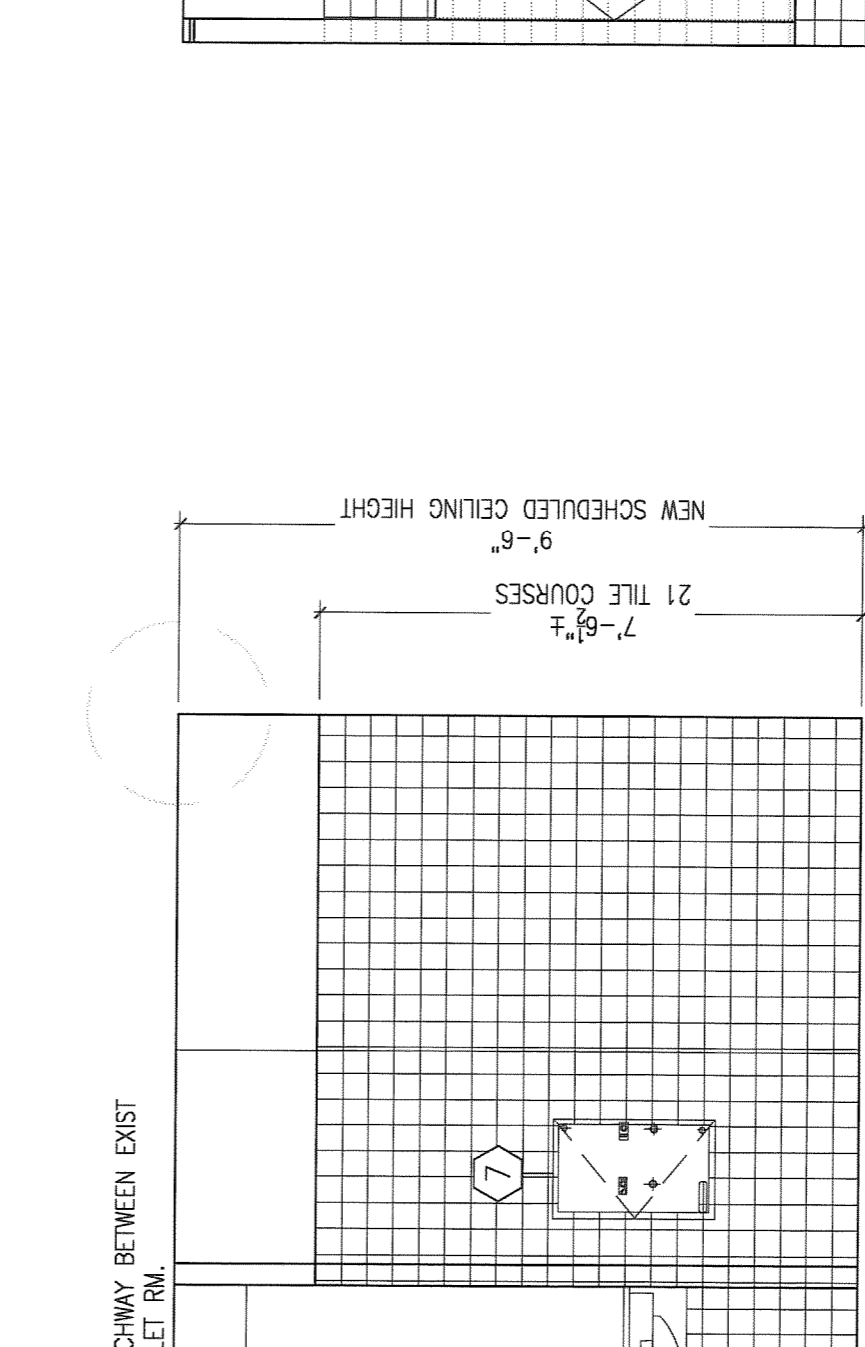
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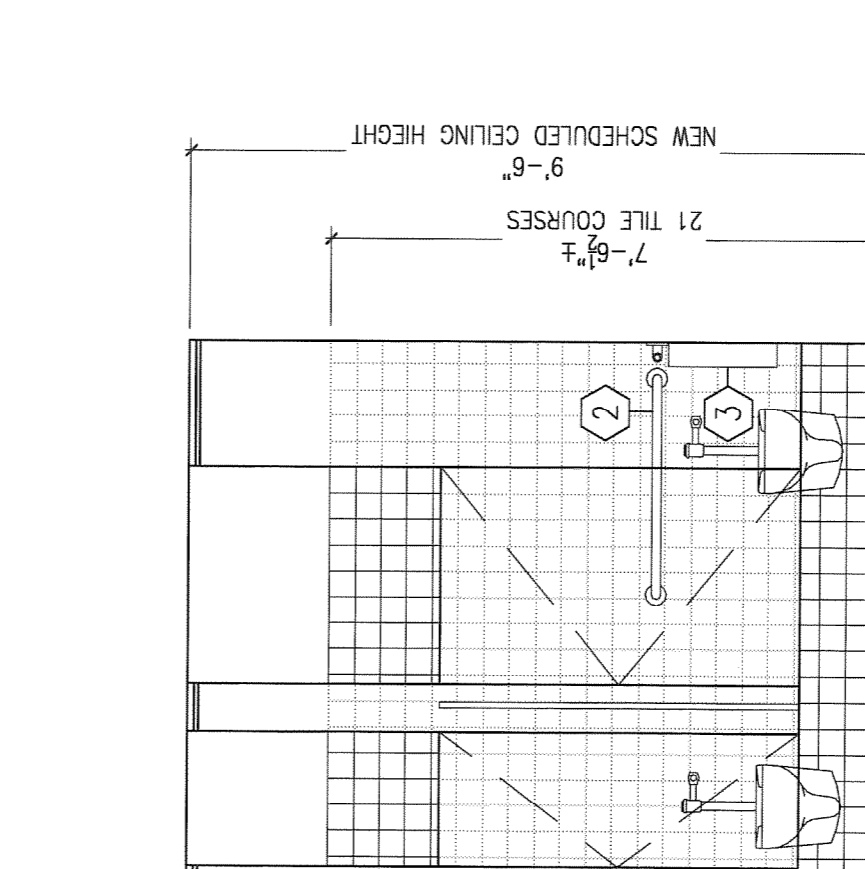
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B



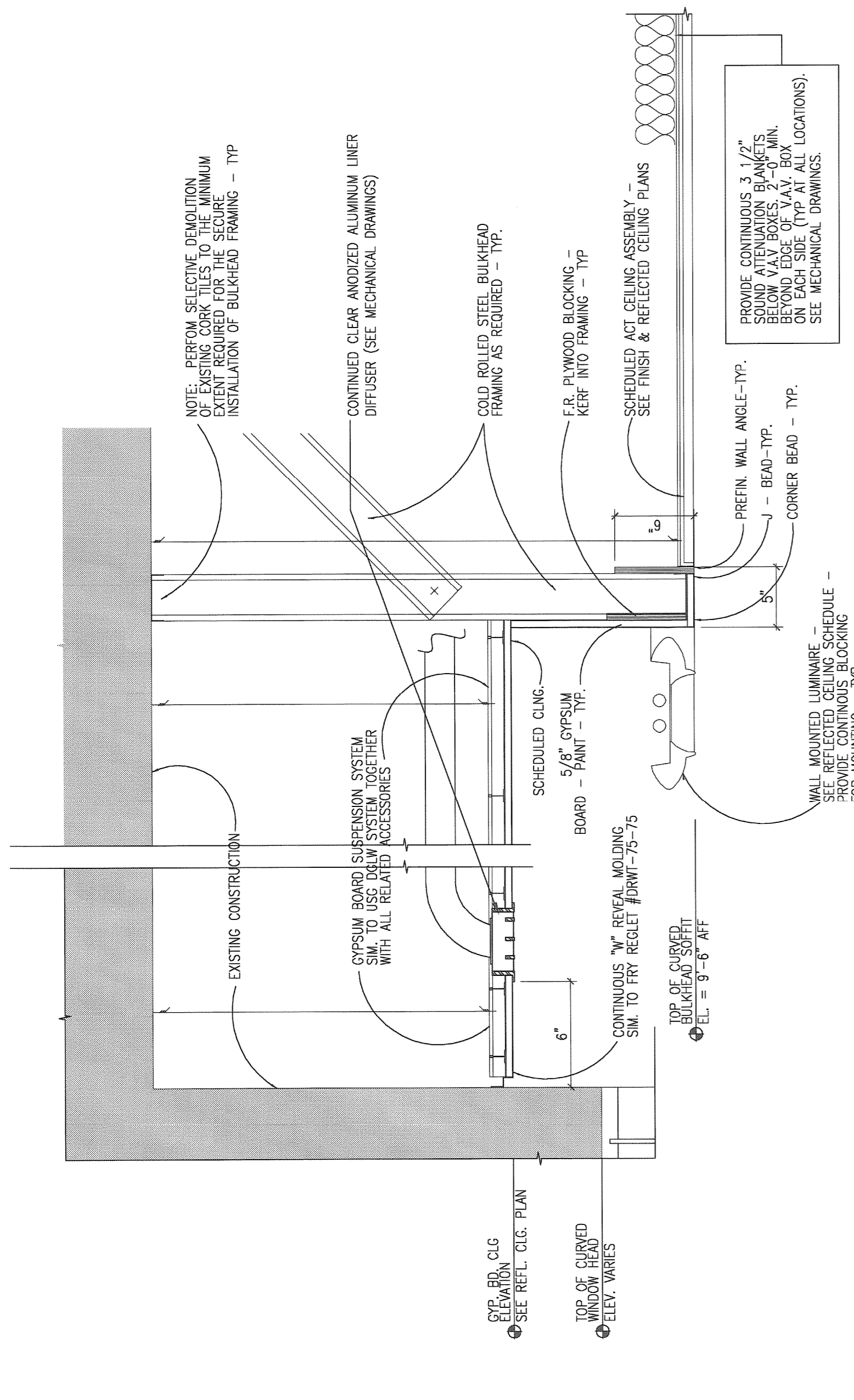
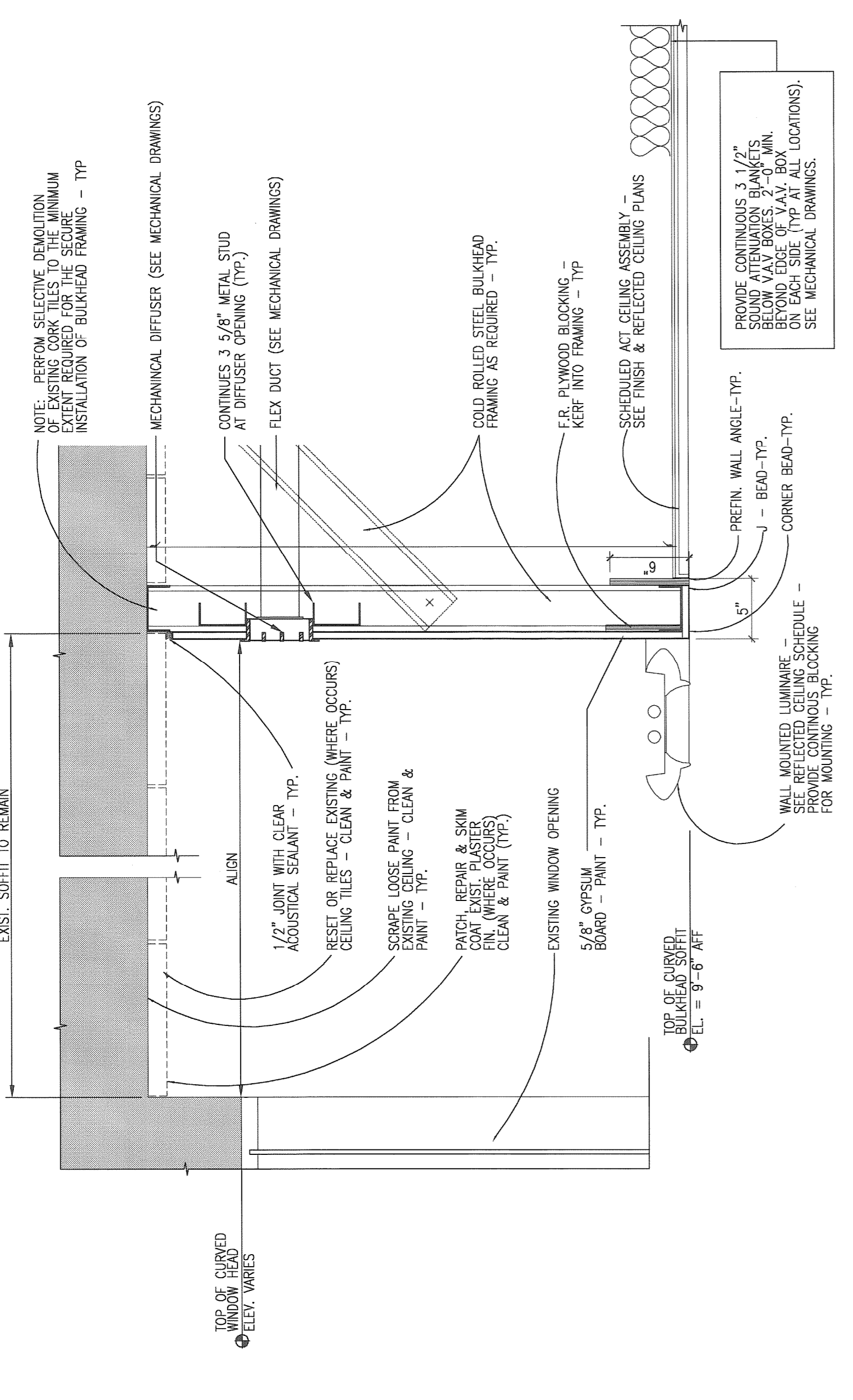
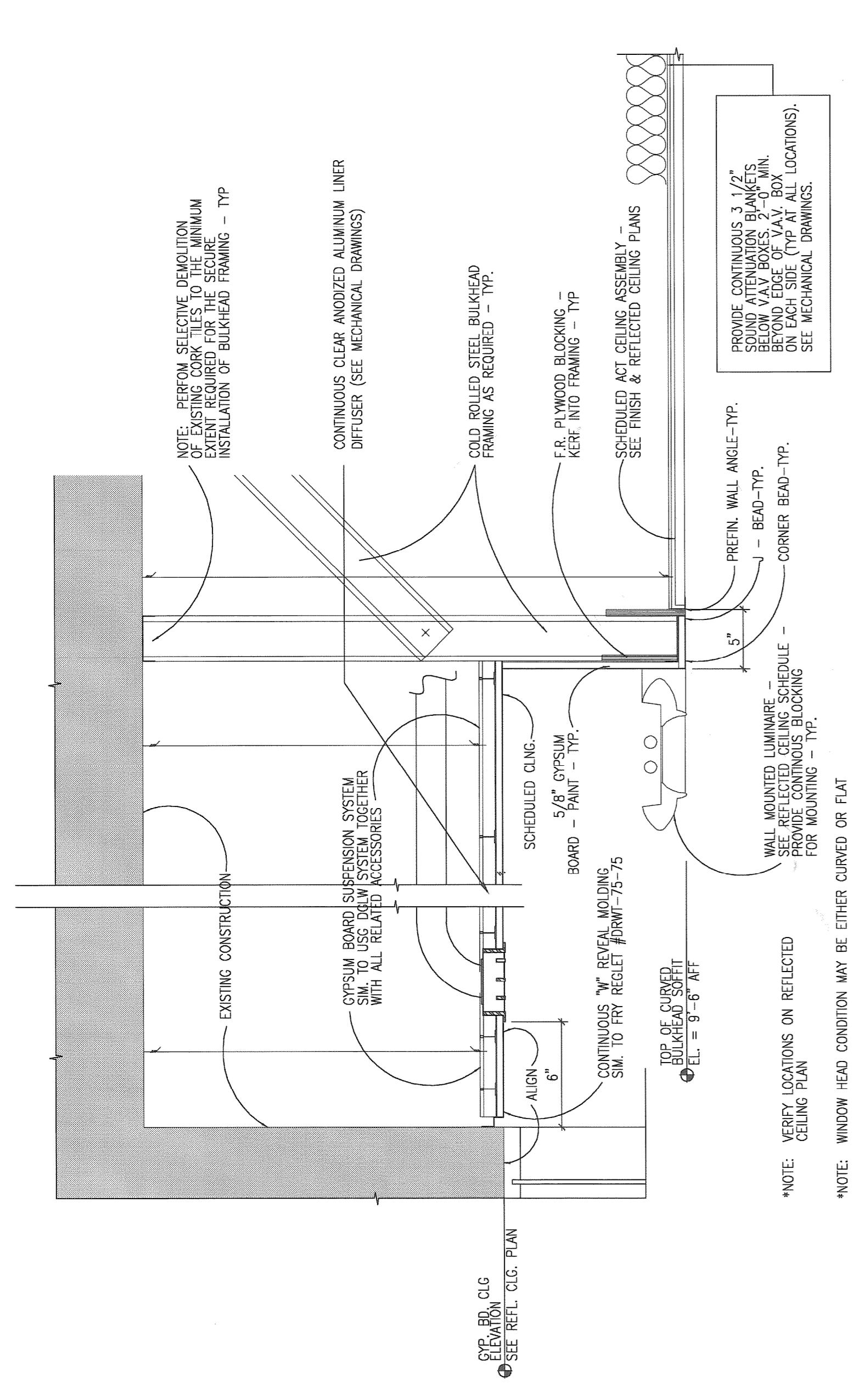
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D

3 RESTROOM ELEVATION - MEN'S ROOM @ FIRST ROOM
A5.11 SCALE: 3/8" = 1'-0"

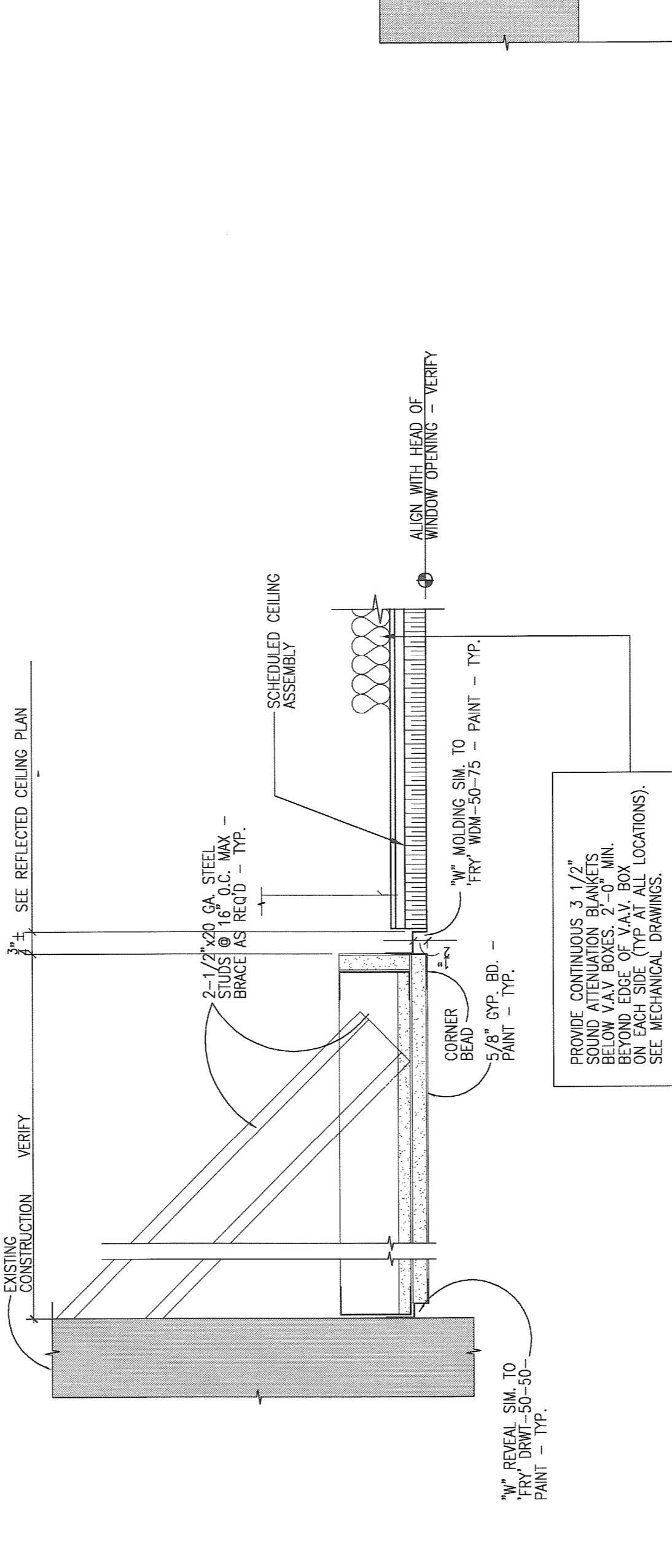
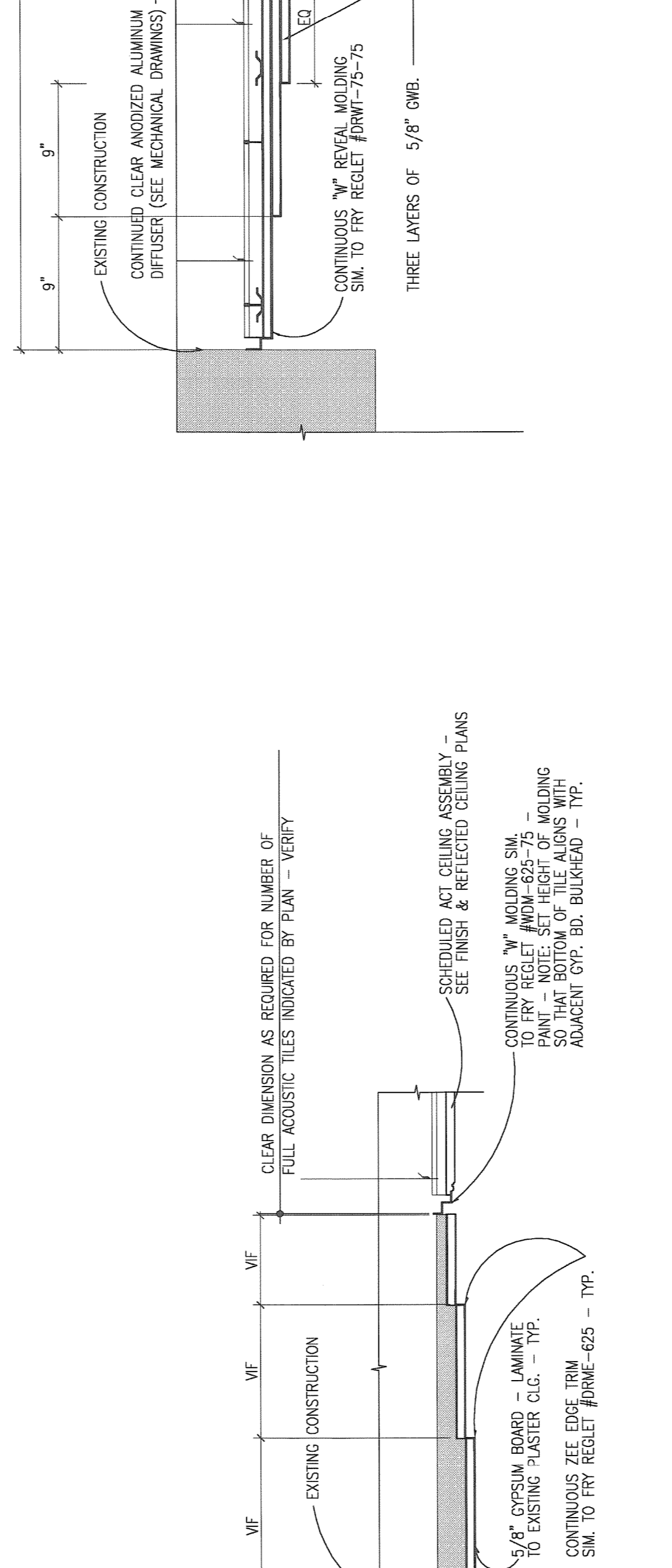
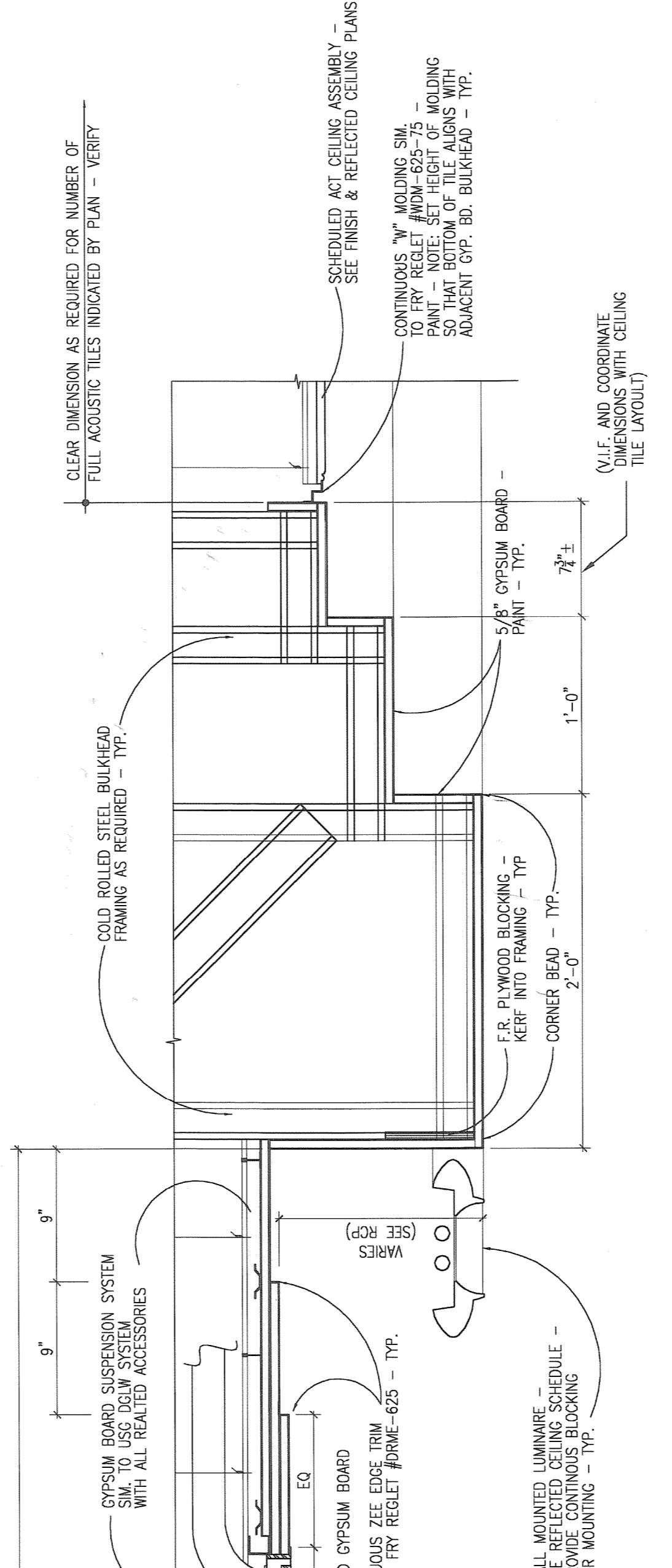
4 RESTROOM ELEVATION - WOMEN'S ROOM @ FIRST ROOM
A5.11 SCALE: 3/8" = 1'-0"



SECTION DETAIL AT TYP BULKHEAD (FLAT HEADED WINDOW CONDITION)
3
A5.31 SCALE: 1 1/2" = 1'-0"

SECTION DETAIL AT TYP BULKHEAD CONDITION (EXIST. SOFFIT TO REMAIN - 2ND FLOOR)
2
A5.31 SCALE: 1 1/2" = 1'-0"

SECTION DETAIL AT TYP BULKHEAD (FLAT ARCHED WINDOW CONDITION)
1
A5.31 SCALE: 1 1/2" = 1'-0"



TYPICAL CEILING DETAIL FIRST FLOOR - COURTROOMS
6
A5.31 SCALE: 1-1/2" = 1'-0"

TYPICAL CEILING DETAIL SECOND FLOOR CORRIDOR SOFFIT
5
A5.31 SCALE: 1-1/2" = 1'-0"

SECTION DETAIL AT CEILING SOFFIT BORDER
4
A5.31 SCALE: 3" = 1'-0"

STRUCTURAL NOTES

1. LIVE LOADS:
- ROOF (SNOW LOAD) LIVE LOAD 30 PSF
 - ROOF DEAD LOAD 15 PSF
 - FIRST FLOOR 100 PSF
 - ATTIC 250 PSF (AT MOVABLE FILING SYSTEM AREA)
 - 150 PSF (AT MECH UNITS) (ATTIC)
 - 40 PSF (ACCESS AREA) (ATTIC)
- POSTING OF LIVE LOADS:
LIVE LOAD SHALL BE MARKED ON PLATES OF APPROVED DESIGN WHICH SHALL BE SUPPLIED AND SECURELY AFFIXED BY THE CONTRACTOR IN A CONSISTENT PLACE IN EACH SPACE TO WHICH THEY RELATE AS DIRECTED BY THE OWNER.

2. CODES:
- ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST EDITION OF THE BOCA BASIC BUILDING CODE.
- ACI 318-89 - BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, STRENGTH DESIGN METHOD.
- AISC - SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDING, NINTH EDITION.
- AWS D1.1 AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE.

3. CONCRETE:
- ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE ACI CODE 301. CONCRETE SHALL HAVE 28 DAY COMPRESSIVE STRENGTH (F_c) OF F_c = 4000 PSI. ALL CONCRETE SHALL AIR ENTRAINED WITH MINIMUM AIR CONTENT OF 4% AND SHALL CONFORM TO ACI-301. THE MAXIMUM SLUMP SHALL BE 3 ± 1/2 INCHES. SAMPLES AND TESTS, COMPLYING WITH ACI 301, SHALL BE MADE BY AN INDEPENDENT TESTING LABORATORY SELECTED BY THE ARCHITECT. CONCRETE SHALL BE NORMAL WEIGHT CONCRETE, UNLESS NOTED OTHERWISE.
- PROVIDE 3/4"-INCH CHAMFER ON ALL EXPOSED CONCRETE CORNERS.

4. REINFORCING STEEL:
- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60. WELDED WIRE MESH TO CONFORM TO ASTM A-185. FABRICATE AND PROVIDE STANDARD SUPPORTING ACCESSORIES IN ACCORDANCE WITH ACI 315. PROVIDE EXTERIOR CORNER BARS SAME SIZE AND SPACING AS HORIZONTAL REINFORCING AT ALL GRADE BEAMS AND WALLS.

5. STRUCTURAL STEEL:
- SHALL BE IN ACCORDANCE WITH AISC SPECS. SHOP OR FIELD CONNECTION SHALL BE WELDED OR MADE WITH 3/4"-INCH DIAMETER HIGH STRENGTH BOLTS. ALL ANGLES, PLATES, AND MISCELLANEOUS STRUCTURAL STEEL SHALL BE FABRICATED AND WELDED TO CONFORM TO AISC SPECIFICATIONS. ALL ANGLES, PLATES AND MISCELLANEOUS STRUCTURAL STEEL SHALL BE DESIGNED IN ACCORDANCE WITH AISC'S SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDING, (NINTH EDITION)

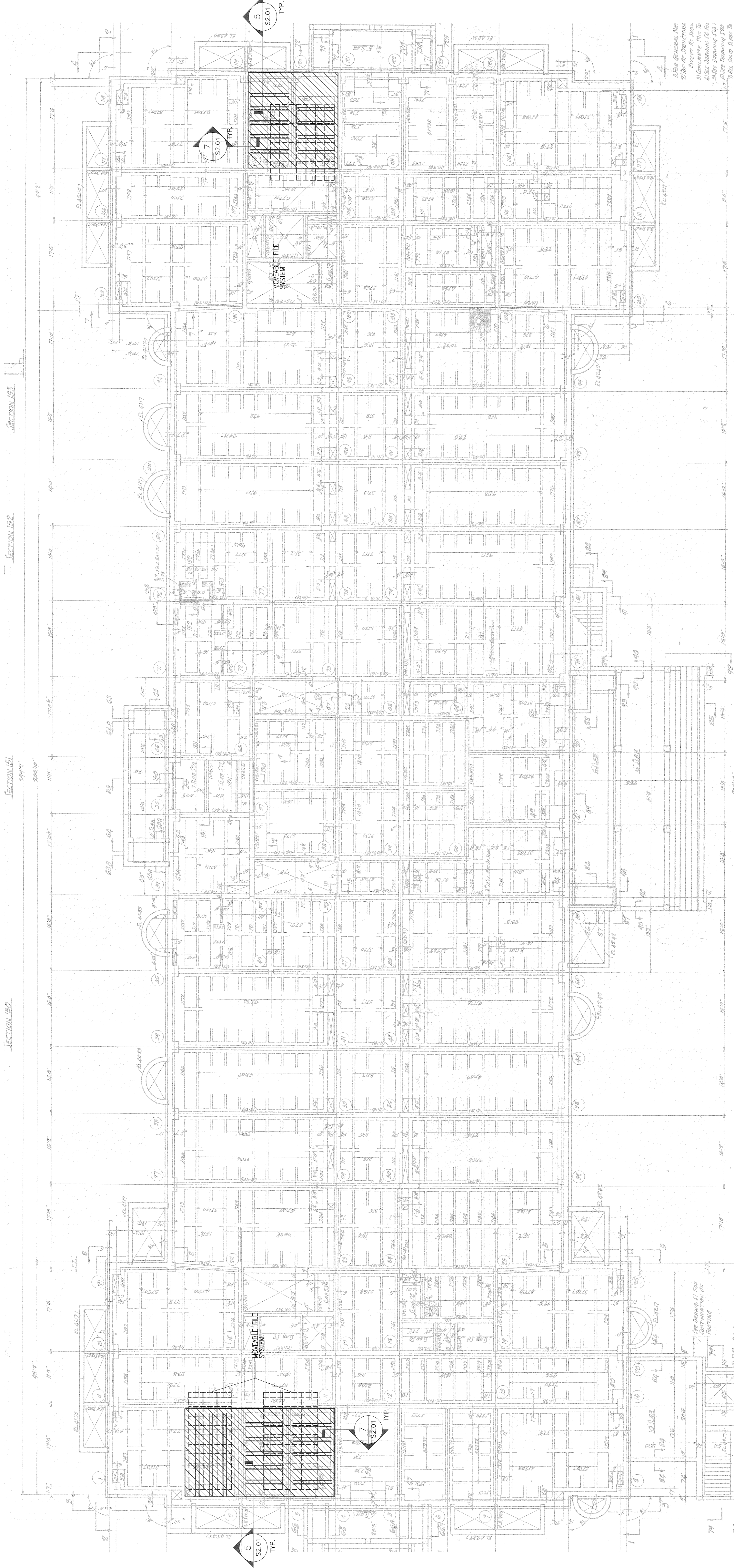
6. METAL DECK:
- METAL DECK SHALL BE DESIGNED FOR BASIC ALLOWABLE STRESS OF 20,000 PSI. SECTION PROPERTIES SHALL CONFORM TO THE SPECIFICATIONS FOR THE COLD - FORMED STEEL STRUCTURAL MEMBERS OF AISI.
- A. FLOOR DECK:
- ELEVATED FLOOR SLAB DECK SHALL BE COMPOSITE FLOOR DECK AND HAVE THE FOLLOWING PROPERTIES:
- | | |
|-------------------|--|
| PROFILE DEPTH | 1 1/2 INCHES |
| GAUGE | 20 GAUGE |
| SECTION MODULUS | S _x = .251in ³ , S _y = .537 in. |
| MOMENT OF INERTIA | I _x = .586 in ⁴ |
- FOR LIGHTWEIGHT CONCRETE COVER ON METAL DECK AND REINFORCING SEE PLAN NOTES.

7. CFRP:
- CARBON FIBER REINFORCED POLYMER (CFRP) SHALL BE DESIGNED, FURNISHED MATERIAL AND INSTALLED, IN COORDINATION WITH OTHER TRADES, BY CFRP SUPPLIER.
- CARBON FIBER REINFORCED POLYMER (CFRP) :
- FIELD LAYOUT DIRECT TENSION
PULL OFF TESTS PER ASTM D 4541.

8. GENERAL:
- THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS (INCLUDING FIELD VERIFICATIONS OF EXISTING CONDITIONS AND DIMENSIONS) BEFORE STARTING WORK OR FABRICATING ANY REINFORCING OR FORMWORK. IF THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES FOUND.
- SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR SIZE AND LOCATION OF WALL, ROOF, FLOOR OPENINGS, AND SLEEVES. THE GENERAL CONTRACTOR SHALL VERIFY FOR ALL OPENINGS THE EXACT SIZE AND LOCATION WITH EQUIPMENT PURCHASED.

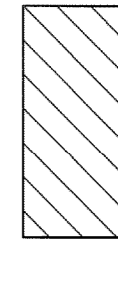
9. SUBMITTALS:
- CAST-IN-PLACE CONCRETE- SUBMIT THE FOLLOWING
- SHOP DRAWINGS FOR REINFORCING DETAILING, FABRICATING, BENDING AND PLACING CONCRETE REINFORCING.
- LABORATORY TEST REPORTS FOR CONCRETE MATERIALS AND MIX DESIGN TEST.
- METAL DECK - SUBMIT THE FOLLOWING
- SHOP DRAWINGS, INCLUDING DETAILS AND SCHEDULES FOR ASSEMBLY OF STEEL DECK LAYOUT, FIELD VERIFIED DIMENSIONS.

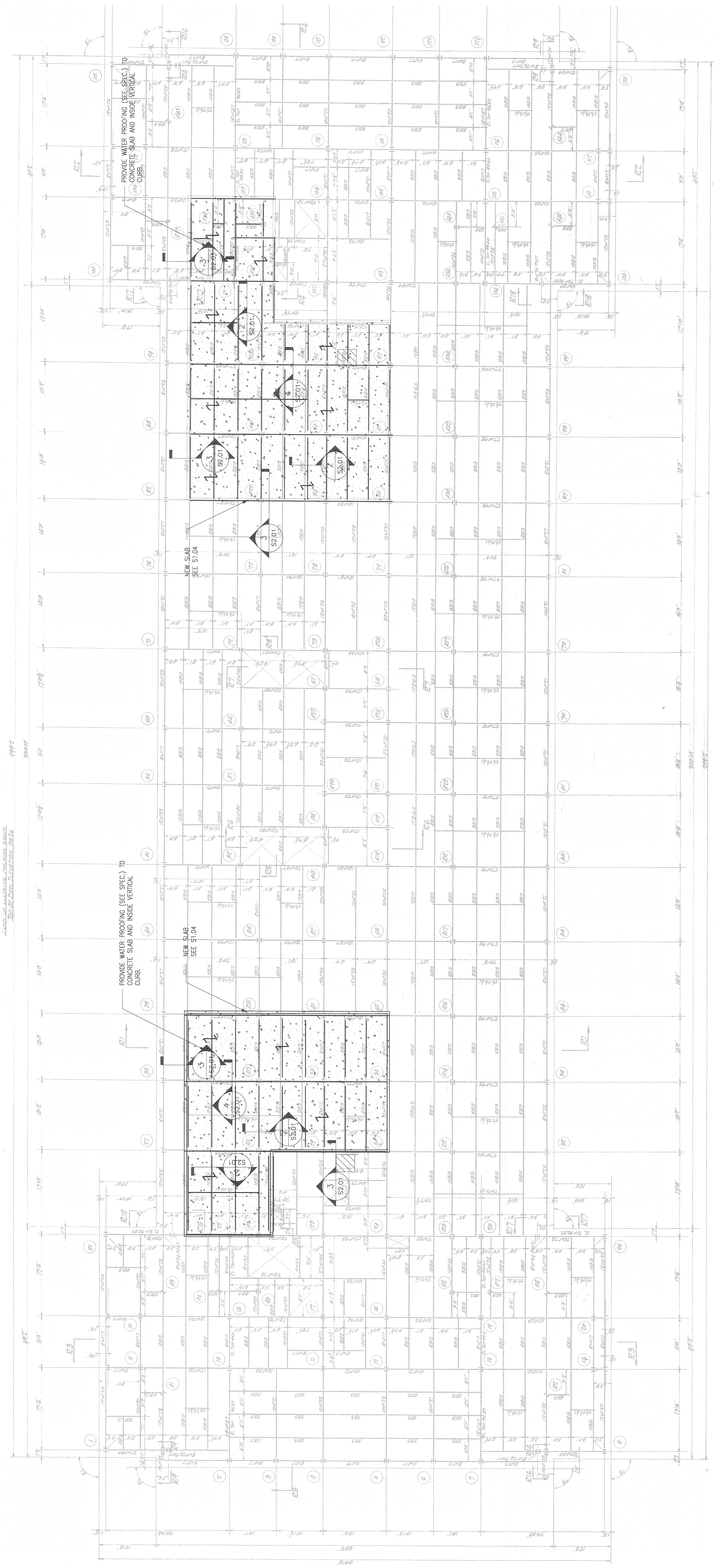
10. QUALITY CONTROL: *
- OWNER WILL ENGAGE AN INDEPENDENT TESTING AND INSPECTION AGENCY TO INSPECT THE FOLLOWING:
- CONCRETE:
- SAMPLING AND TESTING FOR QUALITY CONTROL DURING CONCRETE PLACEMENT SHALL INCLUDE THE FOLLOWING:
- SLUMP- ASTM C143
- CONCRETE TEMPERATURE
- ASTM C1064
- ASTM C1065
- ASTM C1066
- ASTM C1067
- ASTM C1068
- ASTM C1069
- ASTM C1070
- ASTM C1071
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1. FIRST FLOOR CONCRETE FRAMING PLAN
(\$1.01) SCALE: 1/8" = 1'-0"

JOISTS BELOW MOVABLE FILE SYSTEM
REINFORCEMENT: SEE
DETAILS 566/52.01





1 ATTIC FLOOR STEEL FRAMING PLAN
S1.04 SCALE: 1/8" = 1'-0"

ROOF OPENING LOCATIONS

NOTES

GENERAL NOTES: MECHANICAL

- ALL MECHANICAL WORK AND EQUIPMENT SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS OF ALL APPLICABLE ASHRAE, RULES, REGULATIONS AND ORDINANCES OF FEDERAL, INTERNATIONAL MECHANICAL CODE, STATE, LOCAL AND/OR MUNICIPAL CODES WHETHER SHOWN ON THE DRAWING OR NOT.
- ADHERE TO THE DRAWINGS WHEN REQUIREMENTS ARE STRICTER THAN CODE REQUIREMENTS AND ARE PERMITTED UNDER THE CODE.
- REPORT ANY ALTERATION TO AND/OR DEVIATIONS FROM THE DRAWINGS AS REQUIRED BY THE INTERNATIONAL MECHANICAL CODE, FEDERAL, STATE, LOCAL AND/OR MUNICIPAL CODES TO THE ARCHITECT AND SECURE SECURE HIS/HER APPROVAL BEFORE STARTING ALTERATION.
- THE CONTRACTOR SHALL REQUEST SUPPLEMENTARY INSTRUCTIONS FROM THE ARCHITECT IN ALL CASES OF DOUBT AS TO THE WORK INTENDED OR IF ADDITIONAL EXPLANATION IS NEEDED.
- DUCT DIMENSIONS INDICATED ON THE DRAWING ARE CLEAR INSIDE DIMENSIONS. INTERNALLY LINED DUCTWORK SHALL BE INCREASED IN BOTH DIMENSIONS BY TWICE THE THICKNESS OF THE LINER.
- DUCTWORK SHALL BE FABRICATED AND INSTALLED IN COMPLIANCE WITH THE LATEST EDITION OF THE SMACNA DUCT CONSTRUCTION STANDARDS. PROVIDE ALL NECESSARY DUCTWORK ACCESSORIES TO ALLOW FOR PROPER AIR BALANCE OF THE SYSTEM.
- FIRE DAMPERS SHALL BE PROVIDED AT ALL DUCT PENETRATIONS THROUGH TWO AND THREE HOUR RATED WALLS, ALL FLOOR PENETRATIONS WHETHER SHOWN ON THE DRAWING OR NOT AND AS INDICATED ON THE DRAWINGS. DUCTWORK LESS THAN 20 SQ IN AREA SHALL HAVE NO FIRE DAMPER.
- FIRE DAMPER FREE AREA SHALL BE THE SAME AREA AS THE DUCT IT IS INSTALLED IN. PROVIDE ACCESS DOOR FOR FIRE DAMPER SERVICING.
- PROVIDE AN ADJUSTABLE VOLUME DAMPER FOR EACH DIFFUSER ATTACHED DIRECTLY TO MAIN TRUNK DUCT SPIN-IN-FITTINGS OR AS FAR AWAY AS POSSIBLE FROM DIFFUSER.
- PROVIDE TURNING VANES AT ALL SQUARE AND RECTANGULAR BRANCH DUCT (ELBOWS) WHETHER SHOWN ON THE DRAWING OR NOT.

- INSULATE ACOUSTICAL INSULATION TO THE FOLLOWING:
 - 1" LINER 25' DOWNSTREAM AND 25' UPSTREAM OF ALL NEW AIR HANDLING UNITS.
 - 1" LINER UP TO 25 FEET UPSTREAM OF ALL NEW EXHAUST FANS.
 - PROVIDE 1" ACOUSTICAL LINING TO ALL TRANSFER DUCTS EXCEPT COURTRROOMS WHERE 2" LINING SHALL BE PROVIDED.
 - PROVIDE 2" LINER UP TO 10 FT DOWNSTREAM OF ALL VAV BOXES.
 - PROVIDE 2" LINER ON ALL DUCTWORK UP TO 10 FEET FROM OPENINGS.
 - PROVIDE 2" LINER ON ALL DUCTWORK UP TO 5 FEET FROM OPENINGS.
- ALL DUCTWORK WITH ACOUSTICAL LINING NEED NOT BE INSULATED EXCEPT ALL SUPPLY AND RETURN AIR DUCTWORK LOCATED IN THE ATTIC. NOT USED.
 - INSULATED FLEXIBLE DUCT SHALL BE PROVIDED TO CONNECT BETWEEN RIGID DUCTWORK AND VARIOUS AIR OUTLETS, ETC., AS SHOWN ON THE DRAWING. FLEXIBLE DUCT SHALL BE 8" O.D. AND SHALL INCLUDE TWO ELBOWS WHEN INSTALLED. IN THE EVENT OF CONNECTIONS NEEDING MORE THAN 8 FEET IN LENGTH, SPIN-IN-FITTING (HARD DUCT) SHALL BE EXTENDED TO ATTAIN THE MIN./MAX. PARAMETERS FOR FLEXIBLE DUCT CONNECTIONS.
 - REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION EQUIPMENT.
 - INSTALL FLANGES OR UNIONS AT PIPING CONNECTIONS TO ALL MECHANICAL EQUIPMENT SUCH THAT UNIT CAN BE REMOVED WITHOUT DISMANTLING ALL PIPING.
 - COORDINATE BOLTING & ELEVATION OF ALL DUCTWORK AND PIPING WITH ALL ALL TRADES BEFORE CONSTRUCTION BEGINS.

MECHANICAL AND PLUMBING SYMBOLS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
CA	COMPRESSED AIR	X	PIPE ANCHOR	⊕	AUTOMATIC DAMPER
COS	CONDENSER WATER SUPPLY	⊖	PIPE DOWN	⊕	MOTORIZED DAMPER
COR	CONDENSER WATER RETURN	⊖	PIPE GUIDE	⊕	BACKDRAFT DAMPER-BD
CWS	CHILLED WATER SUPPLY	⊖	PIPE UP	⊕	DUCTWORK (PROVIDED BY LANDLORD)
CWR	CHILLED WATER RETURN	⊖	PIPE WITH HEAT TRACING	⊕	FIRE DAMPER-FD
...	...	⊖	PRESSURE GAUGE	⊕	FAN POWERED VAV BOX WITH ELECTRIC HEAT
DRW	DRINKING WATER	⊖ SA A	SHOCK ABSORBER	⊕	REGULAR VAV BOX WITHOUT ELECTRIC HEAT
DW	DRINKING WATER PIPE	⊖	SIGHT GLASS (FLOW TYPE)	⊕	SMOKE DAMPER
ED	EXPRESS DRAIN	⊖	STATIC PRESSURE SENSOR	⊕	SMOKE DETECTOR / SENSOR
FW	FILTERED WATER	⊖	STRAINER	⊕	VOLUME DAMPER-VD MANUAL DAMPER-MD
G	NATURAL GAS	⊖	THERMOMETER	⊕	FLEXIBLE CONNECTION
HWS	HOT WATER SUPPLY	⊖	THERMOSTAT	⊕	FLEXIBLE DUCT
HWR	HOT WATER RETURN	⊖	TRAP PRIMER	⊕	OUTSIDE AIR DUCT (ON)
S	SANITARY SEWER	⊖	UNION	⊕	OUTSIDE AIR DUCT (UP)
D	CONDENSATE DRAIN PIPE	⊖	WALL CLEANOUT	⊕	RECTANGULAR DUCT (FIRST NUMBER IS SIDE SHOWN IN INCHES)
SD	SUBSOIL DRAIN	⊖	LAVATORY	⊕	RETURN/EXHAUST DUCT (ON)
ST	STORM SEWER	⊖	MOP SINK	⊕	RETURN OR EXHAUST DUCT (UP)
V	SANITARY VENT	⊖	SERVICE SINK	⊕	ROUND DUCT
⊕	BALANCING VALVE	⊖	SHOWER HEAD	⊕	SUPPLY AIR DUCT (ON)
⊕	BALL VALVE	⊖	URINAL	⊕	SUPPLY AIR DUCT (UP)
⊕	CHECK VALVE	⊖	COLUMN NUMBER OR LETTER	⊕	RECTANGULAR REGISTER OR DIFFUSER-SUPPLY
⊕	COCK (GAGE, AIRVENT, DRAIN)	⊖	SHOWER	⊕	TURNING VANES
⊕	DRY VALVE	⊖	WATER CLOSET (FLUSH VALVE)	⊕	RECTANGULAR REGISTER RETURN OR EXHAUST
⊕	DOUBT-DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY	⊖	WATER CLOSET (TANK TYPE)	⊕	ROUND FACE SUPPLY DIFFUSER
⊕	RZBP-ROBUST ZONE BACKFLOW PREVENTER	⊖	DOMESTIC WATER RISER	⊕	SQUARE FACE SUPPLY DIFFUSER
⊕	ECCENTRIC PLUG VALVE	⊖	SANITARY RISER	⊕	GLYCOL SUPPLY
⊕	GAS COCK	⊖	DOOR LOUVER	⊕	GLYCOL RETURN
⊕	GATE VALVE	⊖	DOOR UNDERCUT	⊕	DIFFUSER TYPE GM
⊕	GLOBE VALVE	⊖	POINT OF CONNECTION (NEW TO EXISTING)	⊕	
⊕	MIXING VALVE	⊖	FIRE PROTECTION RISER	⊕	
⊕	OS&Y VALVE	⊖	NATURAL GAS RISER	⊕	
⊕	PRE-ACTION VALVE	⊖	STORM RISER	⊕	
⊕	PRESSURE REGULATING VALVE	⊖	ROOM NUMBER	⊕	
⊕	SAFETY RELIEF VALVE	⊖	DOMESTIC WATER RISER	⊕	
⊕	TEMP. & PRESS. RELIEF VALVE	⊖	VENT RISER	⊕	
⊕	TEST PLUG	⊖	REFRIGERANT MONITOR (REFRIGERANT) AUDIBLE AND VISUAL SIGNALING DEVICE	⊕	
⊕	VALVE IN RISER	⊖	PURGE SWITCH	⊕	
⊕	WET VALVE	⊖	PRESSURE DIFFERENTIAL SENSOR	⊕	
⊕	CAP	⊖	SUPPLY AIR RISER	⊕	
⊕	CLEANOUT	⊖	RETURN AIR RISER	⊕	
⊕	FIRE DEPARTMENT CONNECTION	⊖	OUTSIDE AIR RISER	⊕	
⊕	FLANGE	⊖	EXHAUST AIR RISER	⊕	
⊕	WALL HYDRANT	⊖	RELIEF AIR RISER	⊕	
⊕	BUTTERFLY VALVE	⊖	SPACE STATIC PRESSURE SENSOR	⊕	
⊕	FLOOR CLEANOUT	⊖	CHILLED WATER SUPPLY RISER	⊕	
⊕	FLOOR DRAIN AT FD	⊖	CHILLED WATER RETURN RISER	⊕	
⊕	PRESSURE REDUCING VALVE	⊖	HOT WATER SUPPLY RISER	⊕	
⊕	GRADE CLEANOUT	⊖	HOT WATER RETURN RISER	⊕	
⊕	HOSE BIBB	⊖	DRINKING WATER RISER	⊕	
⊕	HUMIDISTAT	⊖	T'STAT SENSOR(DDC) DUCT OR CEILING MTD	⊕	

ABBREVIATIONS

A	FIN.	FIN.	FIN.	O.C.	ON CENTER
AD	AREA DRAIN/AUTOMATIC DAMPER	FT.	FEET	OED	OPEN-END DUCTWORK
ADJ.	ADJUSTABLE	FPM	FEET PER MINUTE	OFD	OVERFLOW DRAIN
AFD	ADJUSTABLE FREQUENCY DRIVE	FS	FLOOR SINK	OPNG.	OPENING
AFF	ABOVE FINISHED FLOOR	FW	FILTERED WATER	P	PANEL
AP	ACCESS PANEL	G	GARAGE CIRCULATING FAN	PPM	PARTS PER MILLION
ARCH.	ARCHITECTURAL	GCF	GUTTER DRAIN/GARAGE DRAIN	PRV	PRESSURE REGULATING VALVE
AUTO.	AUTOMATIC	GD	GLYCOL SUPPLY	PSI	POUNDS PER SQUARE INCH
B	BACKDRAFT DAMPER	GLYS	GLYCOL RETURN	R	RETURN AIR
BD	BRITISH THERMAL UNIT/HOUR	GLYR	GALLONS PER MINUTE	RA	ROOF DRAIN
BTUH	BACKWATER VALVE	GRD	GROUND	RD	REGISTER
BWV	CEILING DIFFUSER	GRD	GAS WATER HEATER	REG.	REG.
C	CAPPED FOR FUTURE	H	HOSE BIBB	RF	RETURN/RELIEF AIR FAN
CD	CUBIC FOOT PER MINUTE	H ₂ O	HIGH SIDE WALL GRILLE	RL	RAIN LEADER
CFM	CUBIC FEET PER HOUR	HB	HIGH SIDE WALL REGISTER	R/O	REVERSE OSMOSIS
CFH	CAST IRON	HP	HOT WATER	RM.	ROOM
C.I.	COMPRESSOR	HSWG	HOT WATER BASEBOARD HEATER	RTU	ROOF TOP UNIT
CLG.	CONCRETE	HSWR	HOT WATER CONNECTOR HEATER	S	SUPPLY AIR/SHOCK ABSORBER
CO	CONDENSATE DRAIN	HW	HOT WATER PUMP	SA	SUPPLY AIR FAN
COMP.	CONNECTION	HWB	HOT WATER RETURN	SAF	SANITARY
CONC.	CONDENSER WATER RETURN	HWH	HOT WATER SUPPLY	SAN./S	SHOWER DRAIN
COND. DR.	CONTINUATION/CONTINUE	HWP	HOT WATER RETURN	SEF	SMOKE EXHAUST FAN
CONN.	CONDENSER WATER SUPPLY	HWS	INVERT ELEVATION	SEF	SQUARE FEET/SUPPLY FAN
COP	CABINET UNIT HEATER	I	INVERT ELEVATION	SF	SHEET
COR	COLD WATER	I.E.	INVERT ELEVATION	S/M	SHEET METAL
COS	CHELLED WATER PUMP	INV. ELEV.	INVERT ELEVATION	S.P.	STATIC PRESSURE
CR	CHILLED WATER SUPPLY	J	JANITORIAL	SPD.	SPEED
CUH	CHILLED WATER RETURN	K	KILOWATT	SQ.	SQUARE
CW	CEILING REGISTER	KW	KEWATT	ST	STORM
CWP	CEILING REGISTER	L	LEAVING AIR TEMPERATURE	STL.	STEEL
CWS	CHILLED WATER SUPPLY	LAT	LEAVING AIR TEMPERATURE	T	TRANSFER DUCT/TRENCH DRAIN
CWR	CHILLED WATER RETURN	LAT	LEAVING AIR TEMPERATURE	TG	TRANSFER GRILLE
D	DRY BULB	LSWG	LOW SIDE WALL GRILLE	TRANS.	TRANSFER
DB	DEPARTMENT	LSWR	LOW SIDE WALL REGISTER	TYP.	TYPICAL
DEPT.	DOWN	LVL	LEVEL	U	UNIT HEATER
DN.	DETAIL	LWT	LEAVING WATER TEMPERATURE	V	VARIABLE AIR VOLUME
DTL.	DOMESTIC WATER	M	MAXIMUM	VAV	VARIABLE FREQUENCY DRIVE
DW	DRAWING	MAX.	MAXIMUM	VFD	VOLTS/PHASE/HERTZ
DWG.	DOMESTIC WATER HEATER	MBH	THOUSAND BTUH	V/PH/HZ	VENT THRU ROOF
DWH	EXISTING	MECH.	MECHANICAL	VTR	VENT THRU ROOF
E	E/EX/EXIST.	MFR.	MANUFACTURER	W	WITH
EAT	ENTERING AIR TEMPERATURE	MH	MANHOLE	WB	WET BULB
ED	EXPRESS DRAIN	MIN.	MINIMUM	WC	WATER COLUMN
EF	EXHAUST FAN	MNL	MANUAL	WCO	WALL CLEANOUT
EL./ELEV.	ELEVATION	MTR	MOTOR	WG	WATER GAUGE
ENT	ENTERING	MW	MECHANICAL WATER	WH	WALL HYDRANT
ESP	EXTERNAL STATIC PRESSURE	N	NOISE CRITERIA	WMS	WIRE MESH SCREEN
EWT	ENTERING WATER TEMPERATURE	NC	NEGATIVE	WS	WET STACK
EXH.	EXHAUST	NO.	NUMBER		
EXP.	EXPANSION	N.O.	NORMALLY OPEN		
F	FAHRENHEIT	N.C.	NORMALLY CLOSE		
F	FLOOR CLEANOUT	O	OUTSIDE AIR		
FOO	FIRE DAMPER/FLOOR DRAIN	OA	OUTSIDE AIR		
FD	FIRE DAMPER				
FH	FIRE HYDRANT				

- WALL HYDRANTS SHALL BE NON-FREEZE TYPE AND SHALL BE EQUIPPED WITH AN APPROVED VACUUM BREAKER.
- ALL CONDENSATE DRAIN PIPING SHALL BE SLOPED 1/4" PER FOOT AND SHALL HAVE A 2" AIR GAP WHERE PIPE TERMINATES AT FLOOR/AREA DRAIN.
- PLUMBING CONTRACTOR SHALL BACK VIEW FIXTURES AT FLOOR ABOVE WHERE STACK BEGINS OFFSET.
- PROVIDE PIPE INSULATION TO ALL DOMESTIC HOT AND COLD WATER PIPES AND STORM PIPING (WHEN HORIZONTAL) ABOVE CEILING SPACE. REFER TO SPECIFICATIONS FOR TYPES OF INSULATION TO BE USED.
- ENTIRE BUILDING SHALL BE SPRINKLERED IN STRICT COMPLIANCE WITH NFPA 13 AND THE RULES AND REGULATIONS OF THE DISTRICT OF COLUMBIA. SEE FIRE PROTECTION RISER ON SHEET P3.03.
- PIPES EXPOSED TO THE WEATHER SHALL BE INSULATED AND HEAT TRACED. REFER TO SPECIFICATIONS FOR MATERIALS TO BE USED.
- ALL PIPE PENETRATIONS THROUGH WALLS SHALL BE PROVIDED WITH SLEEVES AND ESCUTCHEON PLATES.
- PIPES SHALL BE CENTERED TO ALLOW FOR EXPANSION AND CONTRACTION. ALSO PROVIDE CAULKING, WATERPROOFING AND FLASHING WHERE REQUIRED.
- TEMPERATURE SENSORS AND SIMILAR DEVICES SHALL BE MOUNTED 54" ABOVE FINISH FLOOR UNLESS NOTED OTHERWISE.
- HOUSEKEEPING (CONC) PANS SHALL BE 3/8 INCHES THICK MINIMUM.

GENERAL NOTES: PLUMBING

- ALL PLUMBING WORK AND EQUIPMENT SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS OF ALL APPLICABLE ASHRAE, RULES, REGULATIONS AND ORDINANCES OF FEDERAL, INTERNATIONAL MECHANICAL CODE, STATE, LOCAL AND/OR MUNICIPAL CODES WHETHER SHOWN ON THE DRAWING OR NOT.
- ALL PIPING SHALL BE ROUTED WITH SLOPE AS FOLLOWS:
 - SANITARY - 1/8 INCH PER FOOT (MIN.)
 - STORM - 1/8 INCH PER FOOT (MIN.)
- COORDINATE ROUTING OF ALL PIPING WITH OTHER TRADES PRIOR TO START OF CONSTRUCTION.
- PROVIDE AS-BUILT DRAWINGS OF ALL UNDERGROUND PIPING INSTALLED WITH DIMENSIONS FROM CENTERLINE OF COLUMN TO CENTER OF PIPES WITH INVERT ELEVATIONS.
- ALL DRAINS SHALL BE PROVIDED WITH SECTIONAL SHUT-OFF VALVES, AS SHOWN ON PLECECT PLANS AND ACCESS PANELS FOR ALL HIDDEN VALVES. PROVIDE ISOLATION VALVES FOR ALL PLUMBING FIXTURES.

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KEY PLAN

ISSUES / REVISIONS

FILE LOG

REGISTER

JOB No 52010300

CONSTRUCTION PACKAGE

ISSUED FOR CONSTRUCTION (FINAL) APRIL 8, 2003

SYMBOLS, NOTES AND ABBREVIATIONS

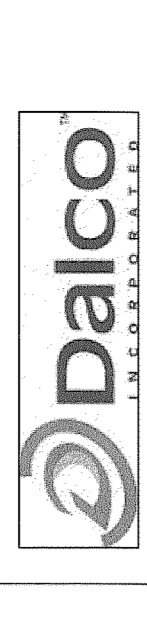
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MECHANICAL
SCHEDULES

M4.01

AIR HANDLING UNIT SCHEDULES

TAG	LOCATION	SUPPLY FAN			COOLING COIL				HEATING COIL				ELECTRICAL V/PH	MANUFACTURER / MODEL #				
		CFM (1)	ESP (1) IN WC	MOTOR HP	MBH TOTAL	MBH SENS	L.A.T. W/F	E.W.T.	W.P.D. FT	GM	OPM	MBH			OPM	EWT	W.P.D. FT	
AHU-1	ATTIC	31,000	1.75	40	1325	1083	52.6'	92.2'	265	45	20	450	30	36"	180"	10	208/3/60	CARRIER AHU BUILDER SIZE 61
AHU-2	ATTIC	31,000	1.75	40	1325	1083	52.6'	92.2'	265	45	20	450	30	36"	180"	10	208/3/60	CARRIER AHU BUILDER SIZE 61
AHU-3	BASEMENT	30,000	1.75	40	1405	1059	52.6'	92.4'	281	45	20	450	30	36"	180"	10	208/3/60	CARRIER AHU BUILDER SIZE 61

NOTES:

- EXTERNAL STATIC PRESSURES DO NOT INCLUDE INTERNAL COMPONENT STATIC PRESSURE LOSS.
- OUTDOOR AIR ECONOMIZER
- PROVIDE AIR MONITOR FAN INLET AIRFLOW TRAVERSE PROBE.

AIR TO AIR HEAT EXCHANGER

TAG	SERVICE	CONDITION	OUTSIDE AIR				EXHAUST AIR				MAX FACE VELOCITY FPM	MANUFACTURER / MODEL #			
			CFM	E.S.P. IN WC	E.S.P. IN WC	E.S.P. IN WC	BTUH	BTUH	E.S.P. IN WC	E.S.P. IN WC			BTUH	BTUH	
HRP-1	AHU-1	SUMMER	6500	0.54	44,730	4500	0.54	44,730	4500	0.54	44,730	4500	0.54	44,730	HEATPIPE TECHNOLOGIES
HRP-2	AHU-2	WINTER	6500	0.54	190,740	5140	0.54	190,740	5140	0.54	190,740	5140	0.54	190,740	HEATPIPE TECHNOLOGIES

STEAM TO WATER HEAT EXCHANGER

TAG	SERVICE	WATER SIDE			STEAM SIDE			CONDENSATE SIDE						
		CFM	W.P.D. FT	BTUH	CFM	W.P.D. FT	BTUH	CFM	W.P.D. FT	BTUH				
HE-1	HOT WATER	410	180	4,100,000	15	15	5	4225	12875	12875	5	5	5	BELL & GOSSETT

NOTES:

- CONDENSATE TRAP SHALL BE FLOAT AND THERMOSTATIC TYPE

SERIES FAN POWERED TERMINAL BOX SCHEDULE

MARK	MAX BOX CFM	INLET SIZE	PRIMARY CFM	FAN CFM	FAN HP	ELEC DATA			HOT WATER HEATING COIL DATA			PIPE RUNDOUT IN/OUT	TYPE	REMARKS (PROTOTYPE)			
						MIN	MAX	WTR	WTR	WTR	WTR				WTR	WTR	WTR
A	500	6"	90	400	300	1/10	0.30	1.12	5	0.15	3/4"	5	0.15	3/4"	SERIES CARRIER MODEL 45A, SIZE 2		
B	900	8"	170	700	450	700	0.40	1/4	120/1/60	19600	64"	180"	2.00	5	0.15	3/4"	SERIES CARRIER MODEL 45A, SIZE 3
C	1400	10"	250	1100	780	1100	0.45	1/4	120/1/60	30880	64"	180"	3.10	5	0.15	3/4"	SERIES CARRIER MODEL 45A, SIZE 4
D	2100	12"	360	1680	300	1680	0.45	1/2	208/3/60	34000	64"	180"	3.40	5	0.15	1"	SERIES CARRIER MODEL 45A, SIZE 5
E	4000	16"	650	3000	780	3000	0.45	3/4	208/3/60	47000	64"	180"	4.70	5	0.15	1"	SERIES CARRIER MODEL 45A, SIZE 6
B1	875	8"	280	700	485	700	0.40	1/4	120/1/60	58800	64"	180"	5.96	5	0.15	3/4"	SERIES CARRIER MODEL 45K, SIZE 3
C1	1300	10"	420	1040	720	1040	0.45	1/4	120/1/60	21500	64"	180"	2.15	5	0.15	3/4"	SERIES CARRIER MODEL 45K, SIZE 4
D1	2500	12"	560	1400	1050	1400	0.45	1/2	208/3/60	28850	64"	180"	2.90	5	0.15	3/4"	SERIES CARRIER MODEL 45K, SIZE 5
E1	2500	14"	800	2000	1450	2000	0.45	3/4	208/3/60	41350	64"	180"	4.14	5	0.15	1"	SERIES CARRIER MODEL 45K, SIZE 6
F1	2675	16"	920	2300	1450	2300	0.45	1	208/3/60	66475	64"	180"	4.57	5	0.15	1"	SERIES CARRIER MODEL 45K, SIZE 7

- NOTES:
- TERMINALS MUST MEET THE SOUND POWER REQUIREMENTS LISTED IN THE BASE BUILDING SPECIFICATION.
 - PROVIDE EACH TERMINAL WITH REMOTE NON-CLOSED DISCONNECT SWITCH MOUNTED TO BUILDING STRUCTURE.
 - CONTRACTORS TO FURNISH 12" LONG ROUND INLET DUCT OF THE SAME DIAMETER AS PRIMARY VALVE CONNECTED TO VAV UNIT COMPLETE WITH INCREASER TO ACCOMMODATE INLET DUCT SIZE AS SCHEDULED.
 - INLET SIZE SCHEDULED IS MINIMUM DIAMETER DUCT RUNDOUT.

DIFFUSER SCHEDULE

MARK	MAX CFM	NECK OR COLLAR	DIFFUSER SIZE (IN.)	MAX. PRES. DROP (IN. WG)	MAX. NC	TYPE	FLOW PATTERN	BASIS OF DESIGN
B	275	10"	24 x 24	0.10	25	2-3/4" SLOT PLAQUE FACE	4-WAY (ADJ.) 4-WAY	TITUS MODEL MB-30 (SEE NOTE 1, 2, 5) TITUS DAT NT MODEL (SEE NOTE 1)
C	65/FT	--	2-1/2" SLOT	0.09	25	LINEAR SLOT	ADJUSTABLE	TITUS MODEL ML-38 (SEE NOTE 3)
D	65/FT	--	2-1/2" SLOT	0.09	25	LINEAR SLOT	ADJUSTABLE	TITUS MODEL ML-38 (SEE NOTE 4)

- NOTE:
- DIFFUSER SHALL BE PROVIDED WITHOUT VOLUME DAMPER. DAMPER SHALL BE PROVIDED AT SPIN-IN FITTINGS.
 - CONTRACTOR SHALL PROVIDE DIFFUSER FACE WITH CEILING TILE MATCHING THE SURROUNDING CEILING.
 - 4'-0" 90° SLOT DIFFUSER WITH 4" LONG MP-39 SUPPLY PLENUM BOX
 - 2'-0" 90° SLOT DIFFUSER WITH 4" LONG MP-39 SUPPLY PLENUM BOX
 - DIFFUSER MODEL SHALL BE USED IN COURT ROOMS AND ROOMS WITH 10'-0" OR HIGHER CEILING ONLY.

HUMIDIFIER SCHEDULE

TAG	LOCATION	CAPACITY LBS/HR	AMP	KW	ELEC DATA V/PH	MANUFACTURER / MODEL #
HUM-1	AHU-1	200	137.8	48.6	208/3/60	STULZ MODEL SHM 603
HUM-2	AHU-2	200	137.8	48.6	208/3/60	STULZ MODEL SHM 603
HUM-3	AHU-3	200	137.8	48.6	208/3/60	STULZ MODEL SHM 603

HOT WATER FIN TUBE RADIATION

TAG	ACTIVE LENGTH	MIN VEL. FPS	MIN CFM	BTUH/FT	EWT T	ENCLOSURE TYPE	MANUFACTURER / MODEL #
FT-A	2'-0"	3	3	820	180	VULCAN FRI 212	VULCAN FRI 212
FT-B	4'-0"	3	4	820	180	16-GANGE CABINET PROTECTIVE ENCLOSURE WALL TO WALL	
FT-C	5'-0"	3	5	820	180		
FT-D	6'-0"	3	5	820	180		
FT-E	8'-0"	3	8	820	180		

FAN SCHEDULE

TAG	SERVICE	TYPE	CFM	E.S.P. IN WC	MOTOR HP	VOLTS/ PHASE	DAMPER GRAY / MOTOR	CONTROL	MANUFACTURER / MODEL #
RF-1	AHU-1	INLINE	26,000	1.00	15	208/3/60	--	DDC	GREENHECK 080 SEE NOTE 1, 2
RF-2	AHU-2	INLINE	26,000	1.00	15	208/3/60	--	DDC	GREENHECK 080 SEE NOTE 1, 2
RF-3	AHU-3	INLINE	26,400	1.00	15	208/3/60	--	DDC	GREENHECK 080 SEE NOTE 1, 2
EF-1	TOILET	UTILITY	4450	1.25	2	208/3/60	--	DDC	GREENHECK 080 SEE NOTE 1
EF-2	TOILET	UTILITY	5140	1.25	2	208/3/60	--	DDC	GREENHECK 080 SEE NOTE 1
EF-3	GEN. RM.	INLINE	1000	0.375	1/4	120/1/60	--	DDC	GREENHECK 080 100-4 SEE NOTE 1

- NOTES:
- PROVIDE SPRING VIBRATION ISOLATORS
 - VARIABLE FREQUENCY DRIVE

PUMP SCHEDULE

TAG	SERVICE	TYPE	GPM	HEAD IN FT	MOTOR		CONTROL	MANUFACTURER / MODEL #
					MOTOR HP	VOLTS/ PHASE		
SCP-1	OW SYSTEM	END SUCTION	840	55	20	208/3/60	DDC	TACO TYPE FE408
SCP-2	STAND-BY	END SUCTION	840	55	20	208/3/60	DDC	TACO TYPE FE408
HWP-1	HW SYSTEM	END SUCTION	420	70	15	208/3/60	DDC	TACO TYPE FE210
HWP-2	STAND-BY	END SUCTION	420	70	15	208/3/60	DDC	TACO TYPE FE210
SHF-1	SECONDARY	END SUCTION	260	55	10	208/3/60	DDC	TACO TYPE FE210
SHF-2	STAND-BY	END SUCTION	260	55	10	208/3/60	DDC	TACO TYPE FE210
RCP-1	AHU-1	INLINE	30	25	1	208/3/60	INTERLOCK WITH AHU-1 AND ON TEMPERATURE	TACO TYPE VI 1508
RCP-2	AHU-2	INLINE	30	25	1	208/3/60	INTERLOCK WITH AHU-2 AND ON TEMPERATURE	TACO TYPE VI 1508
RCP-3	AHU-3	INLINE	43	25	1	208/3/60	INTERLOCK WITH AHU-3 AND ON TEMPERATURE	TACO TYPE VI 1508

HOT WATER BOILER SCHEDULE

TAG	FUEL	HEATING CAPACITY			WATER FLOW			TEMP RISE	PROTOTYPE
		INPUT MBH	OUTPUT MBH	NET GAS	INPUT GPM	OUTPUT GPM	PD (FT)		
B-1, B-2	NAT GAS	1950	1658	100	100	18	30"		RBI DOMINATOR SERIES MODEL DB1950

- NOTES:
- UNIT TO HAVE 4-STAGE FIRING OPERATION.
 - BOILER SHALL BE PROVIDED WITH INLET CIRCULATING PUMP, 1 HP @ 208/3/60 AND A 15 AMP CIR @ 115/1/60 FOR CONTROL AND BOILER OPERATION.

CABINET UNIT HEATERS AND UNIT HEATERS

TAG	MANUFACTURER MODEL #	TYPE	SERVICE	FAN			HEATING COIL			PIPE SIZE	VOLTS/ PHASE	REMARKS	
				ACFM MAX	MOTOR HP	MBH TOTAL	E.A.T. DB	E.W.T. L.W.T.	OPM				
CUH-3	STERLING / F-1000-02	WALL MOUNTED	TOILET RM	200	1/10	8.0	60	180	180	0.5	3/4"	115/1	1,2,3
UH-1	TRAME MODEL 38-5	CEILING HUNG	MECHANICAL RM	540	1/20	14	60	190	160	1.4	3/4"	115/1	1,2,3
UH-2	TRAME MODEL 38-5	CEILING HUNG	MECHANICAL RM	540	1/20	14	60	190	160	1.4	3/4"	115/1	1,2,3

- NOTES:
- MECH CONTRACTOR TO FURNISH ELECTRIC DISCONNECT.
 - BOILER SHALL BE PROVIDED WITH INLET CIRCULATING PUMP, 1 HP @ 208/3/60 AND A 15 AMP CIR @ 115/1/60 FOR CONTROL AND BOILER OPERATION.
 - PROVIDE COLOR WITH REGISTER.

GENERAL NOTES: MECHANICAL

- ALL MECHANICAL WORK AND EQUIPMENT SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS OF ALL APPLICABLE ASHRAE, RULES, REGULATIONS AND ORDINANCES OF FEDERAL, INTERNATIONAL MECHANICAL CODE, STATE, LOCAL AND/OR MUNICIPAL CODES WHETHER SHOWN ON THE DRAWING OR NOT.
- ADHERE TO THE DRAWINGS WHEN REQUIREMENTS ARE STRICTER THAN CODE REQUIREMENTS AND ARE PERMITTED UNDER THE CODE.
- REPORT ANY ALTERATION TO AND/OR DEVIATIONS FROM THE DRAWINGS AS REQUIRED BY THE INTERNATIONAL MECHANICAL CODE, FEDERAL, STATE, LOCAL AND/OR MUNICIPAL CODES TO THE ARCHITECT AND SECURE SECURE HIS/HER APPROVAL BEFORE STARTING ALTERATION.
- THE CONTRACTOR SHALL REQUEST SUPPLEMENTARY INSTRUCTIONS FROM THE ARCHITECT IN ALL CASES OF DOUBT AS TO THE WORK INTENDED OR IF ADDITIONAL EXPLANATION IS NEEDED.
- DUCT DIMENSIONS INDICATED ON THE DRAWING ARE CLEAR INSIDE DIMENSIONS. INTERNALLY LINED DUCTWORK SHALL BE INCREASED IN BOTH DIMENSIONS BY TWICE THE THICKNESS OF THE LINER.
- DUCTWORK SHALL BE FABRICATED AND INSTALLED IN COMPLIANCE WITH THE LATEST EDITION OF THE SMACNA DUCT CONSTRUCTION STANDARDS. PROVIDE ALL NECESSARY DUCTWORK ACCESSORIES TO ALLOW FOR PROPER AIR BALANCE OF THE SYSTEM.
- FIRE DAMPERS SHALL BE PROVIDED AT ALL DUCT PENETRATIONS THROUGH TWO AND THREE HOUR RATED WALLS, ALL FLOOR PENETRATIONS WHETHER SHOWN ON THE DRAWING OR NOT AND AS INDICATED ON THE DRAWINGS. DUCTWORK LESS THAN 20 SQ IN AREA SHALL HAVE NO FIRE DAMPER.
- FIRE DAMPER FREE AREA SHALL BE THE SAME AREA AS THE DUCT IT IS INSTALLED IN. PROVIDE ACCESS DOOR FOR FIRE DAMPER SERVICING.
- PROVIDE AN ADJUSTABLE VOLUME DAMPER FOR EACH DIFFUSER ATTACHED DIRECTLY TO MAIN TRUNK DUCT SPIN-IN-FITTINGS OR AS FAR AWAY AS POSSIBLE FROM DIFFUSER.
- PROVIDE TURNING VANES AT ALL SQUARE AND RECTANGULAR BRANCH DUCT (ELBOWS) WHETHER SHOWN ON THE DRAWING OR NOT.

- INSULATE ACOUSTICAL INSULATION TO THE FOLLOWING:
 - 1" LINER 25' DOWNSTREAM AND 25' UPSTREAM OF ALL NEW AIR HANDLING UNITS.
 - 1" LINER UP TO 25 FEET UPSTREAM OF ALL NEW EXHAUST FANS.
 - PROVIDE 1" ACOUSTICAL LINING TO ALL TRANSFER DUCTS EXCEPT COURTRROOMS WHERE 2" LINING SHALL BE PROVIDED.
 - PROVIDE 2" LINER UP TO 10 FT DOWNSTREAM OF ALL VAV BOXES.
 - PROVIDE 2" LINER ON ALL DUCTWORK UP TO 10 FEET FROM OPENINGS.
 - PROVIDE 2" LINER ON ALL DUCTWORK UP TO 5 FEET FROM OPENINGS.
- ALL DUCTWORK WITH ACOUSTICAL LINING NEED NOT BE INSULATED EXCEPT ALL SUPPLY AND RETURN AIR DUCTWORK LOCATED IN THE ATTIC. NOT USED.
 - INSULATED FLEXIBLE DUCT SHALL BE PROVIDED TO CONNECT BETWEEN RIGID DUCTWORK AND VARIOUS AIR OUTLETS, ETC., AS SHOWN ON THE DRAWING. FLEXIBLE DUCT SHALL BE 8" O.D. AND SHALL INCLUDE TWO ELBOWS WHEN INSTALLED. IN THE EVENT OF CONNECTIONS NEEDING MORE THAN 8 FEET IN LENGTH, SPIN-IN-FITTING (HARD DUCT) SHALL BE EXTENDED TO ATTAIN THE MIN./MAX. PARAMETERS FOR FLEXIBLE DUCT CONNECTIONS. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION EQUIPMENT.
 - INSTALL FLANGES OR UNIONS AT PIPING CONNECTIONS TO ALL MECHANICAL EQUIPMENT SUCH THAT UNIT CAN BE REMOVED WITHOUT DISMANTLING ALL PIPING.
 - COORDINATE BOLTING & ELEVATION OF ALL DUCTWORK AND PIPING WITH ALL ALL TRADES BEFORE CONSTRUCTION BEGINS.

MECHANICAL AND PLUMBING SYMBOLS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
CA	COMPRESSED AIR	X	PIPE ANCHOR		AUTOMATIC DAMPER
COS	CONDENSER WATER SUPPLY	○	PIPE DOWN		MOTORIZED DAMPER
COR	CONDENSER WATER RETURN	—	PIPE GUIDE		BACKDRAFT DAMPER-BD
CWS	CHILLED WATER SUPPLY	○	PIPE UP		DUCTWORK (PROVIDED BY LANDLORD)
CWR	CHILLED WATER RETURN		PIPE WITH HEAT TRACING		FIRE DAMPER-FD
...	...	⊙	PRESSURE GAUGE		FAN POWERED VAV BOX WITH ELECTRIC HEAT
DRW	DRINKING WATER	⊙ SA A	SHOCK ABSORBER		REGULAR VAV BOX WITHOUT ELECTRIC HEAT
DW	DRINKING WATER PIPE	⊙	SIGHT GLASS (FLOW TYPE)		SMOKE DAMPER
ED	EXPRESS DRAIN	⊙	STATIC PRESSURE SENSOR		SMOKE DETECTOR / SENSOR
FW	FILTERED WATER	—	STRAINER		VOLUME DAMPER-VD
G	NATURAL GAS	⊙	THERMOMETER		MANUAL DAMPER-MD
HWS	HOT WATER SUPPLY	⊙	THERMOSTAT		FLEXIBLE CONNECTION
HWR	HOT WATER RETURN	—	TRAP PRIMER		FLEXIBLE DUCT
S	SANITARY SEWER		UNION		OUTSIDE AIR DUCT (ON)
D	CONDENSATE DRAIN PIPE		WALL CLEANOUT		OUTSIDE AIR DUCT (UP)
SD	SUBSOIL DRAIN		LAVATORY		RECTANGULAR DUCT (FIRST NUMBER IS SIDE SHOWN IN INCHES)
ST	STORM SEWER		MOP SINK		RETURN/EXHAUST DUCT (ON)
V	SANITARY VENT		SERVICE SINK		RETURN OR EXHAUST DUCT (UP)
⊙	BALANCING VALVE	△	SHOWER HEAD		ROUND DUCT
⊙	BALL VALVE	⊙ UR	URINAL		SUPPLY AIR DUCT (ON)
⊙	CHECK VALVE	①	COLUMN NUMBER OR LETTER		SUPPLY AIR DUCT (UP)
⊙	COCK (GAGE, AIRVENT, DRAIN)		SHOWER		RECTANGULAR REGISTER OR DIFFUSER-SUPPLY
⊙	DRY VALVE		WATER CLOSET (FLUSH VALVE)		TURNING VANES
⊙	DOUBA-DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY		WATER CLOSET (TANK TYPE)		RECTANGULAR REGISTER RETURN OR EXHAUST
⊙	RZBP-ROOFED ZONE BACKFLOW PREVENTER		DOMESTIC WATER RISER		ROUND FACE SUPPLY DIFFUSER
⊙	ECCENTRIC PLUG VALVE	①	SANITARY RISER		SQUARE FACE SUPPLY DIFFUSER
⊙	GAS COCK	①	DOOR LOUVER		GLYCOL SUPPLY
⊙	GATE VALVE	①	DOOR UNDERCUT		GLYCOL RETURN
⊙	GLOBE VALVE	①	POINT OF CONNECTION (NEW TO EXISTING)		DIFFUSER TYPE
⊙	MIXING VALVE	①	FIRE PROTECTION RISER		GM
⊙	OS&Y VALVE	①	NATURAL GAS RISER		
⊙	PRE-ACTION VALVE	①	STORM RISER		
⊙	PRESSURE REGULATING VALVE	①	ROOM NUMBER		
⊙	SAFETY RELIEF VALVE	①	DOMESTIC WATER RISER		
⊙	TEMP. & PRESS. RELIEF VALVE	①	VENT RISER		
⊙	TEST PLUG	①	REFRIGERANT MONITOR (REFRIGERANT) AUDIBLE AND VISUAL SIGNALING DEVICE		
⊙	VALVE IN RISER	①	PURGE SWITCH		
⊙	WET VALVE	①	PRESSURE DIFFERENTIAL SENSOR		
⊙	CAP	①	SUPPLY AIR RISER		
⊙	CLEANOUT	①	RETURN AIR RISER		
⊙	FIRE DEPARTMENT CONNECTION	①	OUTSIDE AIR RISER		
⊙	FLANGE	①	EXHAUST AIR RISER		
⊙	WALL HYDRANT	①	RELIEF AIR RISER		
⊙	BUTTERFLY VALVE	①	SPACE STATIC PRESSURE SENSOR		
⊙	FLOOR CLEANOUT	①	CHILLED WATER SUPPLY RISER		
⊙	FLOOR DRAIN AT FLOOR	①	CHILLED WATER RETURN RISER		
⊙	PRESSURE REDUCING VALVE	①	HOT WATER SUPPLY RISER		
⊙	GRADE CLEANOUT	①	HOT WATER RETURN RISER		
⊙	HOSE BIBB	①	DRINKING WATER RISER		
⊙	HUMIDISTAT	①	T'STAT SENSOR(DDC) DUCT OR CEILING MTD		

ABBREVIATIONS

A	FIN.	FIN.	FIN.	O.C.	ON CENTER
AD	AREA DRAIN/AUTOMATIC DAMPER	FT.	FEET	OED	OPEN-END DUCTWORK
ADJ.	ADJUSTABLE	FPM	FEET PER MINUTE	OFD	OVERFLOW DRAIN
ADF	ADJUSTABLE FREQUENCY DRIVE	FS	FLOOR SINK	OPNG.	OPENING
AFF	ABOVE FINISHED FLOOR	FW	FILTERED WATER	P	PANEL
AP	ACCESS PANEL	G	GARAGE CIRCULATING FAN	PPM	PARTS PER MILLION
ARCH.	ARCHITECTURAL	GCF	GUTTER DRAIN/GARAGE DRAIN	PRV	PRESSURE REGULATING VALVE
AUTO.	AUTOMATIC	GD	GLYCOL SUPPLY	PSI	POUNDS PER SQUARE INCH
B	BACKDRAFT DAMPER	GLYS	GLYCOL RETURN	R	RETURN AIR
BD	BRITISH THERMAL UNIT/HOUR	GLYR	GALLONS PER MINUTE	RA	ROOF DRAIN
BTUH	BACKWATER VALVE	GRD	GROUND	RD	REGISTER
BWV	CEILING DIFFUSER	GWH	GAS WATER HEATER	REG.	REGISTRATION
C	CAPPED FOR FUTURE	H	HOSE BIBB	RF	RETURN/RELIEF AIR FAN
CD	CUBIC FOOT PER MINUTE	H ₂ O	HIGH SIDE WALL GRILLE	RL	RAIN LEADER
CFM	CUBIC FEET PER HOUR	HB	HIGH SIDE WALL REGISTER	R/O	REVERSE OSMOSIS
CFH	CAST IRON	HP	HOT WATER	RM.	ROOM
C.I.	COMPRESSOR	HSWG	HOT WATER BASEBOARD HEATER	RTU	ROOF TOP UNIT
C.G.	CONCRETE	HSWR	HOT WATER CONNECTOR HEATER	S	SUPPLY AIR/SHOCK ABSORBER
CO	CONDENSATE DRAIN	HW	HOT WATER PUMP	SA	SUPPLY AIR FAN
COMP.	CONNECTION	HWB	HOT WATER RETURN	SAF	SANITARY
COND.	CONDENSER WATER RETURN	HWH	HOT WATER SUPPLY	SAN./S	SHOWER DRAIN
COND. DR.	CONDENSER WATER SUPPLY	HWP	HOT WATER RETURN	SEF	SMOKE EXHAUST FAN
CONN.	COLD WATER	HWS	INVERT ELEVATION	SEF	SQUARE FEET/SUPPLY FAN
CONT.	CHELLED WATER RETURN	I	INVERT ELEVATION	SF	SHEET
COP	CHELLED WATER SUPPLY	I.E.	INVERT ELEVATION	S/M	SHEET METAL
COS	CHELLED WATER RETURN	INV. ELEV.	INVERT ELEVATION	S.P.	STATIC PRESSURE
CR	CABINET UNIT HEATER	J	JANITORIAL	SPD.	SPEED
CUH	CHILLED WATER	JAN	JANITORIAL	SQ.	SQUARE
CW	CHILLED WATER PUMP	K	KILOWATT	SO.	STORM
CWP	CHILLED WATER SUPPLY	KW	KILOWATT	ST	STEEL
CWS	CHILLED WATER RETURN	L	LEAVING AIR TEMPERATURE	STL.	STEEL
CWR	CHILLED WATER RETURN	LAT	LEAVING AIR TEMPERATURE	T	TRANSFER DUCT/TRENCH DRAIN
D	DRY BULB	LAT	LEAVING AIR TEMPERATURE	TD	TRANSFER GRILLE
DB	DEPARTMENT	LSWG	LOW SIDE WALL GRILLE	TG	TRANSFER
DEPT.	DOWN	LSWR	LOW SIDE WALL REGISTER	TRANS.	TRANSFER
DN.	DETAIL	LVL	LEVEL	TYP.	TYPICAL
DTL.	DRAWING	LWT	LEAVING WATER TEMPERATURE	U	UNIT HEATER
DW	DOMESTIC WATER HEATER	M	MAXIMUM	V	VARIABLE AIR VOLUME
DWG.	EXISTING	MAX.	MAXIMUM	VAV	VARIABLE FREQUENCY DRIVE
DWH	ENTERING AIR TEMPERATURE	MBH	THOUSAND BTUH	VFD	VARIABLE FREQUENCY DRIVE
E	ENTERING AIR TEMPERATURE	MECH.	MECHANICAL	V/PH/HZ	VOLTS/PHASE/HERTZ
E/EX/EXIST.	EXPRESS DRAIN	MFR.	MANUFACTURER	VTR	VENT THRU ROOF
EAT	EXHAUST FAN	MH	MANHOLE	W	WITH
ED	ELEVATION	MIN.	MINIMUM	W	WITH
EF	EXTERNAL STATIC PRESSURE	MNL	MANUAL	WB	WET BULB
EL./ELEV.	EXTERNAL WATER TEMPERATURE	MTR	MOTOR	WC	WATER COLUMN
ENT	EXHAUST	N	NOISE CRITERIA	WCO	WALL CLEANOUT
ESP	EXPANSION	NC	NEGATIVE	WG	WATER GAUGE
EMT	EXPANSION	NO.	NUMBER	WH	WALL HYDRANT
EXH.	EXPANSION	N.O.	NORMALLY OPEN	WMS	WIRE MESH SCREEN
EXP.	EXPANSION	N.C.	NORMALLY CLOSE	WS	WET STACK
F	DEGREE FAHRENHEIT	O	OUTSIDE AIR		
F	FLOOR CLEANOUT	OA	OUTSIDE AIR		
FOO	FIRE DAMPER/FLOOR DRAIN				
FD	FIRE HYDRANT				
FH					

Interior Improvements to DC Superior Courts Building 'B'
409 E Street, NW
Washington, DC 20001

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Contractor Address

KEY PLAN

ISSUES / REVISIONS

FILE LOG

RESUME

ELECTRICAL NOTES:

- GENERAL AND POWER:
 - ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, NFPA AND ALL OTHER LOCAL CODES.
 - ALL WORK SHALL BE ACCOMPLISHED WITHIN THE INTENT OF THE BASE BUILDING CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, AS APPLICABLE.
 - ELECTRICAL CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ALL OTHER TRADES.
 - CONTRACTOR SHALL VERIFY ALL EQUIPMENT REQUIREMENTS BEFORE INSTALLING CONDUIT OR CONDUCTORS FROM POWER SOURCE TO EQUIPMENT TERMINATION.
 - EXACT LOCATION, MOUNTING HEIGHT, AND TYPE OF TERMINATION FROM JUNCTION BOXES, STUB-UPS, DISCONNECT SWITCHES, ETC., SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS, SHOP DRAWINGS, EQUIPMENT CUTS, OR DETAILS BEFORE CONDUIT ROUGH IN.
 - CONTRACTOR SHALL PROVIDE AND INSTALL MINIMUM #12 AWG WIRE SIZE AND 3/4" CONDUIT FOR ALL BRANCH CIRCUITS.
 - CONTRACTOR SHALL COORDINATE WITH ARCHITECTS COLOR OF DEVICES AND COVER PLATES.
 - CONTRACTOR SHALL PROVIDE AND INSTALL A SEPARATE NEUTRAL CONDUCTOR FOR EACH DIMMER AND GROUND FAULT INTERRUPTER RECEPTACLE.
 - CONTRACTOR SHALL X-RAY SLAB IN AREA OF PENETRATION PRIOR TO CORE DRILLING AND COORDINATE WITH EQUIPMENT IN CEILING SPACE BELOW TO CHECK FOR OBSTRUCTIONS.
 - CONTRACTOR SHALL PROVIDE MINIMUM #10 AWG CONDUCTOR SIZE IN BRANCH CIRCUIT HOME RUNS OVER 75' AND #8 AWG RUNS OVER 150' IN LENGTH.
 - ALL EMPTY RACEWAY FOR USE BY OTHER SHALL BE PROVIDED WITH NYLON PULL STRINGS.
 - ALL RACEWAYS SHALL BE CONCEALED WHERE PRACTICAL. WHERE RACEWAYS CANNOT BE CONCEALED, IT SHALL BE INSTALLED AT THE ARCHITECT'S DIRECTION.
 - ALL ELECTRICAL OUTLETS AND ACCESSORIES FURNISHED WITH EQUIPMENT AND/OR EXISTING EQUIPMENT REUSED AND RELOCATED SHALL BE CONNECTED AND ENERGIZED BY THE ELECTRICAL CONTRACTOR. THE CONTRACTOR SHALL ENSURE THAT EXISTING DEVICES REMAINING IN PLACE ARE RECONNECTED TO EXISTING CIRCUITS SERVING THOSE DEVICES.
 - THE CONTRACTOR MUST ASSURE EQUIPMENT GROUNDING SYSTEM CONTINUITY AND SHALL BE CONTINUOUSLY IDENTIFIED THROUGHOUT THE SYSTEM TO AVOID ERROR.
 - CONTRACTOR SHALL PROVIDE NEW TYPED PANEL DIRECTORIES FOR ALL PANELS AFFECTED BY THIS WORK.
 - GROUNDING OF ALL CONDUIT, PANELBOARD, BOXES AND EQUIPMENT SHALL CONFORM TO LATEST APPLICABLE EDITION OF NATIONAL ELECTRICAL CODE. CONTINUITY OF METAL RACEWAYS SHALL BE INSURED BY THE USE OF DOUBLE LOCKNUTS. GROUND CONNECTORS SHALL BE OF PRESSURE-TYPE SIMILAR AND EQUAL TO BURNED OR O-Z.
 - ALL CONDUCTORS SHALL BE COPPER WITH INSULATION RATED 75C TYPE THHN, THWN, OR THW.
 - CONTRACTOR SHALL DEGRADE CONDUCTORS PER NATIONAL ELECTRICAL CODE IF MORE THAN THREE PHASE CONDUCTORS ARE INSTALLED IN A SINGLE CONDUIT.
 - PROVIDE SINGLE COVERPLATE IN ALL AREAS WHERE DEVICES ARE GANGED - VERIFY WITH ARCHITECT.
 - ALL WIRE AND/OR CABLE RUNNING ABOVE CEILING IN RETURN AIR PLENUMS SHALL BE UL LISTED FOR SUCH USE.
 - ALL CONNECTORS AND/OR COUPLERS SHALL BE MALLEABLE STEEL. CAST FITTINGS ARE NOT ACCEPTABLE.
 - FURNISH ALL LABOR, MATERIAL, SERVICES AND SKILLED SUPERVISION NECESSARY FOR THE CONSTRUCTION, ERECTION, INSTALLATIONS, CONNECTIONS, TESTING AND ADJUSTMENT OF ALL CIRCUIT AND ELECTRICAL EQUIPMENT SPECIFIED HEREIN, OR SHOWN OR NOTED ON THE DRAWINGS, AND ITS DELIVERY TO THE OWNER COMPLETE IN ALL RESPECTS READY FOR USE.
 - CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS
 - NOT USED.
 - ALL CUTTING AND PATCHING SHALL BE PERFORMED IN A WORKMANLIKE MANNER ACCEPTABLE TO THE ARCHITECT/OWNER
 - ALL ELECTRICAL WORK, INCLUDING SERVICE AND EQUIPMENT, SHALL BE CONDUCTED ON DE-ENERGIZED SYSTEMS AND COMPONENTS. WHERE CONTINUOUS SERVICE IS REQUIRED TO EXISTING EQUIPMENT, AN ALTERNATIVE MEANS OF SERVICE SHALL BE PROVIDED AND INSTALLED UNTIL THE REQUIRED NEW AND/OR ALTERED WORK HAS BEEN COMPLETED
 - THE CONTRACTOR SHALL EXTEND AS REQUIRED ANY FEEDER OR BRANCH CIRCUIT SUPPORTING RELOCATED OR REPLACED MECHANICAL EQUIPMENT.

LIGHTING:

- ELECTRICAL CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR TYPE OF CEILING CONSTRUCTION IN ALL AREAS BEFORE ORDERING OR INSTALLING LIGHTING FIXTURES.
- CONTRACTOR TO NOTIFY ARCHITECT OF ANY LIGHTING LAYOUT INTERFERENCE WITH EXISTING STRUCTURAL MEMBERS AND/OR MECHANICAL EQUIPMENT TO OBTAIN FINAL APPROVAL PRIOR TO INSTALLATION.
- ALL LIGHT FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE; DO NOT SUPPORT FROM SUSPENDED CEILING.

LEGEND:

AC	AMPERES INTERRUPTION CAPACITY	EMT	ELECTRICAL METALLIC TUBING	MH	MOUNTING HEIGHT	UN	UNLESS OTHERWISE NOTED
AF	ABOVE FINISHED FLOOR	E/R	EXISTING TO BE RELOCATED	M/L	MAIN LUGS ONLY	UL	UNDERWRITERS LABORATORIES
BFG	BELOW FINISHED GRADE	FA	FIRE ALARM SYSTEM	M/G	MOUNTING	V	VOLT
C	CONDUIT	GFP	GROUND FAULT PROTECTION	NFS	NON-FUSIBLE SAFETY SWITCH	VA	VOLT AMPERES
CKT	CIRCUIT BREAKER	HP	HORSE POWER	NEC	NATIONAL ELECTRIC CODE ASSOCIATION	WP	WEATHER PROOF
CB	CURRENT TRANSFORMER	HH	HAND-HOLE	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION	WHM	WAIT HOUR METER
CT	CURRENT TRANSFORMER	JB	JUNCTION BOX	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION	W	WAIT
EC	EMPTY CONDUIT	KWC	1000 AMPERE INTERRUPTING CAPACITY	PNL	PANELBOARD	XFRM	TRANSFORMER
E	EXISTING TO REMAIN	KVA	KILO VOLTS AMPERES	PH	PHASE		
EF	EXHAUST FAN	MCC	MOTOR CONTROL CENTER	R	RELOCATED		
EG	EQUIPMENT GROUND			TYP	TYPICAL		

LEGEND:

- INDICATES A DRAWING NOTE
- 208Y/120 VOLTS PANELBOARD
- BRANCH CIRCUIT WIRING. ARROW INDICATE NUMBER OF CIRCUIT HOMERUNS TO PANELBOARD. GROSS MARKS INDICATE NUMBER OF PHASE & NEUTRAL CONDUCTORS. A DOT CROSSMARK INDICATE ISOLATED GREEN GROUNDING CONDUCTOR. A FLAGGED CROSSMARK INDICATE EQUIPMENT GROUNDING CONDUCTOR. PROVIDE 2#12-1#12G-3/4" WHEN NOT NOTED.
- DUPLEX RECEPTACLE: 2P-3W-20A-125V. SUBSCRIPTS ADJACENT TO SYMBOL INDICATE THE FOLLOWING (TYPICAL FOR ALL RECEPTACLES):
- WP- WEATHERPROOF
 - GF- GROUND FAULT INTERRUPTING
 - D- DEDICATED CIRCUIT
 - #- A NUMBER IDENTIFIES THE CIRCUIT FEEDING THE RESPECTIVE RECEPTACLE
 - EW- ELECTRICAL WATER COOLER CONNECTION
- ISOLATED GROUND DUPLEX RECEPTACLE
- FLUSH FLOOR DUPLEX RECEPTACLE
- DOUBLE DUPLEX RECEPTACLE WITH COMMON FACEPLATE
- SPECIAL RECEPTACLE: POLES, WIRES, VOLTAGE AND AMPERAGE AS INDICATED BY NEMA DESIGNATION
- RECEPTACLE MOUNTED 42" AFF
- CEILING MOUNTED JUNCTION BOX PROVIDE CONDUIT, PULL STRING AND RING TO 6" ABOVE CEILING FOR INSTALLATION OF WIRING- VERIFY CONDUIT SIZE FOR EQUIPMENT NOTED.
- WALL MOUNTED JUNCTION BOX PROVIDE CONDUIT, PULL STRING AND RING TO 6" ABOVE CEILING FOR INSTALLATION OF WIRING- VERIFY CONDUIT SIZE FOR EQUIPMENT NOTED.
- FLUSH FLOOR JUNCTION BOX
- SINGLE POLE TOGGLE SWITCH. SUBSCRIPTS AT SW SYMBOL INDICATE THE FOLLOWING:
- 3 - THREE WAY
 - P - PILOT LIGHT
 - o.b.c. IDENTIFICATION OF OUTLET CONTROLLED
- TELEPHONE OUTLET JUNCTION BOX, WALL MOUNTED 18" AFF
- SUBSCRIPT "W" INDICATES WALL MOUNTING -FS& AFF. EXTEND 3/4" EMPTY CONDUIT FROM BOX UP TO CEILING SPACE
- COMBINATION TELEPHONE AND DATA OUTLET JUNCTION BOX, WALL MOUNTED 18" AFF. EXTEND 3/4" EMPTY CONDUIT FROM BOX UP TO CEILING SPACE WITH PULL LINE. FACEPLATE SHALL BE PER COMMUNICATION VENDOR, APPROVED BY THE ARCH
- COMBINATION DOUBLE DUPLEX RECEPTACLE, TELEPHONE AND DATA OUTLET (POKE THRU) EXACT LOCATION SHALL BE AS INDICATED ON ARCHITECTURAL DRAWINGS.
- TELEPHONE AND DATA OUTLET JUNCTION BOX, WALL MOUNTED 18" AFF. EXTEND 3/4" EMPTY CONDUIT FROM BOX UP TO CEILING SPACE
- MANUAL MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION
- HEAVY DUTY SAFETY SWITCH, RATING AS NOTED; 60/50 INDICATES 60A SWITCH WITH 50A FUSES, 60/NF INDICATES 60A SWITCH NON-FUSED, AND VOLTAGE AS REQUIRED
- DARKENED SAFETY SWITCH INDICATES THAT SWITCH (AND MOTOR STARTER WHERE APPLICABLE) IS SUPPLIED WITH EQUIPMENT, CONNECTION BY THIS CONTRACTOR
- ENCLOSED CIRCUIT BREAKER, SIZE AS NOTED. F INDICATES FLUSH MOUNTED, NO LETTER INDICATES SURFACE MOUNTED
- MOTOR STARTER OR CONTROLLER, SIZE FOR LOAD SERVED, WITH HOA(HAND-OFF-AUTO) SWITCH. DARKENED MOTOR STARTER OR CONTROLLER INDICATES THAT STARTER OR CONTROLLER IS SUPPLIED WITH EQUIPMENT.
- COMBINATION MOTOR STARTER OR CONTROLLER/ DISCONNECT, SIZE FOR LOAD SERVED, WITH HOA(HAND-OFF-AUTO) SWITCH.
- MOTOR CONNECTION,NUMERAL INDICATES HORSEPOWER. "F" INDICATES FRACTIONAL HORSEPOWER, 120V., . 1φ

LIGHTING:

- FIXTURE SYMBOL-LETTER INDICATES FIXTURE TYPE. SEE LIGHTING FIXTURE SCHEDULE TO SYMBOL IDENTIFIES THE CIRCUIT FEEDING THE RESPECTIVE LIGHTING FIXTURE
- 2' X 2' FLUORESCENT FIXTURE. A NUMBER ADJACENT TO SYMBOL IDENTIFIES THE CIRCUIT FEEDING THE RESPECTIVE LIGHTING FIXTURE
- 2' X 2' FLUORESCENT FIXTURE. A NUMBER ADJACENT TO SYMBOL IDENTIFIES THE CIRCUIT FEEDING THE RESPECTIVE LIGHTING FIXTURE

- FLUORESCENT STRIP OR INDUSTRIAL FIXTURE
- WALL MOUNTED FLUORESCENT FIXTURE
- INCANDESCENT OR COMPACT FLUORESCENT FIXTURE
- WALL WASHER INCANDESCENT OR FLUORESCENT FIXTURE
- WALL MOUNTED INCANDESCENT FIXTURE

- A DARKENED IN FIXTURE OUTLET AT THE FIXTURE INDICATES THAT IT IS ON AN EMERGENCY CIRCUIT.
- SUBSCRIPT "NL" INDICATES THAT THE FIXTURE IS A NITE LIGHT.

- WALL OR CEILING MOUNTED EXIT LIGHT ON EMERGENCY CIRCUIT (DARKENED QUARTER SECTION(S) DENOTES FACE(S), WITH DIRECTIONAL ARROW AS INDICATED ON PLANS

COMMUNICATIONS:

- MICROPHONE DESK MOUNTED
- MICROPHONE WALL/SURFACE MOUNTED
- ALARM/PANIC BUTTON-MOUNTED TO UNDERSIDE OF COUNTER/SURFACE WHERE INDICATED VERIFY/COORDINATE TERMINATION POINTS WITH BUILDING SECURITY AND US MARSHAL'S OFFICE
- ALARM/PANIC BUTTON-WALL MOUNTED WERE INDICATED VERIFY/COORDINATE TERMINATION POINTS WITH BUILDING SECURITY AND US MARSHAL'S OFFICE
- ELECTRONIC TEXT MESSAGING SYSTEM-WALL MOUNTED VERIFY POWER/DATA REQUIREMENTS
- ELECTRONIC TEXT MESSAGING SYSTEM-CEILING MOUNTED
- DOOR RELEASE BUZZER-MOUNTED TO UNDERSIDE OF COUNTER/SURFACE WHERE INDICATED
- WALL MOUNTED BUZZER
- COAXIAL CABLE TV CONNECTION; WALL MOUNTED; PROVIDE J-BOX AND CONDUIT TO 6" ABOVE FINISH CEILING WITH PULL STRING AND RING FOR USE BY CABLE INSTALLER

LIGHTING FIXTURE NOTES:

- LAMP ORDERING ABBREVIATION IS BASED ON OSRAM SYLVANIA
- SINGLE LAMP ELECTRONIC BALLAST,BALLASTS BY ADVANCE, CAT. NO. REL-1P32-RH-TP NOT USED
- TWO LAMP ELECTRONIC BALLAST, BY ADVANCE, CATALOG NO. REL-2P32-RH-TP
- THREE LAMP ELECTRONIC BALLAST,BY ADVANCE, CATALOG NO. REL-3P32-RH-TP
- SUBSTITUTIONS: INCLUDE COMPLETE PHOTOMETRIC REPORTS AND POINT BY POINT CALCULATIONS
- CONFIRM THE EXACT LENGTHS REQUIRED AND PROVIDE ALL THE NECESSARY PARTS AND ACCESSORIES TO INSURE PROPER INSTALLATION
- (*) DIRECTIONAL ARROW AND MOUNTING AS INDICATED ON PLANS. WALL MOUNTED FIXTURES LOCATED ABOVE DOOR FRAME SHALL BE LOCATED AT THE CENTER BETWEEN DOOR FRAME AND CEILING.
- SINGLE AND TWO LAMP ELECTRONIC BALLAST, BALLAST BY ADVANCE, CAT. NO. ICF-2526-H1-X
- TWO LAMP ELECTRONIC BALLAST, BALLAST BY ADVANCE, CAT. NO. ICF-2542-W2-X
- PENDANT MOUNT EXIT FIXTURE 9'-0" ABOVE FINISH FLOOR
- SIGNAGE FIXTURE TO BE FURNISHED BY OWNER AND INSTALLED BY ELECTRICAL CONTRACTOR.
- WALL MOUNTED BATTERY PACK SHALL BE MOUNTED 8'-6" ABOVE FINISH FLOOR.

LIGHTING FIXTURE SCHEDULE

SYM	DESCRIPTION	MANUFACTURER	CATALOG No. AND VOLTAGE	QUANT.	LAMP DATA	MOUNTING	REMARKS
				WATT.	LAMP	REC. SURF. WALL PEND.	
A	COMPACT FLUORESCENT DOWN LIGHT FIXTURE	OMEGA	OM240R60LCS 120	2	CF260D/630	●	1 B
B	COMPACT FLUORESCENT WALL WASHER LIGHT FIXTURE	OMEGA	120	2	CF260D/630	●	1 B NOT USED
C	2'x2' FLUORESCENT FIXTURE WITH 1-2" FEED BELL LEADERS	DAY-BRITE BENJAMIN	2L230J331U14HSL120 120	3	F0317B/SPX30	●	1 4
D	2'x2' FLUORESCENT FIXTURE WITH 2-4" FEED BELL LEADERS AND 1-2" FEED BELL LEADERS	DAY-BRITE BENJAMIN	2L230J332F4BELL12EB 120	2	F327B/SPX30	●	1 3 NOT USED
E	WALL MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2218T02WINDM411EW 120	2	F327B/SPX30	●	1 3 5 6
F	WALL MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2218T02WINDM811EW 120	4	F327B/SPX30	●	1 3 5 6
G	WALL MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2218T02WINDM1211EW 120	6	F327B/SPX30	●	1 3 5 6
H	WALL MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2218T02WINDM1611EW 120	8	F327B/SPX30	●	1 3 5 6
I	WALL MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2218T02WINDM2011EW 111W 120	16	F327B/SPX30	●	1 3 5 6
J	WALL MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2218T02WINDM2411EW 120	20	F327B/SPX30	●	1 3 5 6
K	WALL MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2218T02WINDM2811EW 120	10	F327B/SPX30	●	1 3 5 6
L	WALL MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2218T02WINDM3211EW 120	24	F327B/SPX30	●	1 3 5 6
M	WALL MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2218T02WINDM3611EW 111W 120	28	F327B/SPX30	●	1 3 5 6
N	WALL MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2218T02WINDM4011EW 120	36	F327B/SPX30	●	1 3 5 6
O	WALL MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2218T02WINDM4411EW 120	12	F327B/SPX30	●	1 3 5 6
P	STEM MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2226T02WINDM4811EW 120	2	F327B/SPX30	●	1 3 5 6
Q	STEM MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2226T02WINDM5211EW 120	4	F327B/SPX30	●	1 3 5 6
R	STEM MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2226T02WINDM5611EW 120	8	F327B/SPX30	●	1 3 5 6
S	STEM MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2226T02WINDM6011EW 31W 120	14	F327B/SPX30	●	1 3 5 6
T	STEM MOUNTED DIRECT/NDBRECT FLUORESCENT LIGHT FIXTURE	LEDALITE EURO 55	2226T02WINDM6411EW 120	42	F327B/SPX30	●	1 3 5 6
U	FINISH: BRUSHED ALUMINUM WITH WHITE LOWER.	G LIGHTING	G12500-24 120	4	CF260D/630	●	1 B
V	4'-0" FLUORESCENT STRIP	DAY-BRITE BENJAMIN	1232120 120	2	F327B/SPX30	●	1 3
W	8'-0" STAGERED FLUORESCENT STRIP	DAY-BRITE BENJAMIN	SS432120 120	4	F327B/SPX30	●	1 3
X	4'-0" STAGERED FLUORESCENT STRIP	DAY-BRITE BENJAMIN	SS232120 120	2	F327B/SPX30	●	1 3
Y	INFORMATION SIGN	CUSTOM	120	-	-	●	1
Z	COMPACT FLUORESCENT DOWN LIGHT FIXTURE	DELBAUY LIGHTING	H73232AA0 120	2	CF320D/830	●	1 B
AA	FLUORESCENT SHOWER FIXTURE	HUBBELL	D326 120	1	CF260D/830	●	1 B
AB	4" LONG GENERAL PURPOSE INDUSTRIAL FLUORESCENT	HUBBELL	1GT4RP10B4 120	2	F327B/SPX30	●	1 3
AC	WALL MOUNTED SEAL NICKEL BATTERY W/ TWIN HEADS	MPHILBEN	ETN18B28A 120	2	INCLUDE W/FIXTURE	●	12
AD	SINGLE FACE WALL MOUNTED LED EXIT LIGHT	MPHILBEN	49MLTR50W 120	-	INCLUDE W/FIXTURE	●	7
AE	SINGLE FACE CEILING MOUNTED LED EXIT LIGHT	MPHILBEN	49V1TR50W 120	-	INCLUDE W/FIXTURE	●	7
AF	DOUBLE FACE CEILING MOUNTED LED EXIT LIGHT	MPHILBEN	49D2CR50W 120	-	INCLUDE W/FIXTURE	●	7
AG	DOUBLE FACE SURFACE MOUNTED LED EXIT LIGHT	MPHILBEN	49S1SR50W 120	-	INCLUDE W/FIXTURE	●	7
AH	SINGLE FACE PENDANT MOUNTED LED EXIT LIGHT	MPHILBEN	49V1PR50W45 120	-	INCLUDE W/FIXTURE	●	7 10

JOB No 52010300
CONSTRUCTION PACKAGE
ISSUED FOR CONSTRUCTION (FINAL) APRIL 8, 2003
ELECTRICAL COVER SHEET
E0.01



1 POWER PLAN - THIRD FLOOR
E1.03 SCALE: 1/8"=1'-0"

POWER NOTES

- 1 FOR EXACT LOCATION AND MOUNTING HEIGHTS OF ALL POWER, TELEPHONE/DATA OUTLETS AND JUNCTION BOXES, SEE ARCHITECTURAL DRAWINGS
- 2 CIRCUITS ARE DESIGNATED BY THE NUMBER SHOWN ADJACENT TO EACH RECEPTACLE. WIRING IS SHOWN ONLY UNDER SPECIAL CIRCUMSTANCES PROVIDE CONDUITS, WIRES AND BOXES REQUIRED FOR THE EQUIPMENT
- 3 SYSTEM FURNITURE PROVIDED BY OTHERS IS 8-WIRE ELECTRICAL SYSTEM WITH 3#12 AWG CIRCUITS, 3#10 AWG NEUTRALS AND 2#12 AWG GROUND WIRES. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH SYSTEM FURNITURE MANUFACTURERS. FURNITURE WHIPS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS' INSTRUCTIONS. CONTRACTOR SHALL ALSO COORDINATE WITH ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF JUNCTION BOXES.
- 4 CIRCUIT NUMBERS ARE FOR REFERENCE ONLY. FIELD CONDITIONS PREVAIL. CONTRACTOR SHALL VERIFY CIRCUIT NUMBERS AND PANELBOARD NAMES AND LOCATIONS AND AVAILABILITY OF EACH CIRCUIT BASED UPON THE TOTAL CONNECTED LOAD. ALL SIGNAL AND TELEPHONE CABLES SHALL BE TEFLON INSULATED AND JACKETED AND SHALL RUN ABOVE HUNG CEILING
- 5 PROVIDE POWER FOR CONTROL OF MECHANICAL EQUIPMENT, MECHANICAL CONTRACTOR WILL PROVIDE LOW VOLTAGE TRANSFORMER, BUT THIS CONTRACTOR SHALL MAKE FINAL CONNECTION.
- 6 DOMESTIC WATER HEATER. SEE PLUMBING DRAWING FOR EXACT LOCATION.
- 7 EXHAUST FAN, SEE MECHANICAL DRAWING FOR EXACT LOCATION.
- 8 DOUBLE SECTION PANELBOARD, 225A, 120/208V. SEE POWER RISER AND ONE-LINE DIAGRAMS FOR MORE DETAILS.
- 9 COURT SHALL MAKE WALL IN EACH ELECTRICAL/TELECOM ROOM FULLY ACCESSIBLE FOR ELECTRICAL EQUIPMENT. WALL SHALL BE FREE FROM PA, IT AND TELEPHONE EQUIPMENT.
- 10 POKE-THRU FOR DATA/TEL/POWER AND OUTLETS. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR EXACT LOCATION.
- 11 TAG CIRCUIT NUMBER AND PANELBOARD FOR ALL JUNCTION BOXES AND WIRING DEVICES IN ALL LOCATIONS.
- 12 PROVIDE POWER FOR CONTROL OF MECHANICAL EQUIPMENT, MECHANICAL CONTRACTOR SHALL MAKE FINAL CONNECTION.
- 13 PROVIDE POWER FOR CEILING MOUNTED ELECTRONIC MESSAGING SYSTEM.
- 14 PROVIDE POWER FOR SECURITY SYSTEM.
- 15 CABLE TRAY 24" BY 6" AS SHOWN WITH 4-4 INCH SLEEVES CROSS HALLWAY. COORDINATE WITH MECHANICAL CONTRACTOR BEFORE FINAL INSTALLATION.
- 16 PROVIDE POWER FOR CARD READERS. COORDINATE WITH SECURITY CONTRACTOR.

UNLESS OTHERWISE NOTED, ALL NON EMERGENCY BRANCH CIRCUITS INDICATED IN THIS AREA SHALL BE CONNECTED TO PANEL N3 AND ALL LIFE SAFETY CIRCUITS SHALL BE CONNECTED TO PANEL ELB

UNLESS OTHERWISE NOTED, ALL NON EMERGENCY BRANCH CIRCUITS INDICATED IN THIS AREA SHALL BE CONNECTED TO PANEL S3 AND ALL LIFE SAFETY CIRCUITS SHALL BE CONNECTED TO PANEL ELB

Contractor
Address

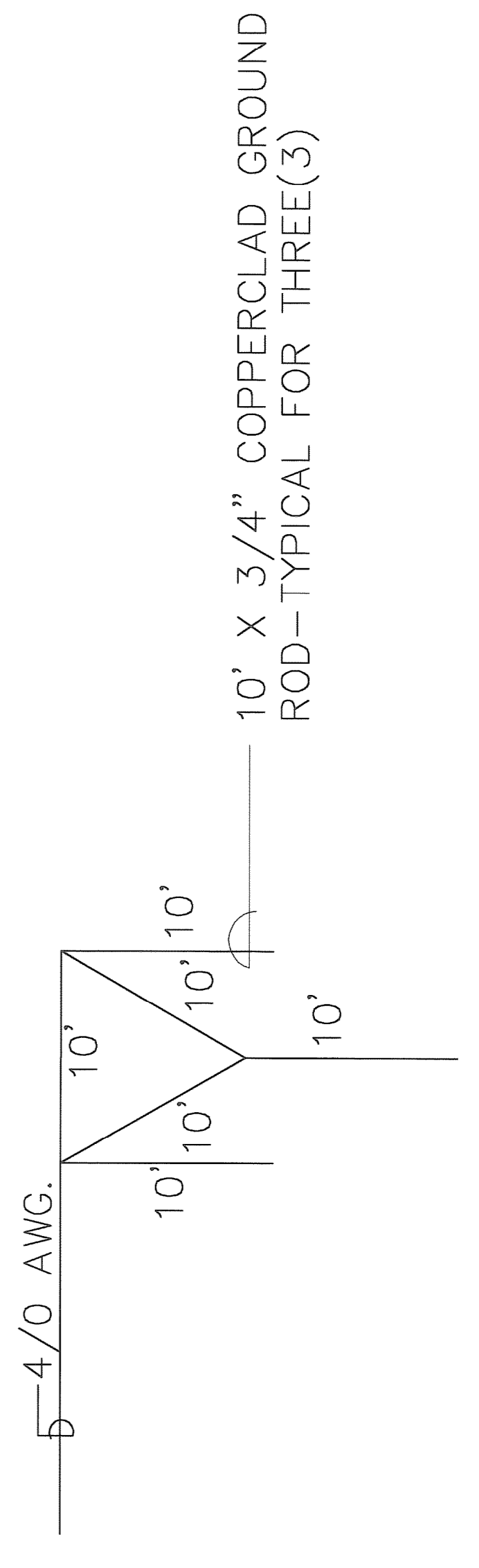
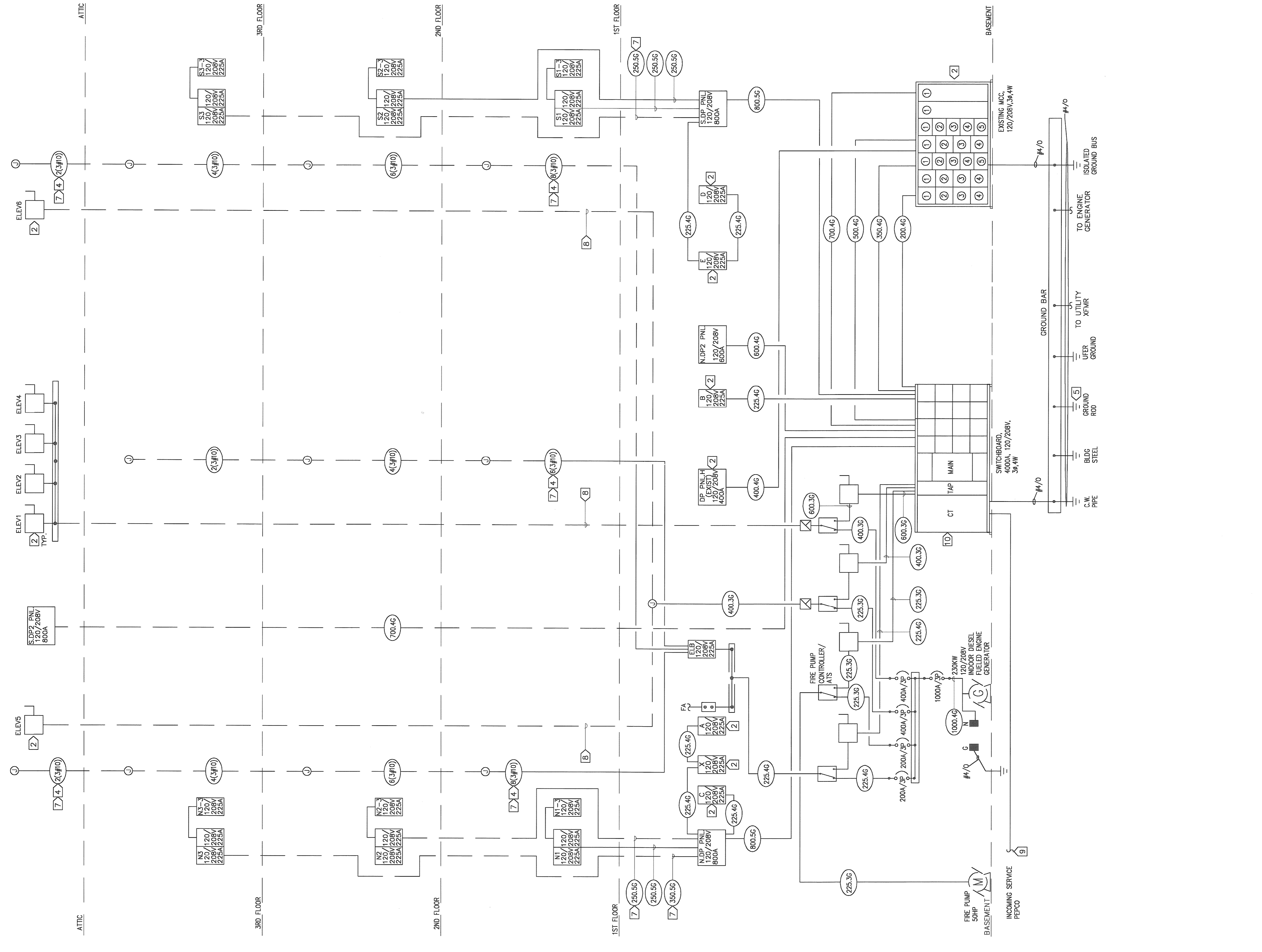
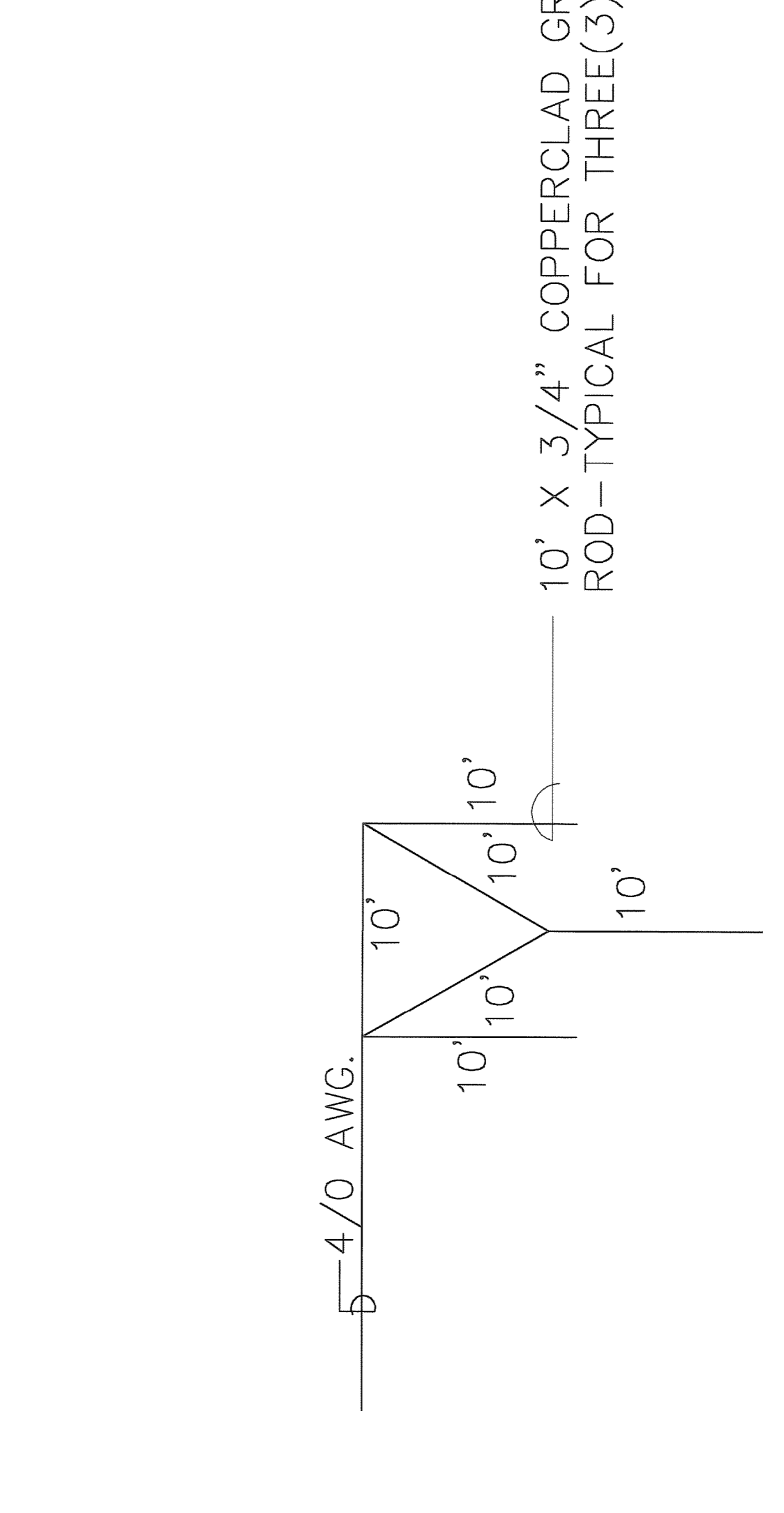
GENERAL NOTES

- INSTALLATION OF NEW ELECTRICAL EQUIPMENT SHALL BE PERFORMED TO ASSURE MINIMUM OUTAGES TO THE FACILITIES.

POWER RISER NOTES

- EQUIPMENT AND DEVICE ARE NEW UNLESS NOTED OTHERWISE.
- EXISTING EQUIPMENT AND DEVICE TO REMAIN UNLESS NOTED OTHERWISE.
- SEE ONE-LINE DIAGRAM AND PANEL SCHEDULES FOR MORE DETAILS.
- THE FIRST NUMBER INDICATES NUMBER OF EMERGENCY CIRCUITS AND THE SECOND AND THIRD NUMBERS INDICATE WIRING SIZES AND NUMBER OF WIRES PER CIRCUIT RESPECTIVELY; DERATE CONDUCTORS AND INCREASE SIZES PER NEC IF MORE THAN THREE CIRCUITS ARE INSTALLED IN ONE RACEWAY.
- SEE GROUNDING ROD DETAIL BELOW.
- ALL FEEDERS AND CONDUIT ARE NEW UNLESS NOTED OTHERWISE.
- EXISTING CONDUIT COULD BE UTILIZED FOR THE NEW WORK IF IT MEETS NEW WIRING.
- EXISTING FEEDER AND CONDUIT TO REMAIN.
- PROVIDE ALL NECESSARY CABLES AND DUCT BANK ACCORDING TO PEPCO'S REQUIREMENT.
- CT CABINET AND SERVICE EQUIPMENT SHALL MEET UTILITY'S SPECIFICATIONS.

FEEDER SCHEDULE		
KEY	3PH+G	3PH+H+G
20.3G	3#12,1#2G, 3/4"	4#12,1#2G, 3/4"
30.3G	3#10,1#10G, 3/4"	4#10,1#10G, 3/4"
40.3G	3#8,1#10G, 1"	4#8,1#10G, 1"
50.3G	3#6,1#10G, 1"	4#6,1#10G, 1-1/4"
60.3G	3#4,1#8G, 1-1/4"	4#4,1#10G, 1-1/4"
70.3G	3#2,1#8G, 1-1/4"	4#4,1#8G, 1-1/4"
80.3G	3#2,1#8G, 1-1/4"	4#4,1#8G, 1-1/4"
90.3G	3#2,1#8G, 1-1/4"	4#4,1#8G, 1-1/4"
100.3G	3#1,1#6G, 1-1/2"	4#4,1#8G, 1-1/2"
110.3G	3#1,1#6G, 1-1/2"	4#4,1#8G, 1-1/2"
125.3G	3#1,1#6G, 1-1/2"	4#4,1#8G, 2"
150.3G	3#1,1#6G, 1-1/2"	4#4,1#8G, 2"
175.3G	3#2,1#8G, 2"	4#2,1#8G, 2"
200.3G	3#3,1#8G, 2"	4#3,1#8G, 2"
225.3G	3#4,1#8G, 2"	4#4,1#8G, 2"
250.3G	3-250,1#4G, 2-1/2"	4-250,1#4G, 2-1/2"
300.3G	3-350,1#4G, 3"	4-250,1#4G, 3"
350.3G	3-500,1#3G, 3"	4-350,1#4G, 3"
400.3G	2[3#3,1#3G, 2"]	4-500,1#3G, 3"
450.3G	2[3#4,1#2G, 2-1/2"]	4-500,1#3G, 3"
500.3G	2[3-350,1#1G, 3"]	4-500,1#3G, 3"
600.3G	2[3-500,1#1G, 3"]	4-500,1#3G, 3"
700.3G	3[3-500,1#1G, 3"]	4-500,1#3G, 3"
800.3G	4[3-500,1#1G, 3"]	4-500,1#3G, 3"
1000.3G	5[3-400,1#2G, 3"]	4-500,1#3G, 3"
1200.3G	6[3-400,1#2G, 3"]	4-500,1#3G, 3"
1600.3G	7[3-500,1#2G, 3"]	4-500,1#3G, 3"
2000.3G	8[3-500,1#2G, 3-1/2"]	4-500,1#3G, 3"
2500.3G	11[3-500,1#2G, 3-1/2"]	4-500,1#3G, 3-1/2"]
3000.3G		
4000.3G		



1 POWER RISER DIAGRAM
SCALE: NOT TO SCALE

2 GROUNDING ROD DETAIL
SCALE: NOT TO SCALE

