Buildings and General Services
133 State Street, 5th Floor | Montpelier VT 05633-8000
802-828-2211 phone |802-828-2222 fax
http://bgs.vermont.gov/purchasing

SEALED BID

REQUEST FOR PROPOSAL

CONSTRUCTION MANAGEMENT SERVICES FOR

STATE HOUSE PANDEMIC MITIGATION/RENOVATION PROJECT
115 STATE STREET, MONTPELIER, VT

ISSUE DATE:	**November 13, 2026**
BIDDERS' CONFERENCE:	**December 9, 2026 at 11:00 AM**
QUESTIONS DUE BY:	**January 5, 2027 at 4:30 PM (EDT)**
RFP RESPONSES DUE BY:	**January 19, 2027 at 4:30 PM (EDT)**

PLEASE BE ADVISED THAT ALL NOTIFICATIONS, RELEASES, AND ADDENDUMS ASSOCIATED WITH THIS RFP WILL BE POSTED AT:

http://www.bgs.state.vt.us/pca/bids/bids.php

THE STATE WILL MAKE NO ATTEMPT TO CONTACT INTERESTED PARTIES WITH UPDATED INFORMATION. IT IS THE RESPONSIBILITY OF EACH BIDDER TO PERIODICALLY CHECK THE ABOVE WEB PAGE FOR ANY AND ALL NOTIFICATIONS, RELEASES AND ADDENDUMS ASSOCIATED WITH THIS RFP.

STATE CONTACT:	**James Meyers, State Senior Purchasing Agent**
E-MAIL:	**BGS.OPCVendorDocs@vermont.gov**

1. **OVERVIEW:**

1.1. **SCOPE AND BACKGROUND:** Through this Request for Proposal (RFP) the Department of Buildings and General Services (hereinafter the "State") is seeking to establish a contract with a construction management firm to provide Construction Management services (hereinafter the "CM") for the State House Pandemic Mitigation/Renovation Project. The primary objective of this project is to create a single point of entry for security and an accessible entrance for better flow and control of visitors to the State House.

1.2. **CONTRACT PERIOD:** The period of performance under this contract shall commence on March 1, 2027 and end on January 1, 2032. See Section 5 – Project Schedule for specific proposed dates.

1.3. **SINGLE POINT OF CONTACT:** All communications concerning this RFP are to be addressed in writing to the State Contact listed on the front page of this RFP. Actual or attempted contact with any other individual from the State concerning this RFP is strictly prohibited and may result in disqualification.

1.4. **BIDDERS' CONFERENCE:** A **non-mandatory** bidders' conference will be held on-site at the date and time indicated on the front page of this RFP. Prospective bidders shall meet at 115 State Street, Montpelier, VT at the west entrance.

1.5. **QUESTION AND ANSWER PERIOD:** Any bidder requiring clarification of any section of this RFP or wishing to comment on any requirement of the RFP must submit specific questions in writing no later than the deadline for questions indicated on the first page of this RFP. Questions may be e-mailed to the point of contact on the front page of this RFP. Questions or comments not raised in writing on or before the last day of the question period are thereafter waived. At the close of the question period a copy of all questions or comments and the State's responses will be posted on the State's web site http://www.bgs.state.vt.us/pca/bids/bids.php. Every effort will be made to post this information as soon as possible after the question period ends, contingent on the number and complexity of the questions.

1.6. **CHANGES TO THIS RFP:** Any modifications to this RFP will be made in writing by the State through the issuance of an Addendum to this RFP and posted online at http://www.bgs.state.vt.us/pca/bids/bids.php . Verbal instructions or written instructions from any other source are not to be considered.

1.7. **BIDDERS ATTENTION IS DIRECTED TO:**

1.7.1. **Please be advised that all notifications, releases, and addendums associated with this RFP will be posted at the website noted on the front page of this RFP. The State will make no attempt to contact contractors with updated information. It is the responsibility of each contractor to periodically check the posting site for any and all notifications, releases and addendums associated with the RFP.**

1.7.2. **BONDING:** Full bonding is required for this Project.

1.7.3. It is the Bidder's responsibility to thoroughly read and comply with all instructions and requirements of this bid solicitation. Your attention is directed to the special instructions regarding the bid proposal submissions. Please follow the Instructions to Bidders carefully.

1.8. **FUNDING SOURCE**: This project is being funded, in whole or in part, through the American Rescue Plan Act (ARPA) funds and/or Vermont Capital Construction Act funds. Wages for construction employees shall be paid no less than the Vermont Prevailing Wage and Fringe Benefit Rate requirements (reference Instructions to Bidders, Prevailing Wage Rate Requirements). A complete list of occupations and associated wage rates are available on the internet at: http://www.vtlmi.info/lmipub.htm

2. **DETAILED REQUIREMENTS/DESIRED OUTCOMES:**

2.1. The CM will join the project at the during of the Design Development phase. The CM will be required to participate in the design process in order to enhance constructability, design quality, provide cost estimates, reduce the amount of change orders, control costs and reduce the length of the overall construction period.

2.2. For BGS billing purposes, the CM is to provide a cost breakdown for each of the following phases: Construction Documents, Bidding & Negotiation, and Construction Administration.

3. **PROJECT DESCRIPTION:** This project shall ensure a safer working environment and efficient operation of the State House to provide a single point of entry for security, accessible entrance and allow for better control of visitors. It creates a safer working environment and efficient operation of the State House to mitigate the impact of any future pandemics that allows Legislative functions to continue unimpaired and create a new space for security screening of visitors

3.1. The following shall be included in the Construction Management firm's scope of work:

3.1.1. Construct the new entrance and great hall per the construction documents.

3.1.2.Renovate some of the interior spaces per the construction documents for additional space .

3.1.3. Refer to the Design Development design plans for the complete scope of work.

3.1.4.The anticipated project schedule is noted in Section 5 below.

4. **PROJECT BUDGET:** The construction estimate, which includes all pre-construction and construction services, costs and fees, General Conditions, Cost of Work, and project contingencies, is $19,659,500.00.

5. **PROJECT SCHEDULE:**

The project is anticipated to begin as soon as this Contract is awarded with a preconstruction start date of approximately March 1, 2027, with a Preconstruction phase ending August 1, 2027, with a construction start of June 1, 2028, to align with legislative funding and a Substantial Completion date on or before December 1, 2031. Final project schedule, sequences and milestones will be determined by the State Project Manager, Architect, and the Construction Manager. Construction is dependent on funding by the Legislature and is unknown until the completion of the legislative session. The contractor shall reflect a total of 21 months of General Conditions on the enclosed Matrix.

Construction Document Start	October 29, 2026
Preconstruction Start	March 1, 2027
Construction Start	June 1, 2028
Construction Pause for Legislative Session	January 1, 2029
Construction Start	June 1, 2029
Construction Pause for Legislative Session	January 1, 2030
Construction Start	June 1, 2030
Substantial Completion	December 1, 2030
Project Completion	January 1, 2031
Contract Completion (1 Year Warranty)	January 1, 2032

5.2 All construction, demobilization, final performance testing, Operations and Maintenance Manuals, and Substantial Completion related to the scope of work performed by the CM must be completed by December 1, 2030; however, the Project Completion date is set for January 1, 2031, to allow for the completion of the punch list, final payments, and other administrative purposes.

6. PROPOSAL REQUIREMENTS:

6.1 **PRE-CONSTRUCTION SERVICES:** The pre-construction services shall include the services noted in the State of Vermont Standard Contract for Construction Management Services with the following additions, clarifications, modifications, and requirements.

6.1.1 For constructability review, the CM will be required, through meetings, phone conferences, etc., to review the project design and develop a schedule, and advise on construction costs and schedule implications.

6.1.2 The CM shall provide budget estimates for the project based on the completed Design Development Drawings and Construction Documents. The budget estimates are to include all costs associated with the project: CM fees, General Conditions, Cost of the Work, fit up costs, and construction contingency, and shall include descriptions of any assumptions, clarifications, budgets, or allowances used in the preparation of the budget estimates. The budget estimates will serve as the basis for evaluating the State's budget for construction and for determining the necessity of incorporating cost-saving measures.

6.1.3 The CM shall provide constructability reviews along with the budget estimates and will be required to submit a tracking list to assemble all review comments in one document and to allow for the corresponding response to each item. Any cost values associated to a comment should also be assigned to that comment. Comments are to include a thorough review of all MEP systems by qualified specialists. The final constructability review shall also include verification that the documents are complete and coordinated among disciplines.

6.1.4 Provide cost saving suggestions and value engineering throughout the pre-construction phase.

6.1.5 An overall site logistics plan is to be developed in close coordination with BGS. This plan is to be updated throughout the project as site conditions dictate and should address, at minimum: Site safety, schedule management, State operational needs and limitations.

6.1.6 The CM will follow the procedures for receiving and evaluating proposals, which are acceptable to the State. If, with the approval of the State, the CM elects to self-perform a portion of the work, they must submit their own bid 24 hours prior to receiving a competitor's bid. Any work performed by the CM will include the required supervision (foreman, etc.), separate from the proposed CM supervision. If bids are not available in time to complete the GMP, then allowances may be used in the GMP if clearly identified. A schedule of rates for all CM staff shall be submitted with the proposal and approved by the State.

6.1.7 The CM will submit a GMP for construction for the project prior to the commencement of construction. Subsequent to the CM's submittal of the GMP, the CM will work with the State and the design team on value engineering, cost saving measures, alternative pricing, etc., as required by the State to bring the guaranteed maximum price within the State's budget.

6.1.8 The CM will be required to solicit a minimum of three (3) bids on all trade contracts and major supply items greater than $15,000 when establishing the GMP.

6.1.9 Providing the State and the CM can establish a GMP, which is acceptable to both parties, the State and the CM will amend the State CM Agreement Form between the State and Construction Manager. The Fixed Fee for General Conditions and the Fixed Fee for Construction Services shall be incorporated into the final agreement for construction.

6.2 **GENERAL CONDITIONS:** Based on the proposed schedule and the available design information, provide a lump sum fixed fee for all general conditions listed on the included Project Cost Matrix, including the following:

6.2.1 Full-time and part-time supervision, including job superintendents, and project managers.

6.2.2 All job site office record keeping and clerical functions, including all required payroll functions and reporting.

6.2.3 Administration and execution of all safety programs and safety personnel required by the CM's operations and as required to comply with all applicable safety regulations.

6.2.4 Maintaining and completing As-Built drawings, record documents and approved submittals.

6.2.5 Lockable barriers at all access roads, halls, doors, walkways, etc., to prevent unauthorized vehicular, public, and staff traffic in construction areas.

6.2.6 Storage trailers as required for the CM's work.

6.2.7 Job site security consisting of reasonable care and diligence in preventing unauthorized activities on the job site, and the safety and well-being of staff, State employees and the general public at all times.

6.2.8 Layout for line and grade. CM will be responsible for providing adequate horizontal and vertical controls.

6.2.9 Labor and equipment to install and maintain temporary heat, including fuel costs, if and when required to maintain temperature requirements of the facility or for construction.

6.2.10 Coordinating and maintaining dumpster service for all trades. Tipping fees shall be paid by the CM as part of the cost of the work, not as a general condition.

6.2.11 Daily and final cleaning.

6.2.12 Wages and salaries of the Construction Manager's supervisory or administrative personnel engaged at factories, workshops or while traveling, in expediting the production or transportation of materials or equipment required for the Work, but only for that portion of their time required for the Work.

6.2.13 General material handling, labor and equipment. Specific material handling equipment, such as cranes for setting structural steel and masons lifts, may be carried as a cost of the work with the applicable trades.

6.2.14 All required job support vehicles.

6.2.15 All costs associated with conducting weekly job meetings and the distribution of meeting minutes.

6.2.16 Creating and revising the construction schedule. All schedules and schedule revisions are to be posted and distributed to State, Engineer, State's Consultants and Architect, and all trade contractors and suppliers.

6.2.17 Assisting the State in scheduling and planning for move in and fit up.

6.2.18 Commissioning for all systems, including functional verification at startup. This process shall include attendance by required factory representatives, testing equipment at all required speeds, and the completion of necessary controls to allow safe and proper start-up of equipment, and functional performance testing. After startup, this process is to confirm that the individual pieces work together. Tests shall be performed on any moving part including, but not limited to, all mechanical/HVAC systems, building automation systems and controls, electrical equipment, devices, lighting and controls, plumbing and piping systems, water transport and treatment systems; Architectural elements including building envelope, doors and operating/moveable items, etc. See Commissioning Specifications and BGS Design Guidelines at http://bgs.vermont.gov/facilities/forms for more information. The CM shall be responsible for assisting with and coordination of all subcontractors with the Commissioning Agent for observations, inspections, documentation, verification, testing, and reporting.

6.2.19 Punch list and training for all systems, see Specifications and BGS Design Guidelines for more information at http://bgs.vermont.gov/facilities/forms.

6.2.20 All warranty work, including coordinating any and all warranty work required by subcontractors.

6.2.21 Warranty Inspection one month prior to expiration of one-year warranty.

6.3 **CONSTRUCTION SERVICES FEE (Construction Manager's Fee):** The fee for the construction phase of the project shall be a lump sum fixed fee developed using the scope of work indicated herein, as well as the proposed project budget and schedule. For this purpose, the cost of construction will include all competitively bid portions of the work, plus the fixed fee for General Conditions established by this proposal. Construction services for Change Orders shall be included in the overhead and mark-up percentage, included in this proposal. The fee for the construction phase of the project shall include the following:

6.3.1 All direct contractor overhead not included in the general conditions.

6.3.2 All estimating.

6.3.3 All home office and data processing costs.

6.3.4 All indirect contractor overhead costs.

6.3.5 All unidentified contractor overhead costs.

6.3.6 All contractor profit.

6.4 **GENERAL INFORMATION AND REQUIREMENTS:**

6.4.1 The form of agreement will be the STATE OF VT CM CONTRACT between the State and Construction Manager.

6.4.2 The General Conditions for the Contract will be the STATE OF VERMONT GENERAL CONDITIONS FORM AND GENERAL CONDITIONS FOR CONSTRUCTION CONTRACTS.

6.4.3 The State shall receive copies of all proposals, contracts, subcontracts and material price proposals for the proposed GMP and material price proposals for which the CM has estimated using their own forces.

6.4.4 All cost savings will be returned to the State and any unused portion of any contingency or allowance carried in the GMP will revert to the State once the project is complete. The GMP shall include assumptions and clarifications, agreed upon by the CM and State.

6.4.5 Labor rates used in establishing the cost of the work shall not include any payroll administrative costs, clerical costs, general administrative costs, or any costs other than the actual wages paid plus Workers' Compensation insurance costs, unemployment insurance costs, payroll taxes, and employee benefits.

6.4.6 Vermont State Wage Rates documentation and reporting shall apply to this project. Proper wage documentation and reports shall be forwarded to the appropriate State Departments as required.

6.4.7 The cost of the work shall not include any supervisory costs or administrative labor cost. Any supervisory costs or administrative labor costs are to be included in the fixed fee for general conditions or the fee for the contractor CM services.

6.4.8 There shall be no reimbursable costs except costs specifically identified in this RFP. All reimbursable costs shall be at cost with no additional mark up.

6.4.9 The State and the CM will have separate contingencies. Use of the CM's contingency (in the GMP) will only be with the approval of the State and will include proposed scope, costs and reason for change, and shall be maintained in a log and reflected in a change order at the end of the project. At the end of the project, any remaining CM contingency will be returned to the State. Use of State's contingency (not in the GMP) will be added via change order.

6.4.10 At any time during the pre-construction phase, the State may terminate the agreement with the CM without prejudice. In the event the State elects to terminate the agreement with the CM, the CM shall provide copies of all records, bids, estimates, quotations, and other pertinent material developed by the CM during the pre-construction phase. The State shall pay the CM for the portion of the pre-construction services performed up to the point of termination. Upon payment for the portion of the pre-construction services performed, the CM shall have no further claims or rights under the executed agreement. Materials provided by the CM, and paid for by the State, shall become the property of the State.

6.4.11 All invoices including, but not limited to, invoices for materials, labor, equipment rental, and trade contracts used in establishing the cost of the work shall reflect all discounts and rebates of which the CM was able to take advantage. In order to take advantage of quick payment discounts, the State may be willing to make accommodations to meet specific terms. The CM will keep the State appraised of potential discounts and savings. The CM will be allowed to keep savings attributed to quick pay discounts unless the State is able to provide payment in such circumstances in the required time frame.

6.4.12 The State shall be responsible for paying all fees associated with attaining the local and state permits required for the project. Trade permits shall be the responsibility of the CM or regulated trade.

6.4.13 Electronic Submittal Procedures will be used for the submittal process, RFIs, reports, drawings and pay applications throughout the project. This account shall be used through the design process and continue through closeout of the project.

6.4.13.1. The electronic submittal process shall not be used for color samples, color charts, or physical material samples.

6.4.14**. SUBMITTAL EXCHANGE®**: Submittal Exchange® (www.submitalexchange.com) shall be used to provide an on-line database and repository, which shall be used to transmit and track project-related documents. The intent for using this service is to expedite the construction process by reducing paperwork, improving information flow, and decreasing submittal review turnaround time.

6.4.14.1 Project submittals (shop drawing, product data and quality assurance submittals) shall be transmitted by the Contractor in PDF to Submittal Exchange®, where it will be tracked and stored for retrieval for review. After the submittal is reviewed it shall be uploaded back to Submittal Exchange® for action and use by the Contractor and Director's Representatives.

6.4.14.2 The service also tracks and stores documents related to the project such as Request for Information (RFI's), Architect's Supplemental Instructions (ASI), Information Bulletins (IB's), CAD Coordination, Commission, Construction Change Directive (CCD), Contractor's Daily Reports, Minutes, Photos, Quality Control, Shop Drawings, Testing, Closeout Documents including As-Built Drawings, Operations and Maintenance Manuals and other project related documents.

6.4.14.3 Training and support during this project will be provided by Submittal Exchange at no additional cost to the selected contractor(s).

7. GENERAL REQUIREMENTS:

7.1 **PRICING:** Bidders must price the terms of this solicitation at their best pricing. Any and all costs that Bidder wishes the State to consider must be submitted for consideration. If applicable, all equipment pricing is to include F.O.B. delivery to the ordering facility. No request for extra delivery cost will be honored. All equipment shall be delivered assembled, serviced, and ready for immediate use, unless otherwise requested by the State.

7.1.1 Prices and/or rates shall remain firm for the initial term of the contract. The pricing policy submitted by Bidder must (i) be clearly structured, accountable, and auditable and (ii) cover the full spectrum of materials and/or services required.

7.1.2 **Retainage.** In the discretion of the State, a contract resulting from this RFP may provide that the State withhold a percentage of the total amount payable for some or all deliverables, such retainage to be payable upon satisfactory completion and State acceptance in accordance with the terms and conditions of the contract.

7.1.2.1. The State shall withhold 10% retainage for all construction related invoices. At Substantial Completion of the entire project, retainage may be reduced as agreed upon by State, CM and Architect. There shall be no retainage withheld on Pre-Construction services.

7.2 **WORKER CLASSIFICATION COMPLIANCE REQUIREMENTS**: In accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54), Bidders must comply with the following provisions and requirements.

7.2.1 **Self Reporting:** For bid amounts exceeding $250,000.00, Bidder shall complete the appropriate section in the attached Certificate of Compliance for purposes of self-reporting information relating to past violations, convictions, suspensions, and any other information related to past performance relative to coding and classification of workers. The State is requiring information on any violations that occurred in the previous 12 months.

7.2.2 **Subcontractor Reporting:** For bid amounts exceeding $250,000.00, Bidders are hereby notified that upon award of contract, and prior to contract execution, the State shall be

provided with a list of all proposed subcontractors and subcontractors' subcontractors, together with the identity of those subcontractors' workers compensation insurance providers, and additional required or requested information, as applicable, in accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54). This requirement does not apply to subcontractors providing supplies only and no labor to the overall contract or project. This list MUST be updated and provided to the State as additional subcontractors are hired. A sample form is available online at http://bgs.vermont.gov/purchasing-contracting/forms . **The subcontractor reporting form is not required to be submitted with the bid response.**

7.3 **METHOD OF AWARD:** Awards will be made in the best interest of the State. All other considerations being equal, preference will be given first to resident bidders of the state and/or to products raised or manufactured in the state, and then to bidders who have practices that promote clean energy and address climate change, as identified in the applicable Certificate of Compliance.

7.3.1. T**he CM must structure their fees as outlined in the attached Project Cost Matrix**. **Any variation in how the CM structures their fees may result in a disqualified bid.** Once a contract is awarded, changes in the way the fee is apportioned may be considered by the State.

Option 1, Scoring:

7.3.2 **Evaluation Criteria:** The evaluation criteria for this project are:

7.3.2.1 Strength and Experience of the Construction Management Team

7.3.2.2 Process

7.3.2.3 Fee Structure (scored separately after evaluation of other criteria)

7.3.2.3.1 Fixed Fee for Pre-Construction Services

7.3.2.3.2 Fixed Fee for Construction Services (CM Fee)

7.3.2.3.3 Fixed Fee for General Conditions based on 21 months of construction.

7.3.2.3.4 Percent Markup for Overhead and Profit for changes in the work after the GMP has been established.

7.3.2.3.5 Mark-up for Profit on Materials Purchased by the CM.

7.3.2.3.6 Hourly Rate for the Project Manager & Superintendent.

7.3.3 **Proposal Content:** Proposals should **respond to each criterion, in the order listed, in a well-organized manner**.

7.3.3.1 Restrict information to that requested. Unorganized or excessive and irrelevant information will impede review of your proposal and could adversely affect the score for one or more criteria.

7.3.3.2 **Non-responsive proposals will result in disqualification.**

7.3.3.3 **All questions must be answered.**

7.3.4 **CRITERION 1:** Strength and Experience of the CM Team

7.3.4.1 Has the CM had at least five (5) years of experience with Construction Management projects of this size and complexity? Include a list of projects that are similar in size and complexity within the last five (5) years. List project costs, dates of construction and delivery method (Construction Management, Design/Bid/Build, and Design Build).

7.3.4.2 Does the CM have experience with similar facilities? Provide a specific list of those projects, including cost and dates of construction.

7.3.4.3 Describe how the experience of the CM team members is appropriate for this project.

7.3.4.3.1 Provide the name and resume of the Project Manager to be assigned to the project, include a list of projects that he/she has worked on that are similar in size, type of construction and complexity for the last five (5) years with references, project costs, dates of construction and delivery method (Construction Management, Design/Bid/Build, and Design Build).

7.3.4.3.2 Provide the name and resume of Supervisory personnel to be assigned to the project, include a list of projects that he/she has worked on that are similar in size, type of construction and complexity for the last five (5) years with references, project costs, dates of construction and delivery method (Construction Management, Design/Bid/Build, and Design Build).

7.3.4.3.3 Who will represent the CM in the office and the field? Provide resumes, experience and references for key management.

7.3.4.3.4 Has the CM team worked together before on projects that are similar in size and complexity? If so, provide a list of the projects and indicate the team members on those projects, and the cost and years constructed.

7.3.5 **CRITERION 2:** Process

7.3.5.1 Provide an overview of the CM's proposed approach to the project; include anticipated challenges and proposed solutions.

7.3.5.2 Describe the CM's cost control methods for the pre-construction and construction phases.

7.3.5.3 Describe how the CM develops cost estimates, how often they are updated and what degree of accuracy is achieved.

7.3.5.4 Provide an evaluation of the proposed schedule. Include in the CM's evaluation the Date of Commencement, Substantial Completion of each phase of the work, and any other relevant milestones. Does the schedule present a challenge? Can the duration be shortened? Are there other considerations related to the schedule?

7.3.6 **CRITERION 3:** Fee Structure

7.3.6.1 The Committee will compare the fees for the Pre-Construction fee, fixed CM fee, fixed General Conditions, the percent markup for change orders, and the hourly rates.

7.3.6.2 For the Committee to equitably compare the Construction fees for Services and General Conditions, the CM must structure their fees as outlined in the attached Project Cost Matrix.

7.3.6.2.1 Once a contract is awarded, changes in the way the fee is apportioned may be considered by the State.

7.3.6.3 Complete the attached “Hourly Rate Schedule”.

7.3.7 **SCORING:** The scoring by the Evaluation Committee members will be based on the cumulative point score of the evaluation criteria assigned by the Evaluation Committee. This score will be converted to an ordinal scoring system (majority rule). This contract will be awarded to the firm receiving the majority of 1st place votes resulting from the conversion, subject to the approval of the Commissioner of Buildings & General Services.

7.3.8

CRITERIA	WEIGHT	MAXIMUM POINTS	WEIGHTED TOTAL
Strength and Experience of CM Team	3	10	30
Process	2	10	20
Fee Structure			
Pre-Construction Fixed Fee	1	10	10
CM Fixed Fee	1	10	10
General Conditions Fixed Fee	1	10	10
Overhead & Profit on Change Orders	0.5	10	5
Mark-up for Profit on Materials Purchased by the CM	0.5	10	5
Hourly Rate for the Project Manager & Superintendent	1	10	10

PLEASE NOTE: The Project Cost Matrix must not be modified and shall be included with the Bid Proposal.

Project Cost Matrix					
Construction Management Services					
State House Pandemic Mitigation/Renovation Project 115 State Street, Montpelier, VT					
Description (As applicable to project)	**General Conditions**		**CM Fee**	**Cost of Work**	**Comments**
	Included in bid	**To be added at GMP**			
General					
Profit			X		
Corporate Officer's Salary & Benefits			X		
Home Office Rent			X		
Home Office Autos & Travel			X		
Home Office Overhead			X		
Interest on Borrowed Capital			X		
Payroll/Bookkeeping/Clerical			X		
Project Management					
Project Executive			X		
Project Manager	X				
Assistant Project Manager	X				
Project Engineer	X				
Estimator			X		
Scheduler	X				
Superintendent	X				
Assistant Superintendent	X				
MEP Engineer/Manager	X				
Field Engineers	X				
Accounting	X				
Safety Officer			X		
Administrative Support	X				
Purchasing	X				
Travel	X				
Lodging	X				
Temporary Housing	X				
Project Vehicles	X				
Surveying	X				

Project Cost Matrix					
Construction Management Services					
State House Pandemic Mitigation/Renovation Project 115 State Street, Montpelier, VT					
Description (As applicable to project)	**General Conditions**		**CM Fee**	**Cost of Work**	**Comments**
	Included in bid	**To be added at GMP**			
Shop Drawings		X			By subcontractor, processed by CM
As-Built Drawings		X			By subcontractor, processed by CM
O&M Manuals		X			By subcontractor, processed by CM
Mobilization/Demobilization		X			
Safety Program			X		
Mock-ups				X	
Insurance/Bonding/Taxes/Permits					
Builder's Risk Insurance		X			
General Liability Insurance		X			
Workers' Compensation Insurance	X				Includes Management & Hourly Workers
Performance Bond		X			
Payment Bond		X			
Warranty Bond		X			
Sales Tax (where applicable)				X	On rented equipment only
Trade Permits				X	
Temporary Services					
Temporary Plumbing				X	
Temporary Power/Lighting				X	
Temporary Heat & Cooling Equipment				X	
Temporary Fire Protection				X	
Temporary Fire Alarm				X	
Temporary Parking Area				X	
Dust & Noise Control				X	
Safety Procedures				X	
Temporary Heat Fuel				X	
Electric Power Compensation				X	
Winter Conditions				X	
Tool Rental				X	

Project Cost Matrix					
Construction Management Services					
State House Pandemic Mitigation/Renovation Project 115 State Street, Montpelier, VT					
Description (As applicable to project)	**General Conditions**		**CM Fee**	**Cost of Work**	**Comments**
	Included in bid	**To be added at GMP**			
Enclosures				X	
Storage Trailers				X	
Snow Removal				X	
Construction Fencing				X	
Staging Area/Access Roads				X	
Equipment Rentals				X	
Guardrail & Protection at Openings				X	
Barriers				X	
Watchman/Guard Services				X	
Police Details				X	
Lull				X	
Lifts				X	
Scaffolding				X	
Temporary Protection					
General Protection & Safety - Materials				X	
Protect Finished Work				X	
First Aid				X	
Fire Extinguishers				X	
Rubbish, Recycling & Clean-up					
Trash Chutes				X	
Dumpsters & Tipping Fees				X	
Recycling Containers				X	
Street Cleaning				X	
Storm Drain Cleaning				X	
General Cleaning				X	
Final Cleaning				X	
Exterior Window Cleaning				X	
Field Office Expenses					
Office Furniture & Computers	X				
Office Equipment	X				
Office Copier/Scanner/Facsimile	X				

Project Cost Matrix					
Construction Management Services					
State House Pandemic Mitigation/Renovation Project 115 State Street, Montpelier, VT					
Description (As applicable to project)	**General Conditions**		**CM Fee**	**Cost of Work**	**Comments**
	Included in bid	**To be added at GMP**			
Supplies	X				
Temporary Signage	X				
Telephone (hard wired/cellular)	X				
Postage, Messengers	X				
High Speed Wired & Wireless Data	X				
2-Way Radios	X				
Travel	X				
Progress Photos	X				
Miscellaneous General Expenses		X			
Sanitary Facilities				X	
Small Tools				X	
Tools & Consumables				X	
Office Trailer(s) – (CM, Meetings & Subcontractors)		X			
Punch List	X			X	In General Conditions unless provided by subcontractor
Demonstration & Training		X		X	In General Conditions unless provided by subcontractor

7.4 **STATEMENT OF RIGHTS:** The State of Vermont reserves the right to obtain clarification or additional information necessary to properly evaluate a proposal. Vendors may be asked to give a verbal presentation of their proposal after submission. Failure of vendor to respond to a request for additional information or clarification could result in rejection of that vendor's proposal. To secure a project that is deemed to be in the best interest of the State, the State reserves the right to accept or reject any and all bids, in whole or in part, with or without cause, and to waive technicalities in submissions. The State also reserves the right to make purchases outside of the awarded contracts where it is deemed in the best interest of the State.

7.5. **CONFLICTS OF INTEREST:**

7.5.1. **Organizational Conflict of Interest (OCOI):** An OCOI arises when a bidder as a business entity has interests (for example, customers, partners, contracts) that could undermine, or reasonably be perceived to undermine, its faithful and unbiased performance of a contract with the State that may result from this solicitation.

7.5.2. **Personal Conflict of Interest (PCOI):** A PCOI arises when an interest held by an individual, agent or employee of a bidder could undermine, or reasonably be perceived to undermine, its faithful and unbiased performance of a contract with the State that may result from this solicitation.

7.5.3. **Requirements**: The State does not seek to contract with any individual or business entity having a conflict of interest which cannot be mitigated to the State's satisfaction. To ensure the State's awareness of actual, potential, or reasonably perceived PCOIs and OCOIs, bidders shall:

a) Prior to submitting a proposal, conduct an internal review of its current affiliations and activities and identify actual, potential, or reasonably perceived PCOIs or OCOIs relative to a contract with the State that may result from this solicitation.

b) Disclose in your proposal any actual or potential PCOI or OCOI or the existence of any facts that may cause a reasonably prudent person to perceive a PCOI or OCOI with respect to a contract with the State that may result from this solicitation. Disclose, also, any actions proposed to mitigate the PCOI or OCOI.

7.5.4. The State shall have sole discretion to determine whether a PCOI or OCOI can be mitigated to the State's satisfaction and may discuss the conflict with the bidder if and to the extent the State deems discussion necessary to its determination. The State reserves the right to (a) reject from further consideration any proposal having a PCOI or OCIO that cannot be mitigated to the State's full satisfaction and (b) terminate a contract upon discovery that a contractor failed to disclose facts pertaining to a PCOI or OCOI in its proposal, or otherwise misrepresented relevant information to the State.

7.6 **CONTRACT TERMS:** The selected bidder(s) will be expected to sign a contract with the State, including the Standard Contract Form and Attachment C as attached to this RFP for reference. The contract will obligate the bidder to provide the services and/or products identified in its bid, at the prices listed.

7.6.1 **Business Registration:** To be awarded a contract by the State of Vermont a vendor (except an individual doing business in his/her own name) must be registered with the Vermont Secretary of State's office Vermont Secretary of State - Business Services Division and must obtain a Contractor's Business Account Number issued by the Vermont Department of Taxes http://tax.vermont.gov/ .

7.6.2 The contract will obligate the bidder to provide the services and/or products identified in its bid, at the prices listed.

7.6.3 **Payment Terms:** All invoices are to be rendered by the Contractor on the vendor's standard billhead and forwarded directly to the institution or agency ordering materials or services and shall specify the address to which payments will be sent. Payment terms are Net 30 days from receipt of an error-free invoice with all applicable supporting documentation. Percentage discounts may be offered for prompt payments of invoices; however, such discounts must be in effect for a period of 30 days or more in order to be considered in making awards.

7.6.4 **Quality**: If applicable, all products provided under a contract with the State will be new and unused, unless otherwise stated. Factory seconds or remanufactured products will not be accepted unless specifically requested by the purchasing agency. All products provided by the contractor must meet all federal, state, and local standards for quality and safety requirements. Products not meeting these standards will be deemed unacceptable and returned to the contractor for credit at no charge to the State.

8. **CONTENT AND FORMAT OF RESPONSES:** The content and format requirements listed below are the minimum requirements for State evaluation. These requirements are not intended to limit the content of a Bidder's proposal. Bidders may include additional information or offer alternative solutions for the State's consideration. However, the State discourages overly lengthy and costly proposals, and Bidders are advised to include only such information in their response as may be relevant to the requirements of this solicitation.

8.1. **Unsolicited Bidder-Confidential Information Prohibited.** Bidders are hereby expressly directed not to include any confidential information in their proposal submissions, except as specifically permitted below. By submitting a proposal in response to this RFP, bidders acknowledge and agree to abide by the terms and conditions outlined in this document, including the prohibition on submitting confidential information. This prohibition reduces the burden on the State while preventing bidder-confidential information from entering the public record.

8.2. **Disclosure under Public Records Act.** All information received by the State in response to this solicitation will become part of the contract file and subject to public disclosure in accordance with the State's Public Records Act, 1 V.S.A. § 315 et seq. The State may also choose to publicly post responses to this solicitation and the resulting agreement(s), following conclusion of this procurement process.

8.3. **Unsolicited Confidential Materials.** This RFP does not solicit bidder confidential information and bidders are expressly prohibited from providing confidential information in response to this RFP. All materials furnished by bidders in response to this RFP, including those marked as confidential by bidders, are subject to disclosure if requested under the Public Records Act, or public posting.

8.4. **State Not Responsible for Disclosure of Unmarked Bidder-Confidential Information.** It is the sole responsibility of the bidder to ensure that, other than where specifically directed or permitted by this RFP and accordingly marked as described below, no information that should not be publicly disclosed is included in their proposal materials, including any 1) trade secrets or intellectual property, 2) proprietary financial or business information, 3) personal information, or 4) any other information that should not be disclosed to the public. For example, bidders should avoid including specific details of their proprietary technologies or methodologies that they consider confidential, and any references to previous client engagements should be presented in a manner that does not disclose the client's confidential information.

8.5. The bid should include a Cover Letter and Technical Response and Price Schedule.

8.6. **COVER LETTER:**

8.6.1. Exceptions to Contract Terms and Conditions. The State will not consider exceptions to contract terms and conditions included with this RFP.

8.3 **BACKGROUND AND EXPERIENCE.** Provide details concerning the form of business organization, company size and resources; describe particular experiences relevant to the proposed project and list all current or past State projects.

8.4 **GENERAL REFERENCES.** Provide the names, addresses, and phone numbers of at least three companies with whom you have transacted similar business in the last 12 months. You must include contact names who can talk knowledgeably about performance.

8.5 **REPORTING REQUIREMENTS:** Provide a sample of any reporting documentation that may be applicable to the Detailed Requirements of this RFP.

8.6 **PRICING:** Bidders shall submit their pricing information in the Bid Proposal attached to the RFP. Bidders may be required to submit pricing information separate from their bid package, if specifically required above.

8.7 **CERTIFICATE OF COMPLIANCE:** This form must be completed and submitted as part of the response for the proposal to be considered valid.

9. **SUBMISSION INSTRUCTIONS:**

9.1. **CLOSING DATE:** Bids must be received by the State by the due date specified on the front page of this RFP. Late bids will not be considered.

9.1.1. The State may, for cause, issue an addendum to change the date and/or time when bids are due. If a change is made, the State will inform all bidders by posting at the webpage indicated on the front page of this RFP.

9.1.2. There will not be a public bid opening. However, the State will record the name, city and state for any and all bids received by the due date.

9.2. **ELECTRONIC BIDS ONLY:** All bids under this RFP must be submitted electronically in accordance with the submission requirements herein. Electronic bids will be accepted via email submission to BGS.VTBids@vermont.gov The subject line of the email submission must reference the Project Title as indicated on the front page of this RFP.

9.2.1. Bids must consist of a single email with a single, digitally searchable PDF attachment containing all components of the bid. Multiple emails and/or multiple attachments will not be accepted.

9.2.2. There is an attachment size limit of 40 MB. It is the Bidder's responsibility to compress the PDF file containing its bid if necessary in order to meet this size limitation. It is also the Bidder's responsibility to ensure that their own email system can send and receive messages up to this size.

10. **BID SUBMISSION CHECKLIST:**

- ✓ Cover Letter
- ✓ Signed Certificate as to Corporate Principal
- ✓ Signed Bid Bonding Form
- ✓ Response to Criterion
- ✓ General References
- ✓ Project Cost Matrix
- ✓ Signed Certificate of Compliance
- ✓ Signed Bid Proposal

11**. ATTACHMENTS:**

11.1 **SAMPLE** Standard Contract Form for Construction Management Services (February 13, 2026)

11.2 Attachment C: Standard State Contract Provisions (February 13, 2026)

11.3 Certificate of Compliance

11.4 Bid Proposal Form

11.6 Instructions & Bond Forms (Bid Performance, Payment and Guaranty)

11.7 Certificate as to Corporate Principal

11.8 Vermont Prevailing Wage Rate Notice

11.9 General Conditions

11.10 Design Development drawing set dated 10/23/26)

BGS CONTRACT FORM FOR CONSTRUCTION MANAGEMENT SERVICES

1. ***Parties.*** This is a contract for services between the State of Vermont, _____ (hereinafter called "State"), and _____, with a principal place of business in _____, (hereinafter called "Contractor"). Contractor's form of business organization is _____ (incorporated, limited liability company, sole proprietor, etc.). It is the contractor's responsibility to determine if, by law, the contractor is required to be registered with the Vermont Department of Taxes for the purposes of filing required Vermont taxes.

2. ***Subject Matter.*** The subject matter of this contract is services generally on the subject of construction services. Services to be provided by the contractor are described in Attachment A.

3. ***Maximum Amount.*** In consideration of the services to be performed by Contractor, the State agrees to pay Contractor, in accordance with the payment provisions specified in Attachment B, a sum not to exceed $XXX.

   MAXIMUM AMOUNT: $XXX.00. The initial contract value will be written to include the Pre-Construction services ($XXX.00), Fee for Construction Services ($XXX.00), the Fee for General Conditions ($XXX.00) and the anticipated Phase I Cost of Work ($XXX.00) which includes any allowances or reimbursables included in this contract. The final contract value will be determined and adjusted after the establishment of a Guaranteed Maximum Price (GMP), inclusive of the estimated construction cost of Phase II and in accordance with the terms of the contract.

4. ***Contract Term.*** The period of contractor's performance shall begin on XXX, and end on XXX with a substantial work completion date of XXX.

5. ***Prior Approvals.*** This Contract shall not be binding unless and until all requisite prior approvals have been obtained in accordance with current State law, bulletins, and interpretations.

5A. ***Sole Source Contract for Services.*** This Contract results from a "sole source" procurement under State of Vermont Administrative Bulletin 3.5 process and Contractor hereby certifies that it is and will remain in compliance with the campaign contribution restrictions under 17 V.S.A. § 2950. ***Instruction for when to use Section 5A: This language must be included in all sole source contracts, regardless of dollar amount. Otherwise, for contracts that result from an RFP or simplified bid, delete this language.***

6. ***Conflicts of Interest.***

   6.1 **Organizational Conflict of Interest (OCOI):** An OCOI arises when the Contractor as a business entity has interests (for example, customers, partners, contracts) that could undermine, or reasonably be perceived to undermine, its faithful and unbiased performance of this Contract.

   6.2 **Personal Conflict of Interest (PCOI):** A PCOI arises when an interest held by an agent or employee of the Contractor could undermine, or reasonably be perceived to undermine, the faithful and unbiased performance of this Contract.

   6.3 **Requirements:** Contractor shall not have PCOIs or OCOI's with respect to this Contract nor with respect to any other contract(s) it may hold with the State. In order to ensure that PCOIs and OCOI's do not exist, the Contractor shall:

SAMPLE

a. Conduct an internal review of its current affiliations and activities and employees and agents and identify actual, potential, or reasonably perceived PCOIs or OCOIs relative to this Contract.

b. Maintain effective oversight to verify compliance with PCOI and OCOI prohibitions.

c. Prevent PCOIs, including not assigning or allowing an employee to perform any role or task under this contract for which the Contractor has identified a PCOI.

d. Inform employees and agents of their obligation to disclose PCOIs and to comply with the confidentiality provisions and any Non-Disclosure Agreement required by this Contract.

e. Make an immediate and full disclosure, in writing, to the State Point of Contact for the Contract of any actual or potential PCOI or OCOI or the existence of any facts that may cause a reasonably prudent person to perceive a PCOI or OCOI with respect to this Contract.

6. 4 **Remedies:**

a. In the event the State determines that a PCOI or OCOI exists, the State will discuss the matter with the Contractor to determine whether the PCOI or OCOI can be mitigated to the State's satisfaction.

b. If the State does not deem mitigation practicable, the State may terminate all or a portion of the contract. for default or pursue such other remedies as may be permitted by law or this contract.

c. If a contractor fails to disclose facts pertaining to the existence of a potential or actual PCOI or misrepresents relevant information to the State, the State may terminate the contract for default or pursue such other remedies as may be permitted by law or this contract.

7. ***Amendment.*** No changes, modifications, or amendments in the terms and conditions of this contract shall be effective unless reduced to writing, numbered and signed by the duly authorized representative of the State and Contractor.

8. ***Cancellation.*** Cancellation of this contract shall be done in a manner consistent with applicable conditions of Article 14 of Attachment D.

9. ***Attachments***. This contract consists of XXX pages including the following attachments which are incorporated herein:

ATTACHMENT A-1: Scope of Work Overview
ATTACHMENT A-2: State Standard Construction Management Form
ATTACHMENT B: Payment Provisions
ATTACHMENT C: Standard State Provisions for Contracts and Grants, a preprinted form (revision dated 02/13/2026), except that the following numbered paragraphs are hereby deleted in their entirety: 8. Insurance
ATTACHMENT D: General Conditions for Construction Contracts
ATTACHMENT E: GUARANTEED MAXIMUM PRICE AMENDMENT FORM
ATTACHMENT F: IF THERE ARE TECHNICAL SPECIFICATIONS – LIST HERE

SAMPLE

ETC.
Addendum No. 1 dated XXX
Addendum No. 2 dated XXX
ETC.

ATTACHMENT G: PLANS, ETC.
You will need to list the various plans from the INDEX
ETC.
ETC.
ATTACHMENT H: Supplementary General Conditions REMOVE IF NOT APPLICAPLE
ATTACHMENT I: State of Vermont – Federal Terms Supplement (construction) **THIS ATTACHMENT MUST BE INCLUDED IN ANY CONTRACT FOR WHICH FEDERAL FUNDS WILL BE USED. THIS LANGUAGE CAN BE DELETED HERE IF THIS REQUIREMENT IS NOT APPLICABLE.**

10. ***Order of Precedence***. Any ambiguity, conflict or inconsistency in the Contract Documents shall be resolved according to the following order of precedence:

(1) Standard Contract
(2) Attachment C (Standard Contract Provisions for Contracts and Grants rev 02/13/2026)
(3) Attachment D General Terms and Conditions for Construction Contracts
(4) Attachment F
(5) Attachment G
(6) Attachment H
(7) Attachment I State of Vermont – Federal Terms Supplement (construction)
(8) Attachment A-1
(9) Attachment A-2
(10) Attachment E
(11) Attachment B

11. ***Plan Security Certification***. Contractor acknowledges that the plans pertaining to this project have been declared exempt from public record inspection for security reasons and have been disclosed to Contractor as per 1 V.S.A. §317(c)(32) for the performance of the Work specified herein. Contractor hereby expressly acknowledges and agrees to disclose plans only to a licensed architect, engineer, or Contractor who is bidding to work on, or actually performing work on, buildings, facilities, infrastructures, systems, or other structures owned, operated, or leased by the state and specifically related to this project. Furthermore, Contractor agrees to abide by BGS Administrative Policy # 35 and any existing or future directives set forth by the State concerning the copying or distribution of the plans. Fraud, misrepresentation, falsification, or concealing or covering up material facts relating to compliance with these directives may result in one or more of the following actions: termination of the contract(s), suspension of bidding privileges, withholding, deducts, forfeiture of security bonds, and criminal prosecution punishable by imprisonment of up to five years and/or up to a $10,000 fine as per 13 V.S.A. §3016.

12. ***Laws.*** Contractor shall comply with all public laws, ordinances, and requirements respecting the work, obtain and pay for all required permits and comply with regulations of any insurance company which issues a policy on any part of the work or site.

The Contractor agrees to comply with all of the requirements of Title 21 V.S.A., Chapter 5, Subchapter 6 relating to fair employment practices, to the extent applicable, and agrees further to include a similar provision in any and all subcontracts.

SAMPLE

Contractor shall acquaint himself with limits of the property or right-of-way of the State and shall not trespass on other property. All work shall be done in such a manner as not to interfere with the State's operating functions. Contractor and his employees shall familiarize themselves and comply with all posted rules.

13. ***Non-Collusion.*** The State of Vermont is conscious of and concerned about collusion. It should therefore be understood by all that in signing bid and contract documents they agree that the prices quoted have been arrived at without collusion and that no prior information concerning these prices has been received from or given to a competitive company. If there is sufficient evidence to warrant investigation of the bid/contract process by the Office of the Attorney General, all bidders should understand that this paragraph might be used as a basis for litigation. We reserve the right to cancel the contract if we suspect collusion.

14. ***Assignment.*** Contractor shall not have the right to transfer, or assign this Contract or any part thereof, without the prior written consent of the State and such consent shall not relieve the Contractor of any liability or responsibility hereunder. The failure of the State to assert any of its rights hereunder shall not be construed as a waiver thereof.

15. ***Employment of Women and Minorities.*** The State of Vermont encourages an increase in work force participation rates for women and minorities in all aspects of publicly funded capital construction projects. The contractor is encouraged to seek out and employ qualified women and minorities for work covered under this contract. The following provisions and requirements shall apply when the total contract exceeds $50,000, and the general contractor shall require all first-tier subcontractors to comply with these requirements when their contract exceeds $50,000.

    a. At the conclusion of the project, the affected contractors must complete the Construction Employment Report and submit it to the Department of Buildings and General Services for recording. A complete description and dollar value of the work or supplies provided, and percentage value of the overall construction contract for each such M/WBE transaction must be included. Final payment will not be made until this requirement has been satisfied.

16. ***Minority and Women Business Enterprises (M/WBE).*** It is the policy of the State of Vermont that M/WBE's shall have the maximum opportunity to participate in the performance of contracts financed with state funds. All Bidders are encouraged to contact M/WBE's in an effort to recruit them to submit proposals for the work or portions thereof. The contractor shall not discriminate on the basis of race, color, national origin or sexual orientation in the award and performance of subcontracts. The Department of Buildings and General Services shall, in accordance with Executive Order #15-91, and for publicly funded capital construction projects exceeding $50,000.00, comply with the following provisions and requirements. Upon receipt of letter of intent to award contract, the successful bidder shall submit an M/WBE Reporting Form along with certificates of insurance and other pre-contract information. The form includes space to report the name, address and phone number of the M/WBE's contacted, the trade, if their price was included in the bid proposal, and if not, the reason for rejection of their bid. The contract will not be executed until the M/WBE Form is received. Failure to contact M/WBE's on or when projects require sub-contract work may constitute non-compliance and may result in forfeiture of future bidding privileges until resolved.

17. ***Vermont Prevailing Wage Rate Requirements***. Vermont law requires this project comply with the prevailing wage rate requirements set forth in 29 V.S.A. §161(b). The full text of 29 V.S.A. §161 is available at: https://legislature.vermont.gov/statutes/section/29/005/00161.

18. ***Worker Classification.*** State Contracts Compliance Requirements: The Department of Buildings

SAMPLE

and General Services in accordance with Act 54, Section 32 of the Acts of 2009 and for total projects costs exceeding $250,000.00 requires bidders comply with the following provisions and requirements. ((a) (3) For construction and transportation projects over $250,000.00, a payroll process by which during every pay period the contractor collects from the subcontractors or independent contractors a list of all workers who were on the jobsite during the pay period, the work performed by those workers on the jobsite, and a daily census of the jobsite. This information, including confirmation that contractors, subcontractors, and independent contractors have the appropriate workers' compensation coverage for all workers at the jobsite, and similar information for the subcontractors regarding their subcontractors shall also be provided to the department of labor and to the department of banking, insurance, securities, and health care administration, upon request, and shall be available to the public.

19. ***Debarment by the Department of Labor (DOL) or the Department of Financial Regulation.*** The State of Vermont reserves the right to terminate this contract with fifteen (15) day notice to contractor, upon determination that the contractor or a subcontractor to the contractor has been debarred by the Department of Labor (DOL) or the Department of Financial Regulation. Additionally, the State of Vermont reserves the right to withhold payment and / or terminate this contract if contractor fails to provide payroll records requested by the DOL and the Department of Financial Regulation within thirty (30) days of receipt of the request from DOL or the Department of Financial Regulation.

20. ***Miscellaneous.*** Paragraph headings are inserted for convenience only and are not to be relied upon for content. The Contractor is required to ensure that any and all agreements with subcontractors conform to the requirements contained herein and that subcontractors abide by all applicable provisions of this contract including, but not limited to, the requirement that Contractor has complied with and shall continue to comply with all requirements with respect to qualification to do business in Vermont and registration with the office of the Secretary of State. In the event that all or a portion of the project is to be subject to a subcontract, it shall be the responsibility of the Contractor to determine that the subcontractor has complied with the above requirements of registration and qualification as well as all other applicable provisions of this contract.

21. ***Waste Reduction Planning.*** It is the intent of the State of Vermont to significantly reduce the amount of construction debris going into the total waste stream. Contractor is required to prepare and submit a Construction Site Waste Reduction Plan prior to contract execution. A sample plan is available at: https://dec.vermont.gov/waste-management/solid/materials-mgmt/construction-waste . Failure to comply with this provision or a failure to comply with the plan itself will result in withholding of general conditions' money from the contractor's monthly requisition until Contractor has rectified the situation and is in full compliance with these provisions.

SAMPLE

ATTACHMENT A-1: SCOPE OF WORK OVERVIEW

Contractor shall provide all labor, materials and equipment necessary to satisfactorily complete the construction of the XXX Project located at XXX in XXX, Vermont.

Construction shall be in accordance with the construction documents (drawings and specifications) prepared by the Department of Buildings and General Services OR XXX Consultants dated XXX and in accordance with the work described in Attachments D, E, F, G, and Attachment H, I. The following represents a summary description of the Project.

DESCRIPTION OF WORK:

A. The work consists of, but not limited to, the construction of XXXX. Including, but not limited to, the following major components:

   1. XXX
   2. ETC.

B. ETC.

WORK UNDER ANOTHER CONTRACT: REMOVE IF NOT APPLICABLE

A. State shall award separate contract for the following work. Work under this contract shall include:

   1. XXX

B. General: Contractor shall cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract. Contractor shall coordinate the Work of this Contract with work performed under separate contracts.

PRE-ORDER PRODUCTS (PURCHASE BY CONTRACTOR(S)): REMOVE IF NOT APPLICABLE

A. None ordered at this time; however State may place orders with suppliers for specific products, to expedite delivery and for other purposes in State's interests.

B. A copy of each purchase order shall be required to be bound at the back of each referenced Section as an attachment for information to Supplier.

C. On execution of State Contractor Agreement, Contractor shall execute purchase agreement with designated supplier, in accordance with terms stated in State's purchase order to supplier.

D. Contractor responsibility for purchase, handling and installation of pre-ordered products is the same as for other Contractor furnished products.

SAMPLE

ATTACHMENT A-2: STATE STANDARD CONSTRUCTION MANAGEMENT FORM

ARTICLE 1
GENERAL PROVISIONS

1.1 STATEMENT OF EXPECTATIONS

The Construction Manager accepts the relationship of trust and confidence established with the State by this Agreement, and covenants with the State to furnish the Construction Manager's reasonable skill and judgment and to cooperate with the Architect in furthering the interests of the State. The Construction Manager, hereinafter referred to as the Contractor, shall furnish preconstruction, construction, and post-construction administration and management services, and use the Contractor's best efforts to perform the Project in an expeditious and economical manner consistent with the best interests of the State. Both parties understand and agree that cooperation with the Architect is vital to the successful completion of the project.

1.2 GENERAL CONDITIONS

This contract includes the State of Vermont General Conditions for Construction which is incorporated herein by reference. The General Conditions of the contract apply to all phases of construction unless otherwise specifically excepted in this Agreement. The term "Contractor", as used in the General Conditions, shall mean the Construction Manager.

ARTICLE 2

CONTRACTOR'S RESPONSIBILITIES

The Contractor shall perform the services described in this Article. The services to be provided under Sections 2.1 and 2.2 of this Article constitute the Preconstruction Phase services. If the State after consultation with the Architect, and Contractor agree, the Construction Phase may commence before the Preconstruction Phase is completed, in which case both phases shall proceed concurrently.

2.1 PRECONSTRUCTION PHASE

2.1.1 PRELIMINARY EVALUATION

The Contractor shall provide a preliminary evaluation of the State's program and Project budget requirements, each in terms of the other.

2.1.2 CONSULTATION

The Contractor, after consultation with the State and the Architect, shall schedule and attend regular meetings with the State and Architect. The Contractor shall consult with the State and Architect regarding site use and improvements, and the selection of materials, building systems

SAMPLE

and equipment. The Contractor shall provide recommendations on construction feasibility; actions designed to minimize adverse effects of labor or material shortages; time requirements for procurement, installation and construction completion; and factors related to construction cost, including estimates of alternative designs or materials, preliminary budgets and possible economies.

2.1.3 PROJECT SCHEDULES

When Project requirements described in Section 3.1.1 have been sufficiently identified, the Contractor shall prepare, and periodically update, a Project schedule for the Architect's review and the State's approval. The Contractor must obtain the Architect's approval of the portion of the Project schedule relating to the performance of the Architect's services prior to submitting the project schedule to the State for State approval. The Contractor shall coordinate and integrate the Project schedule with the services and activities of the State, Architect and Contractor. As design proceeds, the Project schedule shall be updated to indicate proposed activity sequences and durations, milestone dates for receipt and approval of pertinent information, submittal of a Guaranteed Maximum Price proposal, preparation and processing of shop drawings and samples, delivery of material or equipment requiring long-lead time procurement, the State's occupancy requirements showing portions of the Project having occupancy priority, and proposed date of Substantial Completion. If Project schedule updates indicate that previously approved schedules may not be met, the Contractor shall notify the State and Architect that the previously approved schedule will not be met and the Contractor will make appropriate recommendations to the State and Architect, which shall include the information contained in this Section (2.1.3) and, in addition, include recommendations on how to meet the previously approved schedule; possible measures to avoid future delays; and a revised schedule.

2.1.4 PHASED CONSTRUCTION

The Contractor shall make recommendations to the State and Architect regarding the phased issuance of Drawings and Specifications to facilitate phased construction of the Work taking into consideration such factors as economies, time of performance, availability of labor and materials, and provisions for temporary facilities.

2.1.5 PRELIMINARY COST ESTIMATES

2.1.5.1 When the State has sufficiently identified the Project requirements and the Architect has prepared other basic design criteria, the Contractor shall prepare, for the review of the Architect and approval of the State, a preliminary cost estimate utilizing area, volume or similar conceptual estimating techniques.

2.1.5.2 When Schematic Design Documents have been prepared by the Architect and approved by the State, the Contractor shall prepare for the review of the Architect and approval of the State, a more detailed estimate with supporting data. During the preparation of the Design Development Documents, the Construction Manager shall update and refine this estimate at appropriate intervals agreed to by the Architect and Contractor and approved by the State.

SAMPLE

2.1.5.3 When Design Development Documents have been prepared by the Architect and approved by the State, the Contractor shall prepare a detailed estimate with supporting data for review by the Architect and approval by the State. During the preparation of the Construction Documents, the Contractor shall update and refine this estimate at appropriate intervals agreed to by the State.

2.1.5.4 If any estimate submitted to the State exceeds previously approved estimates or the State's budget, the Contractor shall include with the aforementioned estimate, appropriate recommendations to the State and Architect.

2.1.6 SUBCONTRACTORS AND SUPPLIERS

The Contractor shall seek to develop subcontractor interest in the Project and shall furnish to the State and Architect for their information a list of possible subcontractors, including suppliers who are to furnish materials or equipment fabricated to a special design, from whom proposals will be requested for each principal portion of the Work. The Architect will promptly notify the State in writing if the Architect knows of any objection to such subcontractor or supplier. The State will promptly reply in writing to the Contractor if the State knows of any objection to such subcontractor or supplier.

The receipt of such list shall not require the State or Architect to investigate the qualifications of proposed, subcontractors or suppliers, nor shall it waive the right of the State or Architect to later object to or reject any proposed subcontractor or supplier under the terms of this contract.

2.1.7 LONG LEAD TIME ITEMS

The Contractor shall recommend to the State and Architect a schedule for procurement of long lead time items, which will constitute part of the Work as required to meet the Project schedule. If such long lead time items are procured by the State, they shall be procured on terms and conditions consistent with all applicable state laws, regulations, and bulletins. Upon the State's acceptance of the Contractor's Guaranteed Maximum Price proposal, all contracts for such items shall be assigned by the State to the Contractor, who shall accept responsibility for such items as if procured by the Contractor. The Contractor shall expedite the delivery of long lead time items.

2.1.8 EXTENT OF RESPONSIBILITY

The Contractor does not warrant or guarantee estimates and schedules except as may be included as part of the Guaranteed Maximum Price. The recommendations and advice of the Contractor concerning design alternatives shall be subject to the review and approval of the State and the State's professional consultants. It is not the Contractor's responsibility to ascertain that the Drawings and Specifications are in accordance with applicable laws, statutes, ordinances, building codes, rules and regulations. However, if the Contractor recognizes that portions of the Drawings and Specifications are at variance therewith, the Contractor shall promptly notify the Architect and State in writing.

SAMPLE

2.2 GUARANTEED MAXIMUM PRICE PROPOSAL AND CONTRACT TIME

2.2.1 When the Drawings and Specifications are sufficiently complete, the Contractor shall propose a Guaranteed Maximum Price, which shall be the sum of the estimated Cost of the Work and the Contractor's Fee.

2.2.2 The Drawings and Specifications may not be finished at the time the Guaranteed Maximum Price proposal is prepared. The Contractor shall provide in the Guaranteed Maximum Price for further development of the Drawings and Specifications by the Architect that is consistent with the Contract Documents and reasonably inferable therefrom. "Further development", as that term is used in the previous sentence, does not include the development of additional Drawings and Specifications due to such things as changes in scope, systems, kinds and quality of materials, finishes or equipment, all of which, if required, shall be incorporated by Change Order.

2.2.3 The estimated Cost of the Work shall include the Contractor's contingency, a sum established by the Contractor for the Contractor's exclusive use to cover costs arising under Section 2.2.2 and other costs which are properly reimbursable as a Cost of the Work. Use of the Contractor's contingency shall be documented and made available for review upon request by the State at the time of submission of monthly requisitions. The amount of contingency being carried by the Contractor in the GMP shall be reduced by change order once the project has been completely "bought out" and after reaching milestones that are mutually agreed upon by the Contractor, State and Architect.

2.2.4 BASIS OF GUARANTEED MAXIMUM PRICE

The Contractor shall include with the Guaranteed Maximum Price proposal a written statement of its basis, which shall include:

(a**)** A list of the Drawings and Specifications, including all addenda thereto and the Conditions of the Contract, which were used in preparation of the Guaranteed Maximum Price proposal.

(b**)** A list of allowances and a statement of their basis.

(c**)** A list of the clarifications and assumptions made by the Contractor in the preparation of the Guaranteed Maximum Price proposal to supplement the information contained in the Drawings and Specifications.

(d**)** The proposed Guaranteed Maximum Price, including a statement of the estimated cost organized by trade categories, allowances, contingency, and other items and the fee that comprise the Guaranteed Maximum Price.

(e**)** The Date of Substantial Completion upon which the proposed Guaranteed Maximum Price is based, and a schedule of the Construction Documents issuance dates upon which the date of Substantial Completion is based.

SAMPLE

2.2.5 The Contractor shall meet with the State and Architect to review the Guaranteed Maximum Price proposal and the written statement of its basis. In the event that the State or Architect discover any inconsistencies or inaccuracies in the information presented, the State shall promptly notify the Contractor, who shall make appropriate adjustments to the Guaranteed Maximum Price proposal, its basis or both.

2.2.6 The Guaranteed Maximum Price proposal shall not be effective without written acceptance by the State.

2.2.7 Prior to the State's acceptance of the Contractor's Guaranteed Maximum Price proposal and issuance of a Notice to Proceed, the Contractor shall not incur any cost to be reimbursed as part of the Cost of the Work, unless, prior to incurring the cost, the contractor has submitted a written request to the State and the State has approved the request in writing.

2.2.8 Upon acceptance by the State of the Guaranteed Maximum Price proposal, the Guaranteed Maximum Price and its basis shall be set forth in the Guaranteed Maximum Price Amendment. The Guaranteed Maximum Price shall be subject to additions and deductions by a change in the Work as provided in the Contract Documents and the date of Substantial Completion shall be subject to adjustment as provided in the Contract Documents.

2.2.9 The State shall authorize and cause the Architect to revise the Drawings and Specifications to the extent necessary to reflect the agreed-upon assumptions and clarifications contained in the Guaranteed Maximum Price Amendment. Such revised Drawings and Specifications shall be furnished to the Contractor in accordance with schedules agreed to by the State, Architect and Contractor. The Contractor shall promptly notify the Architect and State if such revised Drawings and Specifications are inconsistent with the agreed upon assumptions and clarifications.

2.2.10 The Guaranteed Maximum Price shall include in the Cost of the Work any taxes applicable to the project at the time the Guaranteed Maximum Price is established.

2.3 CONSTRUCTION PHASE

2.3.1 COMMENCEMENT

The Construction Phase shall commence, in whole or in part, upon receipt of a Notice to Proceed from the Commissioner of Buildings and General Services.

2.3.2 ADMINISTRATION

2.3.2.1 Those portions of the Work that the Contractor has not identified in his or her Guaranteed Maximum Price as being self performed with the Contractor’s own personnel, or as otherwise approved by the State, shall be performed under subcontracts or by other appropriate agreements with the Contractor. The Contractor shall obtain bids from and select Subcontractors and suppliers according to the following conditions and requirements:

SAMPLE

(a) The Contractor shall publically advertise **or** invite three or more bids for any supplier or subcontractor whose proposed work or materials and/or equipment for use on the project exceeds Fifteen Thousand dollars ($ 15,000.00). The term "suppliers" includes those who are to furnish materials or equipment fabricated to a special design, from whom proposals will be requested for each principal portion of the Work.
(b) Subject to approval by the State, the Contractor shall award the bid to one of the three lowest responsible bidders, conforming to specifications, with consideration being given to quantities involved, time required for delivery, purpose for which required, competency and responsibility of bidder, and his or her ability to render satisfactory service.
(c) Subject to approval by the State, the Contractor is permitted to bid on specific aspects of the project. The Contractor must submit a bid consistent with the terms of this contract and present it to the State prior to other bids being opened. Any bid in which the Contractor has submitted a bid must be awarded to the lowest bidder unless approved in writing by the State.
(d) The commissioner of Buildings and General Services has the right to reject any and all bids and to invite other bidders.

The Contractor shall not be required to contract with anyone to whom the Contractor has reasonable objection.

2.3.2.2 If the Guaranteed Maximum Price has been established and a specific bidder among those whose bids are delivered by the Contractor to the State and Architect (1) is recommended to the State by the Contractor; (2) is qualified to perform that portion of the Work; (3) has submitted a bid which conforms to the requirements of the Contract Documents without reservations or exceptions, but the State fails to approve the bid, then the Contractor may require that a change in the Work be issued to adjust the Contract Time and the Guaranteed Maximum Price by the difference between the bid of the person or entity the State failed to approve and the amount of the subcontract or other agreement actually signed with the person or entity eventually selected by Contractor.

2.3.2.3 Subcontracts and agreements with suppliers furnishing materials or equipment fabricated to a special design shall conform to the payment provisions of Sections 7.1.8 and 7.1.9 and shall not be awarded on the basis of cost plus a fee without the prior consent of the State.

2.3.2.4 The Contractor shall schedule and conduct meetings, at least bi-weekly, at which the State, Architect, Contractor and appropriate Subcontractors can discuss the status of the Work. The Contractor shall prepare and promptly distribute meeting minutes.

2.3.2.5 Promptly after the State's acceptance of the Guaranteed Maximum Price proposal, the Contractor shall prepare a schedule in accordance with Section 4.10 of the State of Vermont General Conditions (Attachment F). The schedule must consider the impacts on the Project and Work caused by the State's occupancy requirements.

SAMPLE

2.3.2.6 The Contractor shall provide monthly written reports to the State and Architect on the progress of the entire Work. The Contractor shall maintain a daily log containing a record of weather, Subcontractors working on the site, number of workers, Work accomplished, problems encountered and other similar relevant data as the State may reasonably require. The log shall be available to the State and Architect.

2.3.2.7 The Contractor shall develop a system of cost control for the Work, including regular monitoring of actual costs for activities in progress and estimates for uncompleted tasks and proposed changes. The Contractor shall identify variances between actual and, estimated costs and report the variances to the State and Architect at regular intervals.

2.4 PROFESSIONAL SERVICES

The Contractor shall not be required to provide professional services which constitute the practice of architecture or engineering, unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor has specifically agreed in writing to provide such services. In such event, the Contractor shall cause such services to be performed by appropriately licensed professionals. Contractor shall require licensed professionals to comply with all insurance requirements contained in Attachment C.

2.5 UNSAFE MATERIALS

In addition to the provisions of Section 10.1 of the State's General Conditions, if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance encountered but not created on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the State and Architect in writing. The State, Contractor and Architect shall then proceed in the same manner described in Section 10.2 of the State's General Conditions. The State shall be responsible for obtaining the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to verify that it has been rendered harmless. Unless otherwise required by the Contract Documents, the State shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. The Contractor and Architect will promptly reply to the State in writing stating whether or not either has reasonable objection to the persons or entities proposed by the State. If either the Contractor or Architect has a reasonable objection to a person or entity proposed by the State, the State shall propose another to whom the Contractor and Architect have no reasonable objection.

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ARTICLE 3

STATE'S RESPONSIBILITIES

3.1 INFORMATION AND SERVICES

3.1.1 The State shall provide full information in a timely manner regarding the requirements of the Project, including a program which sets forth the State's objectives, constraints and criteria, including space requirements and relationships, flexibility and expandability requirements, special equipment and systems, and site requirements.

3.1.2 The State shall establish and update an overall budget for each phase of the Project, based on consultation with the Contractor and Architect, which shall include contingencies for changes in the Work and other costs which are the responsibility of the State.

3.1.3 STRUCTURAL AND ENVIRONMENTAL TESTS, SURVEYS AND REPORTS

During the Preconstruction Phase, the State shall furnish the following with reasonable promptness and at the State's expense, and the Contractor shall be entitled to rely upon the accuracy of any such information: reports, surveys, drawings and tests described in Sections 3.1.3.1 through 3.1.3.4 of this Article except to the extent that the Contractor knows of any inaccuracy.

3.1.3.1 Reports, surveys, drawings, tests and any and all permits and their conditions concerning the conditions of the site which are required by law.

3.1.3.2 Surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a written legal description of the site: The surveys and legal information shall include, as available and applicable, grades and lines of streets, alleys, pavements and adjoining property., and structures; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions and necessary data pertaining to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths. All information on the survey shall be referenced to a project benchmark.

3.1.3.3 The services of geotechnical engineers when such services are reasonably required by the scope of the project and are requested by the Contractor. Such services may include, but are not limited to, test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, ground corrosion and resistivity tests, including, necessary operations for anticipating subsoil conditions, with reports and appropriate professional recommendations.

3.1.3.4 Structural, mechanical, chemical, air and water pollution tests, tests for hazardous materials, and other laboratory and environmental tests, inspections and reports, which are required by law.

3.1.3.5 The services of other consultants when such services are reasonably required by the scope

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of the Project and are requested by the Contractor.

3.2 STATE'S DESIGNATED REPRESENTATIVE

The State shall designate a Project Manager who shall have express authority to bind the State with respect to all matters requiring the State's approval or authorization. The Project Manager shall have the authority to make decisions on behalf of the State concerning estimates and schedules, construction budgets, and changes in the Work, and shall render such decisions promptly and furnish information expeditiously, so as to avoid unreasonable delay in the services or Work of the Contractor.

3.3 ARCHITECT

The State shall retain an Architect to provide the Basic Services, including normal civil, structural, mechanical and electrical engineering services, other than cost estimating services. The State shall authorize and cause the Architect to provide those services requested by the Contractor, which must necessarily be provided by the Architect for the Preconstruction and Construction Phases of the Work. Such services shall be provided in accordance with time schedules agreed to by the State, Architect and Contractor. In the event that an Architect has not been utilized for the project, the Project Manager will be responsible for administration of the contract. All other functions, duties, or obligations of the Architect, under these Standard Construction Management Form, in the absence of an Architect, will be performed by the Project Manager.

ARTICLE 4

COMPENSATION AND PAYMENTS FOR PRECONSTRUCTION PHASE SERVICES

The State shall compensate and make payments to the Contractor for Preconstruction Phase services as follows:

4.1 COMPENSATION

4.1.1 For the services described in Section 2.1 (preconstruction phase) and Section 2.2 (work regarding Guaranteed Maximum price) the Contractor's compensation shall be calculated as detailed and described in Contract Documents, specifically the Contractor’s response to the State’s RFP.

4.1.2 Compensation for Preconstruction Phase services shall be equitably adjusted if such services extend beyond the dates established in this Agreement or if the originally contemplated scope of services is significantly modified.

4.1.3 If compensation is based on a multiple of Direct Personnel Expense, Direct Personnel Expense is defined as the direct salaries of the Contractor's personnel engaged in the Project and the portion of the cost of their mandatory and customary contributions and benefits related

SAMPLE

thereto, such as employment taxes and other statutory employee benefits, insurance, sick leave, holidays, vacations, pensions and similar contributions and benefits.

4.2 PAYMENTS

4.2.1 Payments shall be made monthly following presentation of the Contractor's invoice and, where applicable, shall be in proportion to services performed.

4.2.2 Payments are due and payable thirty (30) days from the date the Contractor's invoice is received by the State. Amounts unpaid after the date on which payment is due shall bear interest at the rate entered below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

ARTICLE 5

COMPENSATION FOR CONSTRUCTION PHASE SERVICES

The State shall compensate the Contractor for Construction Phase services as follows:

5.1 COMPENSATION

5.1.1 For the Contractor's performance of the Work as described in Section 2.3 of this Agreement, the State shall pay the Contractor in current funds the Contract Sum consisting of the Cost of the Work as defined in Article 6 and the Contractor's Fee determined as follows for Phase I and Phase II:

1. The initial contract value will be written to include the Pre-Construction services ($XXXX.00), Fee for Construction Services ($XXXX.00), the Fee for General Conditions ($XXXX.00) and the anticipated Phase I Cost of Work ($XXXX.00), which includes any allowances or reimbursables included in the RFP. The final contract value will be determined and adjusted after the establishment of a Guaranteed Maximum Price (GMP), inclusive of the estimated construction cost of Phase II and in accordance with the terms of the contract.

2. Change Orders = XX% overhead plus XX% profit.

5.2 GUARANTEED MAXIMUM PRICE

5.2.1 The sum of the Cost of the Work and the Contractor's Fee are guaranteed by the Contractor not to exceed the amount provided in Guaranteed Maximum Price Amendment (Attachment E), subject to additions and deductions by changes in the Work as provided in the Contract Documents. Such maximum sum as adjusted by approved changes in the Work is referred to in the Contract Documents as the Guaranteed Maximum Price. Costs which would cause the Guaranteed Maximum Price to be exceeded shall be paid by the Contractor without reimbursement by the State.

All savings that result in a total cost below the Guaranteed Maximum Price shall accrue 100 %

SAMPLE

to the owner.

5.3 CHANGES IN THE WORK

5.3.1 Adjustments to the Guaranteed Maximum Price on account of changes in the Work subsequent to the execution of Guaranteed Maximum Price Amendment (Attachment E) may be determined by any of the following methods:

(a) mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
(b) unit prices stated in the Contract Documents or subsequently agreed upon; or
(c) cost to be determined in a manner agreed upon by the parties and a mutually accepted fixed or percentage fee.

5.3.2 In calculating adjustments to subcontracts (except those awarded with the State's prior consent on the basis of cost plus a fee), the terms "cost" and "fee" as used in Section 12.1.3(c) of the State's General Conditions and the terms "costs" and "a reasonable allowance for overhead and profit" as used in Section 12.1.4 of the State's General Conditions shall have the meanings assigned to them in that document and shall not be modified by this Article 5. Adjustments to subcontracts awarded with the State's prior consent on the basis of cost plus a fee shall be calculated in accordance with the terms of those subcontracts.

5.3.3 In calculating adjustments to the Contract, the terms "cost" and "costs" as used in the above referenced provisions of the State's General Conditions shall mean the Cost of the Work as defined in Article 6 of this Agreement and the terms "and a reasonable allowance for overhead and profit" shall mean the Contractor's Fee as defined in Article 5, Section 5.1 of this Agreement.

5.3.4 If no specific provision is made in Article 5, Section 5.1 for adjustment of the Contractor's Fee in the case of changes in the Work, or if the extent of such changes is such, in the aggregate, that application of the adjustment provisions of Section 5.1 will cause substantial inequity to the State or Contractor, the Contractor's Fee shall be equitably adjusted on the basis of the fee established for the original Work.

ARTICLE 6

COST OF THE WORK FOR CONSTRUCTION PHASE

6.0 COSTS TO BE REIMBURSED

The term "Cost of the Work" shall mean costs necessarily incurred by the Contractor in the proper performance of the Work. Such costs shall be at rates not higher than those customarily paid at the place of the Project except with prior consent of the State. The Cost of the Work shall include only the items set forth in this Article 6.

SAMPLE

6.1 LABOR COSTS

(a**)** Wages of construction workers directly employed by the Contractor to perform the construction of the Work at the site or, with the State's agreement, at off-site workshops.

(b**)** Wages or salaries of the Contractor's supervisory and administrative personnel when stationed at the site with the State's agreement.

(c**)** Wages and salaries of the Contractor's supervisory or administrative personnel engaged, at factories, workshops or on the road, in expediting the production or transportation of materials or equipment required for the Work, but only for that portion of their time required for the Work.

(d**)** Costs paid or incurred by the Contractor for taxes, insurance, contributions, assessments and benefits required by law or collective bargaining agreements, and, for personnel not covered by such agreements, customary benefits such as sick leave, medical and health benefits, holidays, vacations and pensions, provided that such costs are based on wages and salaries included in the Cost of the Work under Clauses 6.1(a) through 6.1(c).

6.2 SUBCONTRACT COSTS

Payments made by the Contractor to Subcontractors in accordance with the requirements of the subcontracts.

6.3 COSTS OF MATERIALS AND EQUIPMENT INCORPORATED IN THE COMPLETED CONSTRUCTION

(a**)** Costs, including transportation, of materials and equipment incorporated or to be incorporated in the completed construction.

(b**)** Costs of materials described in the preceding Section 6.3(a) in excess of those actually installed but required to provide reasonable allowance for waste and for spoilage. Unused excess materials, if any, shall be handed over to the State at the completion of the Work or, at the State's option, shall be sold by the Contractor. Any amounts realized from such sales shall be credited to the State as a deduction from the Cost of the Work.

6.4 COSTS OF OTHER MATERIALS AND EQUIPMENT, TEMPORARY FACILITIES AND RELATED ITEMS

(a**)** Costs, including transportation, installation, maintenance, dismantling and removal of materials, supplies, temporary facilities, machinery, equipment, and hand tools not customarily owned by the construction workers, which are provided by the Contractor at the site and fully consumed in the performance of the Work; and cost less salvage value on such items if not fully consumed, whether sold to others or retained by the Contractor. Cost for items previously used by the Contractor shall mean fair market value.

SAMPLE

(b) Rental charges for temporary facilities, machinery, equipment, and hand tools not customarily owned by the construction workers, which are provided by the Contractor at the site, whether rented from the Contractor or others, and costs of transportation, installation, minor repairs and replacements, dismantling and removal thereof. Rates and quantities of equipment rented shall be subject to the State's prior approval.

(c) Costs of removal of debris from the site.

(d) Reproduction costs, costs of telegrams, facsimile transmissions and long-distance telephone calls, postage and express delivery charges, telephone service at the site and reasonable petty cash expenses of the site office.

(e) That portion of the reasonable travel and subsistence expenses of the Contractor's personnel incurred while traveling in discharge of duties connected with the Work.

6.5 MISCELLANEOUS COSTS

(a) That portion directly attributable to this Contract for insurance premiums and bonds.

(b) Sales, use or similar taxes assessed by a governmental authority which are related to the Work and for which the Contractor is liable.

(c) Fees and assessments for the building permit and for other permits, licenses and inspections for which the Contractor is required by the Contract Documents to pay.

(d) Fees of testing laboratories for tests required by the Contract Documents, except those related to nonconforming Work other than that for which payment is permitted by Section 6.7(b).

(e) Royalties and license fees paid for the use of a particular design, process or product required by the Contract Documents; the cost of defending suits or claims for infringement of patent or other intellectual property rights arising from such requirement by the Contract Documents; payments made in accordance with legal judgments against the Contractor resulting from such suits or claims and payments of settlements made with the State's consent; provided, however, that such costs of legal defenses, judgments and settlements shall not be included in the calculation of the Contractor's Fee or the Guaranteed Maximum Price and provided that such royalties, fees and costs are not excluded by the last sentence of Section 4.17 of the State’s General Conditions or other provisions of the Contract Documents.

(f) Deposits lost for causes reasonably attributable to the State through change orders, revisions in scope of project, or undue delay directly attributable to the State.

6.6 OTHER COSTS

SAMPLE

Other costs incurred in the performance of the Work if and to the extent approved in advance in writing by the State.

6.7 EMERGENCIES AND REPAIRS TO DAMAGED OR NONCONFORMING WORK

The Cost of the Work shall also include costs described in Article 6 which are incurred by the Contractor:

(a) In taking action to prevent threatened damage, injury or loss in case of an emergency affecting the safety of persons and property, as provided in Section 10.3 of the State's General Conditions.

(b) In repairing or correcting damaged or nonconforming Work executed by the Contractor or the Contractor's Subcontractors or suppliers, provided that such damaged or nonconforming Work was not caused by the negligence or failure to fulfill a specific responsibility to the State set forth in this Agreement of the Contractor or the Contractor's foremen, engineers or superintendents, or other supervisory, administrative or managerial personnel of the Contractor, or the failure of the Contractor's personnel to supervise adequately the Work of the Subcontractors or suppliers, and only to the extent that the cost of repair or correction is not recoverable by the Contractor from insurance, Subcontractors or suppliers.

6.8 The costs described in Sections 6.1 through 6.8 shall be included in the Cost of the Work notwithstanding any provision of the State's General Conditions or other Conditions of the Contract which may require the Contractor to pay such costs, unless such costs are excluded by the provisions of Section 6.9 of this Agreement.

6.9 COSTS NOT TO BE REIMBURSED

The Cost of the Work shall not include:

(a) Salaries and other compensation of the Contractor's personnel stationed at the Contractor's principal office or offices other than the site office.

(b) Expenses of the Contractor's principal office and offices other than the site office.

(c) Overhead and general expenses.

(d) The Contractor's capital expenses, including interest on the Contractor's capital employed for the Work.

(e) Rental costs of machinery and equipment except as provided in Section 6.4(b).

(f) Costs due to the negligence of the Contractor or to the failure of the Contractor to fulfill a specific responsibility to the State set forth in this Agreement.

SAMPLE

(g) Costs incurred in the performance of Preconstruction Phase Services.

(h) Costs which would cause the Guaranteed Maximum Price to be exceeded.

6.10 DISCOUNTS, REBATES AND REFUNDS

(a) Cash discounts obtained on payments made by the Contractor shall accrue to the State if (1) before making the payment, the Contractor included them in an Application for Payment and received payment therefore from the State, or (2) the State has deposited funds with the Contractor with which to make payments; otherwise, cash discounts shall accrue to the Contractor. Trade discounts, rebates, refunds and amounts received from sales of surplus materials and equipment shall accrue to the State, and the Contractor shall make provisions so that they can be secured.

(b) Amounts which accrue to the State in accordance with the provisions of Section 6.10(a) shall be credited to the State as a deduction from the Cost of the Work.

6.11 ACCOUNTING RECORDS

The Contractor shall keep full and detailed accounts and exercise such controls as may be necessary for proper financial management under this Contract; the accounting and control systems shall be satisfactory to the State. The State and the State's accountants shall be afforded access to the Contractor's records, books, correspondence, instructions, drawings, receipts, subcontracts, purchase orders, vouchers, memoranda and other data relating to this Project, and the Contractor shall preserve these for a period of three years after final payment, or for such longer period as may be required by law.

ARTICLE 7

CONSTRUCTION PHASE

7.1 PROGRESS PAYMENTS

7.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the State shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

7.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month.

7.1.3 Provided an Application for Payment is received by the Architect no later than the twentieth (20th) day of a month, the State shall make payment to the Contractor no later than the twentieth (20th) day of the following month. If an Application for Payment is received by the Architect after the application date fixed above, payment shall be made by the State no later than

SAMPLE

thirty (30) days after the Architect receives the Application for Payment.

7.1.4 With each Application for Payment, the Contractor shall submit payrolls, petty cash accounts, receipted invoices or invoices with check vouchers attached, and any other evidence required by the State or Architect to demonstrate that cash disbursements already made by the Contractor on account of the Cost of the Work equal or exceed (1) progress payments already received by the Contractor; less (2) that portion of those payments attributable to the Contractor's Fee; plus (3) payrolls for the period covered by the present Application for Payment.

7.1.5 Each Application for Payment shall be based upon the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Guaranteed Maximum Price among the various portions of the Work, except that the Contractor's Fee shall be shown as a single separate item. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

7.1.6 Applications for Payment shall show the percentage completion of each portion of the Work as of the end of the period covered by the Application for Payment. The percentage completion shall be the lesser of (1) the percentage of that portion of the Work which has actually been completed or (2) the percentage obtained by dividing (a) the expense which has actually been incurred by the Contractor on account of that portion of the Work for which the Contractor has made or intends to make actual payment prior to the next Application for Payment by (b) the share of the Guaranteed Maximum Price allocated to that portion of the Work in the schedule of values.

7.1.7 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

(a**)** Take that portion of the Guaranteed Maximum Price properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Guaranteed Maximum Price allocated to that portion of the Work in the schedule of values. Pending final determination of cost to the State of changes in the Work, amounts not in dispute may be included even though the Guaranteed Maximum Price has not yet been adjusted by Change Order. The amount of credit to be allowed by the Contractor to the State for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed by Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be calculated on the basis of net increase, if any, with respect to that change.

(b**)** Add that portion of the Guaranteed Maximum Price properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work or, if approved in advance by the State, suitably stored off the site at a location agreed upon in writing.

SAMPLE

(c**)** Add the Contractor's Fee then subtract retainage from the total payment amount requested. The Contractor's Fee shall be computed upon the Cost of the Work described in the two preceding Clauses (a & b) at the rate stated in Section 5.1.1 or, if the Contractor's Fee is stated as a fixed sum in that section, shall be an amount which bears the same ratio to that fixed-sum Fee as the Cost of the Work in the two preceding Clauses bears to a reasonable estimate of the probable Cost of the Work upon its completion.

(d**)** Subtract the aggregate of previous payments made by the State.

(e) Subtract the shortfall, if any, indicated by the Contractor in the documentation required by Section 7.1.4 to substantiate prior Applications for Payment, or resulting from errors subsequently discovered by the State.

(f**)** Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate for Payment as provided in Section 9.6 of State's General Conditions.

7.1.8 Except with the State's prior approval, payments to Subcontractors shall be subject to retention of not less than ten percent (10 %). The State and the Contractor shall agree upon a mutually acceptable procedure for review and approval of payments and retention for subcontracts.

7.1.9 Except with the State's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

7.1.10 In taking action on the Contractor's Applications for Payment, the Architect shall be entitled to rely on the accuracy and completeness of the information furnished by the Contractor and shall not be deemed to represent that the Architect has made a detailed examination, audit or arithmetic verification of the documentation submitted in accordance with Article 7, Section 7.1.4 of this Agreement or other supporting data; that the Architect has made exhaustive or continuous on-site inspections or that the Architect has made examinations to ascertain how or for what purposes the Contractor has used amounts previously paid on account of the Contract. Such examinations, audits and verifications, if required by the State, will be performed by the State's accountants acting in the sole interest of the State.

7.2 FINAL PAYMENT

7.2.1 Final payment shall be made by the State to the Contractor when (1) the Contract has been fully performed by the Contractor except for the Contractor's responsibility to correct nonconforming Work, as provided in Section 13.2 of the State's General Conditions and to satisfy other requirements, if any, which necessarily survive final payment; (2) a final Application for Payment and a final accounting for the Cost of the Work have been submitted by the Contractor and reviewed by the State; and (3) a final Certificate for Payment has then been issued by the Architect; such final payment shall be made by the State not more than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

7.2.2 The amount of the final payment shall be calculated as follows:

SAMPLE

(a**)** Take the sum of the Cost of the Work substantiated by the Contractor's final accounting and the Contractor's Fee; but not more than the Guaranteed Maximum Price.

(b**)** Subtract amounts, if any, for which the Architect withholds, in whole or in part, a final Certificate for Payment as provided in Section 9.6 of State's General Conditions or other provisions of the Contract Documents.

(c**)** Subtract the aggregate of previous payments made by the State.

If the aggregate of previous payments made by the State exceeds the amount due the Contractor, the Contractor shall reimburse the difference to the State.

7.2.3 The State will review and report in writing on the Contractor's final accounting within 30 days after delivery of the final accounting to the Architect by the Contractor. Based upon such Cost of the Work as the State reports to be substantiated by the Contractor's final accounting, and provided the other conditions of Section 7.2.1 of this Agreement have been met, the Architect will, within seven (7) days after receipt of the written report of the State, either issue to the State a final Certificate for Payment with a copy to the Contractor, or notify the Contractor and State in writing of the Architect's reasons for withholding a Certificate as provided in Section 9.6 of the State's General Conditions. The time periods stated in this Section 7.2 supersede those stated elsewhere in the Contract Documents.

7.2.4 If the State reports the Cost of the Work as substantiated by the Contractor's final accounting to be less than claimed by the Contractor, the Contractor shall be entitled to proceed in accordance with Article 9 without a further decision of the Architect. Unless agreed to otherwise, a demand for mediation of the disputed amount shall be made by the Contractor within 60 days after the Contractor's receipt of a copy of the Architect's final Certificate for Payment. Failure to make such demand within this 60-day period shall result in the substantiated amount reported by the State becoming binding on the Contractor. Pending a final resolution of the disputed amount, the State shall pay the Contractor the amount certified in the Architect's final Certificate for Payment.

7.2.5 If, subsequent to final payment and at the State's request, the Contractor incurs costs described in Sections 6.1 through 6.8 which are not excluded by Section 6.9 of this Agreement (1) to correct nonconforming Work, or (2) arising from the resolution of disputes, the State shall reimburse the Contractor such costs and the Contractor's Fee, if any, related thereto on the same basis as if such costs had been incurred prior to final payment, but not in excess of the Guaranteed Maximum Price. If the Contractor has participated in savings, the amount of such savings shall be recalculated and appropriate credit given to the State in determining the net amount to be paid by the State to the Contractor.

SAMPLE

ARTICLE 8

INSURANCE AND BONDS

8.1 INSURANCE REQUIRED OF THE CONTRACTOR

During both phases of the Project, the Contractor shall purchase and maintain insurance as set forth in these Contract Documents (Attachment C).

8.2 INSURANCE REQUIRED OF THE STATE

During preconstruction and construction phases of the Project, the State shall purchase and maintain liability and property insurance, including waivers of subrogation, as set forth in the Contract Documents.

8.3 PERFORMANCE BOND, PAYMENT BOND AND WARRANTY BOND

The Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising there under as specified in the Contract Documents (Instructions to Bidders). Bonds may be obtained through the Contractor's usual source and the cost thereof shall be included in the Cost of the Work.

ARTICLE 9

MISCELLANEOUS PROVISIONS

9.1 DISPUTE RESOLUTION FOR THE PRECONSTRUCTION PHASE

9.1.1 Disputes involving the meaning and application of the terms of the Contract Documents which arise prior to the commencement of the Construction Phase or which relate solely to the Preconstruction Phase services of the Contractor or to the State's obligations to the Contractor during the Preconstruction Phase, may be resolved by mediation if agreement cannot be reached by the parties utilizing the processes outlined in the Contract Documents.

9.1.2 Any mediation conducted pursuant to this Section 9.1 shall be held in accordance with the Construction Industry Mediation Rules of the American Arbitration Association in effect at the time of execution of the Contract Documents, unless the parties mutually agree otherwise. Demand for mediation shall be filed in writing with the other party to this Agreement and with the American Arbitration Association. Any demand for mediation shall be made within thirty (30) days after the claim, dispute or other matter in question has arisen. In no event shall the demand for mediation be made after the date when institution of legal or equitable proceedings based upon such claim, dispute or other matter in question would be barred by the applicable statute of limitations.

9.2 DISPUTE RESOLUTION FOR THE CONSTRUCTION PHASE

SAMPLE

9.2.1 The parties shall endeavor to settle any other claim, dispute or other matter in question arising out of or related to this Agreement or breach thereof by mediation in accordance with the Construction Industry Mediation Rules of the American Arbitration Association currently in effect unless the parties mutually agree otherwise. Any mediation arising under this section shall be conducted in accordance with the provisions of Sections 9.1.2 and 9.1.3.

9.3 OTHER PROVISIONS

Unless otherwise noted, the terms used in this Agreement shall have the same meaning as those in the State's General Conditions.

9.3.1 OWNERSHIP AND USE OF DOCUMENTS

The Drawings, Specifications and other documents prepared by the Architect and the state, and copies thereof furnished to the Contractor, are for use solely with respect to this Project. They are not to be used by the Contractor, Subcontractors, Sub-subcontractors or suppliers on other projects, or for additions to this Project outside the scope of the Work, without the specific written consent of the State and Architect. The Contractor, Subcontractors, Sub-subcontractors and suppliers are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications and other documents prepared by the Architect and State appropriate to, and for use in, the execution of their Work under the Contract Documents.

9.3.2 ASSIGNMENT

The Contractor and the Contractor's partners, successors, assigns and legal representatives are bound to the State and the State's successors and assigns in respect to covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole without written consent of the other. If Contractor attempts to make such an assignment without such consent, Contractor shall nevertheless remain legally responsible for all obligations under the Contract.

ARTICLE 10

TERMINATION OR SUSPENSION

10.1 TERMINATION PRIOR TO ESTABLISHING GUARANTEED MAXIMUM PRICE

10.1.1 Prior to execution by both parties of Guaranteed Maximum Price Amendment establishing the Guaranteed Maximum Price, the State may terminate this Contract at any time without cause, and the Contractor may terminate this Contract for any of the reasons described in Section 14.1 of the State's General Conditions.

10.1.2 If the State or Contractor terminates this Contract pursuant to this Section 10.1 of this Agreement prior to commencement of the Construction Phase, the Contractor shall be equitably compensated for Preconstruction Phase services performed prior to receipt of notice of

SAMPLE

termination; provided, however, that the compensation for such services shall not exceed the compensation set forth in Section 4.1 of this Agreement.

10.1.3 If the State or Contractor terminates this Contract pursuant to this Section 10.1 of this Agreement after commencement of the Construction Phase, the Contractor shall, in addition to the compensation provided in Section 10.1.2, be paid an amount calculated as follows:

(a**)** Take the Cost of the Work incurred by the Contractor.

(b**)** Add the Contractor's Fee computed upon the Cost of the Work to the date of termination at the rate stated in Section 5.1 of this Agreement or, if the Contractor's Fee is stated as a fixed sum in that section, an amount which bears the same ratio to that fixed-sum Fee as the Cost of Work at the time of termination bears to a reasonable estimate of the probable Cost of the Work upon its completion.

(c**)** Subtract the aggregate of previous payments made by the State on account of the Construction Phase. The State shall also pay the Contractor fair compensation, either by purchase or rental at the election of the State, for any equipment owned by the Contractor which the State elects to retain and which is not otherwise included in the Cost of the Work under Section 10.1.3(a) of this Agreement. To the extent that the State elects to take legal assignment of subcontracts and purchase orders (including rental agreements), the Contractor shall, as a condition of receiving the payments referred to in this Article 10, execute and deliver all such papers and take all such steps, including the legal assignment of such subcontracts and other contractual rights of the Contractor, as the State may require for the purpose of fully vesting in the State the rights and benefits of the Contractor under such subcontracts or purchase orders. Subcontracts, purchase orders and rental agreements entered into by the Contractor with the State's written approval prior to the execution of Amendment No. 1 shall contain provisions permitting assignment to the State as described above. If the State accepts such assignment, the State shall reimburse the Contractor with respect to all costs arising under the subcontract, purchase order or rental agreement except those which would not have been reimbursable as Cost of the Work if the contract had not been terminated. If the State elects not to accept the assignment of any subcontract, purchase order or rental agreement which would have constituted a Cost of the Work had this agreement not been terminated, the Contractor shall terminate such subcontract, purchase order or rental agreement and the State shall pay the Contractor the costs necessarily incurred by the Contractor by reason of such termination.

10.2 TERMINATION SUBSEQUENT TO ESTABLISHING GUARANTEED MAXIMUM PRICE

Subsequent to execution by both parties of Guaranteed Maximum Price Amendment, the Contract may be terminated as provided in Article 14 of the State’s General Conditions.

10.2.1 In the event of such termination by the State for reasons included in Section 14.2 of the State’s General Conditions, the amount payable to the Contractor shall not exceed the amount

SAMPLE

the Contractor would have been entitled to receive pursuant to Sections 10.1.2 and 10.1.3 of this Agreement.

10.2.2 In the event of such termination by the Contractor for reasons included in Section 14.1 of the State's General Conditions, the amount to be paid to the Contractor shall not exceed the amount the Contractor would be entitled to receive under Sections 10.1.2 or 10.1.3 above, except that the Contractor's Fee shall be calculated as if the Work had been fully completed by the Contractor, including a reasonable estimate of the Cost of the Work for Work not actually completed.

10.3 SUSPENSION

The Work may be suspended by the State as provided in Article 14 of the State's General Conditions; in such case, the Guaranteed Maximum Price, if established, shall be increased as provided in Section 14.4.2 of the State's General Conditions except that the term "cost of performance of the Contract" in that section shall be understood to mean the Cost of the Work and the term "profit" shall be understood to mean the Contractor's Fee as described in Sections 5.1.1 and 5.3.4 of this Agreement.

ARTICLE 11

OTHER CONDITIONS AND SERVICES

This Agreement entered into as of the day and year first written above.

STATE:	CONTRACTOR:
By:_____	By:_____
Date:_____	Date:_____
ATTEST:_____	ATTEST:_____

MASTER COPY DISTRIBUTED: _____
Contractor, Accounting, PM,
DEPT ID:
FUND SOURCE:
PROJECT #:
BUILDING #:

SAMPLE

ATTACHMENT B – PAYMENT PROVISIONS

The State shall pay the Contractor a maximum amount of $XXXX upon satisfactory completion of the project and acceptance thereof by the state for all work identified in Attachment A, as follows:

1. **Contract Sum**: The State shall pay Contractor compensation as follows: Maximum Amount of $XXXX.00.
   a) Withholding shall be at 10% pursuant to Paragraph #3 in the Additional Terms and Conditions for Construction Renovation OR New Construction.
   b) Payments under this Contract shall be made in a manner consistent with paragraphs 3, 5, 9 and 14 of Attachment D and with applicable conditions in Attachment E.

2. MAXIMUM LIMITING AMOUNT: $*. The initial contract value will be written to include the Pre-Construction services ($*), Fee for Construction Services ($*), the Fee for General Conditions ($*) and the anticipated Phase I Cost of Work ($*) which includes any allowances or reimbursables included in this contract. The final contract value will be determined and adjusted after the establishment of a Guaranteed Maximum Price (GMP), inclusive of the estimated construction cost of Phase II and in accordance with the terms of the contract.

3. Construction Management Fee Schedule: TO BE INSERTED - Project Specific

ITEM	AMOUNT
Fixed Fee for Pre-Construction Services	$
Fixed Fee for Construction Services (Construction Manager's Fee)	$
Fixed Fee for General Conditions	$
Rate (%) for providing 100% Performance, Payment and Guarantee Bonds.	
Percent Markup for Overhead and Profit for changes in the work after the GMP has been established.	

4. Hourly Rate Schedule: The following are a list of all employees that are not charged as part of the CM fee. The far right column indicates how all of the tasks will be charged to the project using the following letter abbreviations: G = General Conditions; F = CM Fee; O = Owner Supplied; W = Cost of the Work; NA = Not Applicable TO BE INSERTED - Project Specific

Employee Title (do not list names)	Base Pay Rate	Est. Hours	Direct Personal Expenses	Billable Rate	Method of Payment
Project Executives					
Project Manager					
Assistant Project Manager					
Project Engineer					
Estimator					

SAMPLE

Clerical					
Accounting					
Superintendent					
Assistant Superintendent(s)					
Scheduler					
Foreman					
Carpenter					
Laborer					
Other:					

5. Project Cost Matrix: TO BE INSERTED - Project Specific

6. LANGUAGE USED UNDER SECTION 3 IS DEPENDENT ON FUNDING SOURCE IDENTIFIED IN RFP. OPTIONS ARE:

   Contractor shall comply with the Prevailing Mean Wage Rate requirements as required by law (29 V.S.A. §161(b)) and as stipulated in these Contract Documents.

   OR

   Contractor shall comply with the Davis-Bacon Act. Wages shall be paid using rates no less than those established under the Davis-Bacon prevailing wage rates.

   OR

   This project is being funded using both federal funds and Vermont Capital Construction Act funds. Contractor shall comply with the Davis-Bacon Act. In addition to the various requirements of the Davis-Bacon Act, wages shall be paid using no less than the higher of either the federal (Davis-Bacon Act) or Vermont's prevailing wage rates.

   OR

   REMOVE ALL IF NOT APPLICAPLE.

7. The amount of compensation paid to the undersigned for work deemed outside the scope as determined by the State will be in one of the following manners as directed by the Owner.

   a. A price agreed upon between the Owner and the Contractor.
   b. A price determined by adding XX% for overhead and profit for changes in the work after the GMP has been established.
   c. For the Contractor's subcontractors: A price determined by adding XX% for overhead and profit to the total direct cost of any extra work excluding unit pricing.
   d. For the Contractor's subcontractors: A price determined by extending unit price work.

8. Contractor shall provide a detailed description of all work completed with each invoice.

SAMPLE

9. The State shall not pay for any unauthorized labor, materials, equipment or expenses of Contractor.

10. Any services outside of agreement shall not be allowed.

11. Upon substantial completion of the work, and upon receipt of approved O&M manuals and record drawings, the State shall make payment, reflecting adjustment in retainage, if any, for work to be completed or corrected.

12. Upon certification by the State that all work has been completed, the following documentation must be received prior to final payment being made:

    a) Contractor shall keep State property free from liens arising hereunder. Prior to any progress payment, the State may require Contractor to furnish waivers of liens or such other evidence of compliance herewith. The State shall require every Contractor to furnish final lien waivers prior to final payment.

    b) At the conclusion of the project, the affected contractors must complete the Construction Employment Report and submit it to the Dept. of Buildings and General Services for recording. A complete description and dollar value of the work or supplies provided, and percentage value of the overall construction contract for each such M/WBE transition must be included. Final payment will not be made until this requirement has been satisfied.

13. Payment Terms: Net 30. Payment of progress and final invoices shall be due from the State 30 days after delivery of an invoice free of errors in documentation and approved by the State's project representative. Retainage withheld, if any, is due from the State within 30 days after receipt of the final invoice, which may be submitted after final acceptance of the work or issuance of a Certificate of Substantial Completion less an amount, as determined by the State, to complete unfinished work.

14. Contractor shall submit invoices to the Department of Buildings and General Services on Contractor's standard billhead and shall specify the address to which payments will be sent. Invoices shall include documentation and itemization of all work performed during that period, including a detail of services, dates and hours of work performed and the rate of pay. Invoicing must also contain a detail of items and costs for allowable reimbursable expenses.

15. Invoices shall include documentation of when work was performed. Contractor shall invoice the State at:

    State of Vermont
    Department of Buildings and General Services
    2 Governor Aiken Avenue
    Montpelier, VT 05633-5801
    Attention: Project Manager

SAMPLE

GUARANTEED MAXIMUM PRICE AMENDMENT (ATTACHMENT E)
BETWEEN STATE AND CONTRACTOR

Pursuant to Article 2, Section 2 of the Agreement, dated _____between *The State of Vermont* and XXXXX *(Construction Manager),* for the XXXX Project at XXXX, XXXX, Vermont *(the Project),* the State and Contractor establish a Guaranteed Maximum Price and Contract Time for the Work as set forth below.

ARTICLE I

GUARANTEED MAXIMUM PRICE

The Contractor's Guaranteed Maximum Price for the Work, including the estimated Cost of the Work as defined in Article 6 and the Contractor's Fee as defined in Article 5 of this agreement, is _____ (write amount out) Dollars ($).
This Price is for the performance of the Work in accordance with the Contract Documents listed and attached to this Amendment and marked Exhibits A through F, as follows:

Exhibit A Drawings, Specifications, addenda and General, Supplementary and other Conditions of the Contract on which the Guaranteed Maximum Price is based, pages through, dated

Exhibit B Allowance items, pages through , dated

Exhibit C Assumptions and clarifications made in preparing the Guaranteed Maximum Price, pages through , dated

Exhibit D Completion schedule, pages through , dated

Exhibit E Alternate prices, pages through , dated

Exhibit F Unit prices, pages through , dated

ARTICLE II

CONTRACT TIME

The date of Substantial Completion established by this Amendment is:_____.

STATE:	CONTRACTOR:
By:_____	By:_____
Date:_____	Date: _____
ATTEST:_____	ATTEST:_____

SAMPLE

ATTACHMENT C: STANDARD STATE PROVISIONS
FOR CONTRACTS AND GRANTS
REVISED FEBRUARY 13, 2026

"Attachment C: Standard State Provisions for Contracts and Grants" (revision version dated February 13, 2026) constitutes part of this Agreement and is hereby incorporated by reference as if fully set forth herein and shall apply to the Contractor and to the purchase of all goods and/or services by the State under this Agreement. A copy of this document is available online at: https://bgs.vermont.gov/purchasing-contracting/forms.

CERTIFICATE OF COMPLIANCE

For your bid to be considered valid, this form must be completed in its entirety, executed by a duly authorized representative of the bidder, and submitted as part of the response to the proposal.

A. **NON COLLUSION:** Bidder hereby certifies that the prices quoted have been arrived at without collusion and that no prior information concerning these prices has been received from or given to a competitive company. If there is sufficient evidence to warrant investigation of the bid/contract process by the Office of the Attorney General, bidder understands that this paragraph might be used as a basis for litigation.

B. **CONTRACT TERMS:** Bidder hereby acknowledges that is has read, understands and agrees to the terms of this RFP, including Attachment C: Standard State Contract Provisions, and any other contract attachments included with this RFP.

C. **WORKER CLASSIFICATION COMPLIANCE REQUIREMENT:** In accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54), the following provisions and requirements apply to Bidder when the amount of its bid exceeds $250,000.00.

Self-Reporting. Bidder hereby self-reports the following information relating to past violations, convictions, suspensions, and any other information related to past performance relative to coding and classification of workers, that occurred in the previous 12 months.

Summary of Detailed Information	Date of Notification	Outcome

Subcontractor Reporting. Bidder hereby acknowledges and agrees that if it is a successful bidder, prior to execution of any contract resulting from this RFP, Bidder will provide to the State a list of all proposed subcontractors and subcontractors' subcontractors, together with the identity of those subcontractors' workers compensation insurance providers, and additional required or requested information, as applicable, in accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54), and Bidder will provide any update of such list to the State as additional subcontractors are hired. Bidder further acknowledges and agrees that the failure to submit subcontractor reporting in accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54) will constitute non-compliance and may result in cancellation of contract and/or restriction from bidding on future state contracts.

D. **Executive Order 05 – 16: Climate Change Considerations in State Procurements Certification**

Bidder certifies to the following (Bidder may attach any desired explanation or substantiation. Please also note that Bidder may be asked to provide documentation for any applicable claims):

1. Bidder owns, leases or utilizes, for business purposes, space that has received:
   - ❑ Energy Star® Certification
   - ❑ LEED®, Green Globes®, or Living Buildings Challenge℠ Certification
   - ❑ Other internationally recognized building certification:

_____

2. Bidder has received incentives or rebates from an Energy Efficiency Utility or Energy Efficiency Program in the last five years for energy efficient improvements made at bidder's place of business. Please explain:

_____

3. Please Check all that apply:
   - ❑ Bidder can claim on-site renewable power or anaerobic-digester power ("cow-power"). Or bidder consumes renewable electricity through voluntary purchase or offset, provided no such claimed power can be double-claimed by another party.
   - ❑ Bidder uses renewable biomass or bio-fuel for the purposes of thermal (heat) energy at its place of business.
   - ❑ Bidder's heating system has modern, high-efficiency units (boilers, furnaces, stoves, etc.), having reduced emissions of particulate matter and other air pollutants.
   - ❑ Bidder tracks its energy consumption and harmful greenhouse gas emissions. What tool is used to do this? _____
   - ❑ Bidder promotes the use of plug-in electric vehicles by providing electric vehicle charging, electric fleet vehicles, preferred parking, designated parking, purchase or lease incentives, etc..
   - ❑ Bidder offers employees an option for a fossil fuel divestment retirement account.
   - ❑ Bidder offers products or services that reduce waste, conserve water, or promote energy efficiency and conservation. Please explain:

_____

_____

4. Please list any additional practices that promote clean energy and take action to address climate change:

_____

_____

_____

E. **Executive Order 02 – 22: Solidarity with the Ukrainian People**

❑ By checking this box, Bidder certifies that none of the goods, products, or materials offered in response to this solicitation are Russian-sourced goods or produced by Russian entities. If Bidder is unable to check the box, it shall indicate in the table below which of the applicable offerings are Russian-sourced goods and/or which are produced by Russian entities.

An additional column is provided for any note or comment that you may have.

Provided Equipment or Product	Note or Comment

F. **Certification Regarding Use of Contract Funds for Lobbying.** The following provision is applicable to the Contractor for contracts over $100,000.00, and Contractor shall include this clause in all its subcontracts over $100,000.00.

1. The prospective contractor certifies, to the best of his or her knowledge and belief, under the penalties of perjury under the laws of the State of Vermont and the United States that on behalf of the person, firm, association, or corporation he or she represents, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective contractor also agrees that they shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

Bidder Name: _____ Contact Name: _____

Address: _____ Fax Number: _____

_____ Telephone: _____

_____ E-Mail: _____

By: _____ Name: _____
Signature of Bidder (or Representative) (Type or Print)

END OF CERTIFICATE OF COMPLIANCE

State of Vermont
Department of Buildings and General Services

CONSTRUCTION MANAGEMENT SERVICES
STATE HOUSE MITIGATION/RENOVATION PROJECT
115 STATE STREET, MONTPELIER, VT

BID PROPOSAL FORM

TO: STATE OF VERMONT
Agency of Administration
Department of Buildings and General Services
133 State Street, 5th Floor | Montpelier VT 05633-8000
Montpelier, Vermont 05609-3001

DATE: _____

Ladies and Gentlemen:

The undersigned proposes to provide Construction Management (CM) Services for the State House Mitigation/Renovation Project, 115 State Street, Montpelier, Vermont. These services shall be provided in accordance with the requirements of this Request for Proposal and its attachments prepared by the Department of Buildings and General Services for the following fee based on a total preliminary Guaranteed Maximum Price (GMP) of $19,659,500.00 (including Fixed Fees and Pre-Construction Services).

A. CONSTRUCTION MANAGEMENT FEE:

ITEM	**AMOUNT**
Fixed Fee for Pre-Construction Services	$
Fixed Fee for Construction Services (Construction Manager's Fee)	$
Fixed Fee for General Conditions based on attached list.	$
Total Fees	**$**
Rate (%) for providing 100% Performance, Payment and Guarantee Bonds.	%
Percent (%) Markup for Overhead and Profit for changes in the work after the GMP has been established (change orders)	%
Percent (%) Mark-up for Profit on Materials Purchased by the CM for self-performed work	%

The initial contract value will be written to include the Fee for Pre-Construction Services, Fee for Construction Services and the Fee for General Conditions based on a preliminary estimated GMP of $19,659,500.00. The final contract value will be determined and adjusted after the establishment and approval of a Guaranteed Maximum Price (GMP), in accordance with the terms of the contract.

B. HOURLY RATE SCHEDULE: Instructions: List the following for all employees that are <u>not</u> charged as part of the CM fee.

Employee Title (do not list names)	Base Pay Rate*	Direct Personal Expenses	Billable Rate
Key Personnel or Project Executives			
Project Manager			
Assistant Project Manager			
Project Engineer			
MEP Coordinator			
Estimator			
Clerical			
Accounting			
Superintendent			
Assistant Superintendents			
Safety Officer			
Scheduler			
Foreman			
Carpenter			
Laborer			
Other:			

*Prevailing minimum wage rate plus fringe benefits

It is the Bidder's responsibility to thoroughly read and comply with all instructions and requirements of this bid solicitation.

<u>Please Note</u>: The Project Cost Matrix must be included with this Bid Proposal.

The undersigned certifies that they are familiar with the contents of this Proposal and that they have examined the site and accept the existing conditions as those under which the work will be done.
The undersigned further agrees:

1. To hold their bid open for sixty (60) days after this day of Bid Opening.
2. To accept the provisions of the "Instructions for CM Firms Submitting Proposals" and "State Standard Construction Management Form", "General Conditions" and the "Instructions to Bidders".
3. To enter into and execute a contract, if awarded on the basis of this proposal within ten (10) calendar days of notification of award.
4. To accomplish the work in accordance with the Bid Documents.
5. The substantial completion date will be **December 1, 2030**, the project completion date shall be by **January 1, 2031,** and the contract completion date will be **January 1, 2032**, includes 1-year warranty period.
6. The amount of compensation paid to subcontractors for extra work and change orders in one of the following manners as directed by the Owner.
   a. A price agreed upon between the Owner and the Contractor.
   b. A price determined by adding 15% for overhead and profit to the total direct cost of any extra work excluding unit pricing.
   c. A price determined by extending unit price work.

Corporate Seal (If Bidder is a Corporation)

Contractor Name: _____ Contact Name: _____

State of Corporation: _____ VT Business Account #: _____

Address: _____ Fax Number: _____

_____ Telephone: _____

_____ E-Mail: _____

By: _____ Name: _____
Signature (Bid Not Valid Unless Signed) (Type or Print)

NOTE: If Bidder is a Partnership, give full names of all Partners.

END OF BID PROPOSAL

STATE OF VERMONT
AGENCY OF ADMINISTRATION
DEPARTMENT OF BUILDINGS AND GENERAL SERVICES
MONTPELIER, VERMONT

I N S T R U C T I O N S

BID•PERFORMANCE•PAYMENT•GUARANTY BONDS

1. This form shall be used whenever a bond is required. There shall be no deviation from this form except as authorized by the Department Commissioner.

2. The bond shall be procured from an insurance company authorized to do business in the State of Vermont.

3. The name, including full legal name and residence of each individual party to the bond, shall be inserted in the body thereof, and each such party shall sign the bond with their usual signature on the line opposite the scroll seal.

4. If the principals are partners, their individual names shall appear in the body of the bond, with the recital that they are partners composing a firm, naming it, and all the members of the firm shall execute the bond as individuals.

5. The signature of a witness shall appear in the appropriate place, attesting the signature of each individual party to the bond.

6. If the principal or surety is a corporation, the name of the state in which incorporated shall be inserted in the appropriate place in the body of the bond, and said instrument shall be executed and attested under the corporate seal as indicated in the form.

7. The official character and authority of the person or persons executing the bond for the principal if a corporation, shall be certified by the secretary or assistant secretary, according to the form attached thereto. In lieu of such certificate there may be attached to the bond copies of as much of the records of the corporation as required to show the official character and authority of the officer signing, duly certified by the secretary or assistant secretary, under the corporate seal, to be true copies.

8. The date of the performance and payment bonds must be no later than the date of the instrument for which it is given.

9. The guaranty bond is for a period of one year and begins on the date of substantial completion established by the architect or project manager and approved by the Department Commissioner.

STATE OF VERMONT
DEPARTMENT OF BUILDINGS AND GENERAL SERVICES
PURCHASING AND CONTRACT ADMINISTRATION DIVISION
MONTPELIER VT 05633

BID BOND

Know All Men By These Presents, that we, ... as principal, and ..... as surety, are held and firmly bound unto the State of Vermont, hereinafter called the State, in the penal sum of .... Dollars Lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such, that whereas the principal has submitted the accompanying bid, dated ....., 2026 for .....

Now, therefore, if the principal shall not withdraw said bid within the period specified therein after the opening of the same, or, if no period be specified, within sixty (60) days after said opening, and shall within the period specified therefore, or if no period be specified, within ten (10) days after the prescribed forms are presented to him for signature, enter into a written contract with the State, in accordance with the bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract, or in the event of the withdrawal of said bid within the period specified, or the failure to enter into such contract and give such bond within the time specified, if the principal shall pay the State the difference between the amount specified in said bid and the amount for which the State may procure the required work and/or supplies, if the later amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

In witness whereof, the above-bounden parties have executed this instrument under their several seals this ..... day of ....., 2026 the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

in presence of-

.... (Seal)
(Individual Principal)

....
(Address) (Business Address)

.... (Seal)
(Individual Principal)

....
(Address) (Business Address)

....
(Address) (Business Address)

Attest:

.....
(Corporate Principal)

.....
(Business Address)

..... By.....(Affix)
Corporate Seal)

Attest:

.....
(Corporate Surety)

.....
(Business Address)

..... By.....(Affix)
Corporate Seal)

STATE OF VERMONT
DEPARTMENT OF BUILDINGS AND GENERAL SERVICES
PURCHASING AND CONTRACT ADMINISTRATION
MONTPELIER VT 05633

PERFORMANCE BOND

Know All Men By These Presents, that we, ... as principal, and .....
..... as surety, are held and firmly bound unto the State of Vermont, hereinafter called the State, in the penal sum of .....
..... Dollars for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such, that whereas the principal entered into a certain contract, which contract is by reference made a part hereof, with the State, dated ....., 2026 for

Now, therefore, if the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the State, with or without notice to the surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue.

In witness whereof, the above-bounden parties have executed this instrument under their several seals this ..... day of ....., 2026 the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

in presence of-

.... (Seal)
(Individual Principal)

....
(Address) (Business Address)

.... (Seal)
(Individual Principal)

....
(Address) (Business Address)

....
(Address) (Business Address)

Attest:

.....
(Corporate Principal)

.....
(Business Address)

..... By .....(Affix)
Corporate Seal)

Attest:

.....
(Corporate Surety)

.....
(Business Address)

..... By .....(Affix)
Corporate Seal)

STATE OF VERMONT
DEPARTMENT OF BUILDINGS AND GENERAL SERVICES
PURCHASING AND CONTRACT ADMINISTRATION DIVISION
MONTPELIER VT 05633

PAYMENT BOND

(Labor and Material)

Know All Men By These Presents, that we, ... as principal, and
.....
..... as surety,
are held and firmly bound unto the State of Vermont, hereinafter called the State, in the penal sum of .....
..... Dollars
for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such, that whereas the principal entered into a certain contract, which contract is by reference made a part hereof, with the State, dated ....., 2026 for

Now, therefore, if the principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of such modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

In witness whereof, the above-bounden parties have executed this instrument under their several seals this ..... day of ....., 2026 the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

in presence of-

.... (Seal)
(Individual Principal)

....
(Address) (Business Address)

.... (Seal)
(Individual Principal)

....
(Address) (Business Address)

....
(Address) (Business Address)

Attest:

.....
(Corporate Principal)

.....
(Business Address)

..... By .....(Affix)
Corporate Seal)

Attest:

.....
(Corporate Surety)

.....
(Business Address)

..... By .....(Affix)
Corporate Seal)

STATE OF VERMONT
DEPARTMENT OF BUILDINGS AND GENERAL SERVICES
PURCHASING AND CONTRACT ADMINISTRATION
MONTPELIER VT 05633

GUARANTY BOND

Know All Men By These Presents, that we, ... as principal, and .... as surety, are held and firmly bound unto the State of Vermont, hereinafter called the State, in the penal sum of .... Dollars for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such, that whereas the principal entered into a certain contract, which contract is by reference made a part hereof, with the State, dated ....., 2026 for

Now, therefore, the condition of the above obligation is such, that if the said principal will make good any faults or defects in the work, arising from improper or defective workmanship or materials, undertaken in said contract and discovered on or before ....., then this obligation shall be null and void; otherwise it shall remain in full force and effect.

In witness whereof, the above-bounden parties have executed this instrument under their several seals this ..... day of....., 2026 the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

in presence of-

.... (Seal)
(Individual Principal)

....
(Address) (Business Address)

.... (Seal)
(Individual Principal)

....
(Address) (Business Address)

....
(Address) (Business Address)

Attest:

.....
(Corporate Principal)

.....
(Business Address)

..... By .....(Affix)
Corporate Seal)

Attest:

.....
(Corporate Surety)

.....
(Business Address)

..... By .....(Affix)
Corporate Seal)

(AA-PUR-107) 06/12/96

STATE OF VERMONT
AGENCY OF ADMINISTRATION
BUILDINGS AND GENERAL SERVICES
MONTPELIER, VERMONT

CERTIFICATE AS TO CORPORATE PRINCIPAL

I,……, certify that I am the…….secretary of the Corporation named as principal in the within bond, that……. who signed the said bond on behalf of the principals was the……of said corporation; that I know his signature, and his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed, and attested for and in behalf of said corporation by authority of its governing body.

(Corporate)
(Seal

VERMONT PREVAILING WAGE RATE NOTICE*

1. EMPLOYEES OF THE GENERAL CONTRACTOR, OR SUBCONTRACTORS TO THE GENERAL CONTRACTOR ON THIS PROJECT, ARE TO BE PAID NOT LESS THAN VERMONT'S PREVAILING WAGE AND FRINGE BENEFIT RATE SCHEDULE POSTED ABOVE THIS NOTICE.

2. A COMPLETE LIST OF OCCUPATIONS AND ASSOCIATED WAGE RATES ARE AVAILABLE FROM THE VERMONT DEPARTMENT OF LABOR AND ON THE INTERNET AT: http://www.vtlmi.info/lmipub.htm

3. WHEN PROJECTS ARE FUNDED FROM VERMONT CAPITAL CONSTRUCTION ACT FUNDS AND/OR AMERICAN RESCUE PLAN ACT (ARPA) FUNDS, AND FEDERAL FUNDS THAT REQUIRE COMPLIANCE WITH THE DAVIS-BACON ACT, CONTRACTORS ARE REQUIREDTO UTILIZE THE HIGHER OF EITHER THE FEDERAL DAVIS-BACON ACT PREVAILING WAGE RATES OR VERMONT'S PREVAILING WAGE AND FRINGE BENEFIT RATES FOR EACH OCCUPATION.

4. FOR ALL QUESTIONS REGARDING THE FEDERAL DAVIS BACON ACT, CONTACT USDOL AT 603-606-3115 OR 603-606-3137.

5. IF A PREVAILING WAGE RATE IS NOT LISTED FOR A SPECIFIC TRADE UNDER VERMONT'S PREVAILING WAGE RATE, CONTACT THE VERMONT DEPARTMENT OF LABOR TO DISCUSS WHETHER A PREVAILING WAGE RATE IS REQUIRED FOR THE PARTICULAR POSITION OR TRADE.

6. EMPLOYEES MAY REPORT ALLEGED VIOLATIONS OF THESE PROVISIONS BY CONTACTING THE VERMONT DEPARTMENT OF LABOR AT 802-828-4301 OR 802-828-0267. AN EMPLOYEE WHO REPORTS A VIOLATION MAY DO SO WITHOUT RETALIATION OR REPRISAL BY THE EMPLOYER.

THE VERMONT DEPARTMENT OF LABOR WILL INVESTIGATE AND TAKE ENFORCEMENT ACTION TO REMEDY VIOLATIONS OF THE VERMONT PREVAILING WAGE LAW, AS NECESSARY. IN ADDITION, THE DEPARTMENT IS REQUIRED BY LAW TO CONDUCT RANDOM AUDITS OF PREVAILING WAGE RATE COMPLIANCE.

VDOL CONTACT INFORMATION: Commissioner's Office at 802-828-4301 Information on Vermont's Prevailing Wage: http://www.vtlmi.info/lmipub.htm

*Note: This document must be posted with Vermont's Prevailing Wage Rate Schedule.

Vermont's Prevailing Wage Rate must also incorporate the required fringe benefit rate of 42.5% minus any allowed credit based upon benefits provided to an employee.

Revised 06/17/2022

STATE OF VERMONT
STANDARD FORM

GENERAL CONDITIONS FOR CONSTRUCTION CONTRACTS
(May 22, 2019)

The following general conditions are for use with all construction contracts with the State of Vermont, administered through the Department of Buildings and General Services.

These general conditions will be attached to, and become part of, the Contract Documents.

If there is a conflict between the terms and conditions stated in these general conditions and the terms and conditions contained in the State-Contractor Agreement; the terms of the State-Contractor Agreement control.

ARTICLE 1

CONTRACT DOCUMENTS

1.1 DEFINITIONS

The term "State-Contractor Agreement" refers to the specific agreement between the State of Vermont and a particular contractor whereby the State and the contractor identify, explain and agree to the specific contractual obligations of each party and identify the nature and scope of a particular project. The "State-Contractor Agreement" will utilize one of the following construction delivery methods: (i) A general contractor hired by the State to provide all services necessary for the construction of the particular project. The general contractor is responsible for completing the particular project for a fixed price; (ii) a construction manager hired by the State to provide professional services and act as a consultant to the State in the design development and construction phases and to deliver the particular project for a Guaranteed Maximum Price; or (iii) a design-build contractor hired by the State to provide both design and construction services, under a single contract, for a particular project.

1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents consist of the State-Contractor Agreement, the Conditions of the Contract (General, Supplementary and other Conditions), the Drawings, the Specifications, and all Addenda issued prior to bid opening and any Change Orders after execution of the Contract.-

1.1.2 THE CONTRACT

The Contract Documents form the contract for construction. This contract represents the entire and integrated agreement between the parties and supersedes all prior negotiations, representations, or agreements, either written or oral. The contract may only be amended by Change Order. The Contract Documents shall not be construed to create any contractual relationship of any kind between the Architect and the Contractor, but the Architect shall be entitled to performance of obligations intended for his benefit, and to enforcement thereof. Nothing contained in the Contract Documents shall create any contractual relationship between the State or the Architect and any Subcontractor or Sub-subcontractor.

1.1.3 THE WORK

The Work comprises the completed construction required by the Contract Documents and includes all labor necessary to produce such construction, and all materials and equipment incorporated or to be incorporated in such construction.

1.1.4 THE PROJECT

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part.

1.1.5 PROJECT MANAGER

The term "Project Manager" refers to the employee of the State who has been assigned responsibility for overseeing and managing the proper and timely implementation of the project.

1.2 EXECUTION & INTENT

1.2.1 Upon request, the State-Contractor Agreement will be signed in duplicate by the State and Contractor.

1.2.2 By executing the Contract, the Contractor represents that he or she has visited and examined the site; is fully informed as to the extent and character of the Project; familiarized himself or herself with the local conditions under which the Work is to be performed, and correlated his / her observations with the requirements of the Contract Documents and understands that no consideration will be given for any alleged misunderstanding of same.

1.2.3 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work. The Contract Documents are complementary, and what is required by any one shall be as binding as, if required by all. Work not covered in the Contract Documents will not be required unless it is consistent with the Contract Documents and is reasonably inferable from the Contract Documents as being necessary to produce the intended results. Words and abbreviations which have well-known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings.

1.2.4 The organization of the Specifications into divisions, sections and articles, and the arrangement of Drawings shall not control the Contractor in dividing the Work among

Subcontractors or in establishing the extent of Work to be performed by any trade.

1.3 OWNERSHIP AND USE OF DOCUMENTS

1.3.1 All drawings, specifications, estimates, and all other documents, including shop drawings and calculations, prepared at any time in connection with the Project, shall, upon payment for services in connection therewith, become the sole property of the State.

ARTICLE 2

ARCHITECT

2.1 DEFINITION

The term Architect, as used in this document, means a person, or entity, lawfully licensed to practice architecture or a person or entity lawfully licensed to provide professional engineering services and has been identified as such in the State-Contractor Agreement. The term Architect means the Architect or his / her authorized representative. These General Conditions are applicable whether or not an Architect is utilized for a particular project. In the event that an Architect has not been utilized for the project, the Project Manager will be responsible for administration of the contract as specifically enumerated in paragraph 2.2. All other functions, duties, or obligations of the Architect, under these General Conditions, in the absence of an Architect, will be performed by the Project Manager.

2.2 ADMINISTRATION OF THE CONTRACT

2.2.1 The Architect will provide administration of the Contract as hereinafter described.

2.2.2 The Architect will be the State's representative during construction and until final payment is due. The Architect will advise and consult with the State. The State's instructions to the Contractor shall be forwarded through the Architect. The Architect will have authority to act on behalf of the State only to the extent provided in the Contract Documents, unless otherwise modified by written instrument in accordance with Subparagraph 2.2.10.

2.2.3 The Architect will visit the site at intervals appropriate to the stage of construction to familiarize himself or herself generally with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of his or her on-site observations as an architect, he or she will keep the State informed of the progress of the Work, and will endeavor to guard the State against defects and deficiencies in the Work of the Contractor.

2.2.4 The Architect will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, and he or she will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Architect will not be responsible for or have control or charge over the acts or omissions of the Contractor,

Subcontractors, or any of their agents or employees, or any other persons performing any of the Work.

2.2.5 The Architect shall at all times have access to the Work wherever it is in preparation and progress. The Contractor shall provide facilities for such access so the Architect may perform his or her functions under the Contract Documents.

2.2.6 Based on the Architect's observations of the Work and an evaluation of the Contractor's Applications for Payment, the Architect will determine the amounts owing to the Contractor and will issue Certificates for Payment in such amounts, as provided in Paragraph 9.4 of these General Conditions.

2.2.7 The Architect will review and approve or take other appropriate action upon Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformance with the design concept of the Work and with the information given in the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay.

2.2.8 The Architect will prepare Change Orders in accordance with Article 12. The Architect has authority to order minor changes in the Work with the consent of the owner.

2.2.9 The Architect will conduct inspections to determine the dates of Substantial Completion and final completion, will receive and forward to the State for the State's review written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment upon compliance with the requirements of Paragraph 9.9.

2.2.10 The duties, responsibilities and limitations of authority of the Architect as the State's representative during construction as set forth in the Contract Documents will not be modified or extended without written consent of the State and the Architect. In the event that the duties, responsibilities and limitations of authority of the Architect as State’s representative during construction as set forth in the Contract Documents is modified or extended, the State will immediately notify the Contractor, in writing, of the modification or extension and the date that the modified or extended authority is effective. If the change of duties, responsibilities, or limitations of authority of the Architect, causes the Contractor to incur new, additional, and unexpected expenses completing the Work, then the State and the Contractor shall agree to an equitable adjustment to be implemented by Change Order to the State-Contractor Agreement.

2.2.11 In case of the termination of the employment of Architect, the State may appoint a subsequent architect in which case, the subsequent architect will have the same status under the Contract Documents as that of the former architect. In the event of termination of the Architect, the State will immediately notify the Contractor, in writing, of the termination and the appointment of a replacement architect, if any.

2.2.12 The Architect will be the interpreter of the requirements of the Contract Documents and will make recommendations to the State regarding the progress and quality of the Work and whether the Work is proceeding in accordance with the Contract Documents.

2.2.13 The Architect will render interpretations necessary for the proper execution and progress of the Work, with reasonable promptness and in accordance with any time limit agreed

upon, in writing, by the Architect, Contractor, and the State.

2.2.14 Claims, disputes and other matters in question between the Contractor and the State relating to the execution or progress of the Work or the interpretation of the Contract Documents shall be referred initially to the Architect for review. The Architect will review the nature of the claim, dispute or other matter, along with any documentation provided by the Contractor or the State, and within a reasonable time, the Architect will provide a written recommendation to the State.

ARTICLE 3

STATE

3.1 DEFINITION

The State of Vermont, by and through the Department of Buildings and General Services is the entity identified as "State" in the State-Contractor Agreement and is referred to throughout the Contract Documents as the "State".

3.2 RESPONSIBILITIES OF THE STATE

3.2.1 The State will identify a Project Manager for the Project. The Project Manager will be the sole point of contact between the Contractor and the State. The Project Manager will be the State's representative authorized to communicate the State's position and directions related to all contract work and to coordinate all change orders with the Commissioner of Buildings and General Services as deemed necessary.

3.2.2 If applicable, the State shall furnish all surveys describing the physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site.

3.2.3 Except as provided in Subparagraph 4.7.1, the State shall secure and pay for necessary approvals, easements, assessments and charges required for the construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

3.2.4 Information or services under the State's control shall be furnished by the State with reasonable promptness to avoid delay in the orderly progress of the Work.

3.2.5 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, all copies of Drawings and Specifications reasonably necessary for the execution of the Work.

3.2.6 The State shall forward instructions to the Contractor through the Architect.

3.2.7 The foregoing are in addition to any other duties and responsibilities of the State enumerated in the Contract Documents including those responsibilities described in Articles 6, 9 and 11 of this agreement.

3.2.8 The State may utilize a Clerk-of-the-Works to provide inspection and monitoring work on behalf of the State. If a Clerk-of-the-Works is utilized, it is the responsibility of the Architect and the Contractor to review and understand the Clerk's duties, responsibilities and limitations of authority. Upon request, the State shall provide a copy of the Clerk-of-the-Works contract to Architect and Contractor.

3.3 STATE'S RIGHT TO STOP THE WORK

3.3.1 If the Contractor fails to correct defective Work as required by Paragraph 13.2 or persistently fails to carry out the Work in accordance with the Contract Documents, the State, by a written order signed personally or by an agent specifically so empowered by the State in writing, may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the State to the stop the Work shall not give rise to any duty on the part the State to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Subparagraph 6.1.3.

3.4 STATE'S RIGHT TO CARRY OUT THE WORK

3.4.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within seven days after receipt of written notice from the State to commence and continue correction of such default or neglect with diligence and promptness, the State may, after seven days following receipt by the Contractor of an additional written notice and without prejudice to any other remedy he may have, make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the Architect's and the State's additional services made necessary by such default, neglect or failure. Such action by the State and the amount charged to the Contractor are both subject to review by the Architect under Paragraph 2.2.14 of these General Conditions. If the payments then or thereafter due the Contractor are not sufficient to cover the amounts paid by the State to make good such deficiencies, then the Contractor shall pay the difference to the Owner.

ARTICLE 4

CONTRACTOR

4.1 DEFINITION

The Contractor is the person or entity identified as such in the State Contractor Agreement and is referred to throughout the Contract Documents as Contractor. The term Contractor means the Contractor or his authorized representative.

4.2 REVIEW OF CONTRACT DOCUMENTS

4.2.1 The Contractor shall carefully study and compare the Contract Documents and shall immediately report in writing to the Architect and the State any error, inconsistency or omission he may discover. The Contractor shall not be liable to the State or the Architect for any damage resulting from any such errors, inconsistencies or omissions in the Contract Documents. The

Contractor shall perform no portion of the Work at any time without Contract Documents or, where required, approved Shop Drawings, Product Data or Samples for such portion of the Work.

4.3 SUPERVISION AND CONSTRUCTION PROCEDURES

4.3.1 The Contractor shall supervise and direct the Work, using his / her best skill and attention. The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract. All aspects of the Project shall be subject to the inspection and approval of the State. Contractor guarantees to repair, replace, re-execute or otherwise correct any defect in workmanship, materials, or the like that fails to conform to the requirements of this Contract or that appears during the progress of the Work or within one year of final acceptance by the State.

4.3.2 The Contractor shall be responsible to the State for the acts and omissions of his / her employees, Subcontractors and their agents and employees, and other persons performing any of the Work under a contract with the Contractor.

4.3.3 The Contractor shall not be relieved from his / her obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Architect in his / her administration of the Contract, or by inspections, tests or approvals required or performed under Paragraph 7.7 by persons other than the Contractor.

4.3.4 The Contractor shall acquaint himself (herself / itself) with the limits of the property or right-of-way of the State and shall not trespass on other property. The Contractor shall adequately protect the project, adjacent property and the public, and shall be responsible for any damage or injury due to the Contractor's act or neglect, and shall save the State harmless in respect thereto.

4.3.5 All work shall be done in such a manner as not to interfere with the State's operating functions. Contractor and his employees shall familiarize themselves and comply with all rules and regulations applicable to the project.

4.3.6 The Contractor shall keep the premises free from liens arising out of or from the Project. Contractor shall obtain and submit waivers of liens with a request for a progress or final payment.

4.4 LABOR AND MATERIALS

4.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work. Contractor guarantees that materials shall be of the best quality, that work shall be completed in a neat and workmanlike manner, that equipment will be installed in a first class manner, and that all aspects of the project will be delivered in good working order complete and perfect in every respect and that all systems and materials necessary to make the project a complete operating utility as contemplated by the above description of the project is included in the Contract price.

4.4.2 The Contractor shall a t all times enforce strict discipline and good order among his employees and shall not employ on the Work any unfit person or anyone not skilled in the task assigned to him.

4.5 WARRANTY

4.5.1 The Contractor warrants to the State and the Architect that all materials and equipment furnished under this Contract will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not conforming to these requirements, including substitutions not properly approved and authorized, ma y be considered defective. If requested by the Architect or the State, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. This warranty is not limited by the provisions of Paragraph 13.2 of these General Conditions.

4.6 TAXES

The State is exempt from all sales and federal excise taxes. Contractors will be responsible for the payment of any sales, consumer, use and other similar taxes for the Work or portions thereof provided by the Contractor which are legally enacted at the time bids are received, whether or not yet effective.

4.7 PERMITS, FEES AND NOTICES

4.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for all permits and governmental fees, licenses and inspections necessary for the proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required at the time the bids are received. Contractor shall comply with the regulations and requirements of any insurance company which issues a policy on any part of the work or site.

4.7.2 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the Work.

4.7.3 It is not the responsibility of the Contractor to make certain that the Contract Documents are in accordance with applicable laws, statutes, building codes and regulations. However, if the Contractor observes that any of the Contract Documents are at variance therewith in any respect, he / she shall promptly notify the Architect in writing, and any necessary changes shall be accomplished by appropriate modification.

4.7.4 If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Architect, he / she shall assume full responsibility therefor and shall bear all costs attributable thereto.

4.7.5 The Contractor agrees to comply with all the requirements of Title 21 V.S.A., Chapter 5, Subchapter 6 relating to fair employment practices and agrees further to include a similar provision in any and all subcontracts. A link to 21 V.S.A. Chapter 5, Subchapter 6 is provided: http://legislature.vermont.gov/statutes/section/21/005/00495

4.8 ALLOWANCES

4.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by these allowances shall be supplied for such amounts and by such persons as dictated by the process contained in the Contract Documents.

4.8.2 Unless otherwise provided in the Contract Documents:

(a) these allowances shall cover the cost to the Contractor, less any applicable trade discount, of the materials and equipment required by the allowance delivered at the site, and all applicable taxes;

(b) the Contractor's costs for unloading an d handling on the site, labor, installation costs, overhead, prof it and other expenses contemplated for the original allowance shall be included in the Contract Sum and not in the allowance;

(c) whenever the cost is more than or less than the allowance, the Contract Sum shall be adjusted accordingly by Change Or der, the a mount of which will recognize changes, if any, in handling costs on site, labor, installation costs, overhead, profit and other expenses.

4.9 SUPERINTENDENT

The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during the progress of the Work. The superintendent shall represent the Contractor and all communications given to the superintendent shall be as binding as if given to the Contractor. All Communications shall be in writing when made or shall be confirmed in writing, by the Contractor, within twenty-four (24) hours of the communication.

4.10 PROGRESS SCHEDULE

The Contractor, within ten (10) working days of receiving notice of the award of the contract, shall prepare and submit for the State's and Architect's information an estimated progress schedule for the Work. The progress schedule shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

4.11 DOCUMENTS AND SAMPLES AT THE SITE

4.11.1 The Contractor shall maintain at the site for the State one record copy of all Drawings, Specifications, Addenda, Change Orders and other modifications, in good order and marked currently to record all changes made during construction, and approved Shop Drawings, Product Data and Samples. These shall be available to the Architect and the State for monthly review prior to approval of Contractor’s monthly application for payment. Prior to substantial completion of the Work, the Contractor shall ensure that one record copy of all Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record all changes made during construction, and approved Shop Drawings, Product Data and Samples are delivered to the Architect for the State and a duplicate copy shall be delivered to the State for the State’s use.

4.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

4.12.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or any Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

4.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of the Work.

4.12.3 Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

4.12.4 The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the State or any separate contractor, all Shop Drawings, Product Data and Samples required by the Contract Documents.

4.12.5 By approving and submitting Shop Drawings, Product Data and Samples, the Contractor represents that he / she has determined and verified all materials, field measurements, and field construction criteria related thereto, or will do so, and that he / she has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

4.12.6 The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data or Samples under Subparagraph 2.2.7 of these General Conditions unless the Contractor has specifically informed the Architect and the State in writing of such deviation at the time of sub-mission and the Architect and the State has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples by the Architect's approval thereof.

4.12.7 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data or Samples, to revisions other than those requested by the Architect on previous submittals.

4.12.8 No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the submittal has been approved by the Architect as provided in Subparagraph 2.2.7 of these General Conditions. All such portions of the Work shall be in accordance with approved submittals.

4.13 USE OF SITE

4.13.1 The Contractor shall confine operations at the site to areas permitted by law, including areas designated for operations or prohibited from operations by any applicable permit and or regulation, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site with any materials or equipment.

4.14 CUTTING AND PATCHING OF WORK

4.14.1 The Contractor shall be responsible for all cutting, fitting or patching that may be required to complete the Work or to make its several parts fit together properly.

4.14.2 The Contractor shall not damage or endanger any portion of the Work or the work of the State or any separate contractors by cutting, patching or otherwise altering any work, or by excavation. The Contractor shall not cut or otherwise alter the work of the State or any separate contractor except with the written consent of the State and of such separate contractor. The Contractor shall not unreasonably withhold from the State or any separate contractor his consent to cutting or otherwise altering the Work.

4.15 CLEANING UP

4.15.1 Before commencement of any on-site activities, Contractor is required to prepare and submit to the Project Manager a Construction Site Waste Reduction Plan. A sample plan is available at: http://www.anr.state.vt.us/dec/wastediv/recycling/CandD.htm . Failure to comply with this provision or a failure to comply with the plan itself will result in withholding of general conditions' money from the contractor's monthly requisition until Contractor has rectified the situation and is in full compliance with these provisions.

4.15.2 The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish. At the completion of the Work he shall remove all his waste materials and rubbish from and about the Project as well as all his tools, construction equipment, machinery and surplus materials and shall leave the premises in a clean and satisfactory condition.

4.15.3 If the Contractor fails to clean up at the completion of the Work, the State may do so as provided in Paragraph 3.4 and the cost thereof shall be charged to the Contractor.

4.16 COMMUNICATIONS

4.16.1 The Contractor shall forward all communications to the State through the Architect.

4.17 ROYALTIES AND PATENTS

The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent rights and shall save the State harmless from loss on account thereof, except that the State shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, The Contractor shall be responsible for such loss unless he promptly gives such information to the Architect.

4.18 INDEMNIFICATION

The Contractor hereby agrees and consents to indemnify and hold harmless the State under the terms and conditions specified in "Attachment C".

ARTICLE 5

SUBCONTRACTORS

5.1 DEFINITION

5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform any of the Work at the site. The term Subcontractor means a Subcontractor or his / her authorized representative. The term Subcontractor does not include any separate contractor or his / her subcontractors.

5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform any of the Work at the site. The term Sub-subcontractor means a Sub-subcontractor or an authorized representative thereof.

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OFTHE WORK

Unless other procedures are specified or required by the Contract Documents or the Bidding Documents, then the following provisions are applicable:

5.2.1 The Parties agree that it is in the best interests of both the Contractor and the State to determine and select subcontractors as soon as possible after the Contractor has been awarded the Project. Therefore, the Contractor agrees, to furnish to the State and the Architect in writing the names of the persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work within Ten (10) working days of award of the Project to Contractor. The State will reply within Ten (10) working days to the Contractor in writing stating whether or not the State, after due investigation, has reasonable objection to any such proposed person or entity.

5.2.2 The Contractor shall not contract with any such proposed person or entity to whom the State has made reasonable objection under the provisions of Subparagraph 5.2.1 of these General Conditions. The Contractor shall not be required to contract with anyone to whom he has a reasonable objection.

5.2.3 If the State has reasonable objection to any such proposed person or entity, the Contractor shall submit a substitute to whom the State has no reasonable objection, and the Contract Sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued; however, no increase in the Contract Sum shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting names as required by Subparagraph 5.2.1. of these General Conditions.

5.2.4 The Contractor shall make no substitution for any Subcontractor, person or entity previously selected if the State makes a reasonable objection to such substitution.

5.3 SUBCONTRACTUAL RELATIONS

5.3.1 By written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities

which the Contractor, by these Documents, assumes toward the State and the Architect. Said agreement shall preserve and protect the rights of the State and the Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that the subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the Contractor Subcontractor agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Documents, has against the State. The Contractor shall require each Subcontractor to enter into similar agreements with his Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the Subcontract, copies of the Contract Documents to which the Subcontractor will be bound by this Paragraph 5.3, and identify to the Subcontractor any terms and conditions of the proposed Subcontract which may be at variance with the Contract Documents. Each Subcontractor shall similarly make copies of such Documents available to his / her Sub-subcontractors.

ARTICLE 6

WORK BY STATE OR BY SEPARATE CONTRACTORS

6.1 STATE'S RIGHT TO PERFORM WORK AND TO AWARD SEPARATE CONTRACTS

6.1.1 The State reserves the right to perform work related to the Project with its own forces, and to award separate contracts in connection with other portions of the Project or other work on the site under these or similar Conditions of the Contract. If the Contractor claims that delay or additional cost is involved because of such action by the State, he / she shall make such claim as provided elsewhere in the Contract Documents.

6.1.2 When separate Contracts are awarded for different portions of the Project or other work on the site, the term Contractor in the Contract Documents in each case shall mean the Contractor who executes each separate State Contractor Agreement.

6.1.3 The State will provide for the coordination of the work of its own forces and of each separate contractor with the Work of the Contractor, who shall cooperate therewith as provided in Paragraph 6.2.

6.2 MUTUAL RESPONSIBILITY

6.2.1 The Contractor shall afford the State and separate contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall connect and coordinate his / her Work with the work of the State and separate contractors as required by the Contract Documents.

6.2.2 If any part of the Contractor's Work depends for proper execution or results upon the work of the State or any separate contractor, the Contractor shall, prior to proceeding with the Work, promptly report to the Architect any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acceptance of the State's or separate contractors work as fit and proper to receive

his Work, except as to defects which may subsequently become apparent in such work by others.

6.2.3 Any costs caused by defective or ill-timed work shall be borne by the party responsible therefor.

6.2.4 Should the Contractor wrongfully cause damage to the work or property of the State, or to other work on the site, the Contractor shall promptly remedy such damage as provided in Subparagraph 10.2.5 of these General Conditions.

6.3 STATE'S RIGHT TO CLEAN UP

6.3.1 If a dispute arises between the Contractor and separate contractors as to their responsibility for cleaning up as required by Paragraph 4.15 of these General Conditions, the State may clean up and charge the cost thereof to the Contractor.

ARTICLE 7

MISCELLANEOUS PROVISIONS

7.1 GOVERNING LAW

7.1.1 The Contract shall be governed by the laws of the State of Vermont.

7.2 SUCCESSORS AND ASSIGNS

7.2.1 The State and the Contractor each bind themselves, their partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any moneys due or to become due to him or her hereunder, without the previous written consent of the State.

7.3 WRITTEN NOTICE

7.3.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or entity or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known to him who gives the notice.

7.4 CLAIMS FOR DAMAGES

7.4.1 Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the other party or of any of his / her employees, agents or others for whose acts he / she is legally liable, claim shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

7.5 BOND REQUIREMENTS

The Contractor hereby agrees to comply with the State's bonding requirements as identified in the Instructions to Bidders which are included in the RFP and are attached and incorporated into the Contract Documents.

7.6 RIGHTS AND REMEDIES

7.6.1 The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

7.6.2 No action or failure to act by the State, Architect or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

7.7 TESTS

7.7.1 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any portion of the Work to be inspected, tested or approved, the Contractor shall give the Architect timely notice of its readiness so the Architect may observe such inspection, testing or approval. The Contractor shall bear all costs of such inspections, tests or approvals conducted by public authorities.

7.7.2 If the Architect determines that any Work requires special inspection, testing, or approval which Subparagraph 7.7.1 does not include, he or she will, upon written authorization from the State, instruct the Contractor to order such special inspection, testing or approval, and the Contractor shall give notice as provided in Subparagraph 7.7.1. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents, the Contractor shall bear all costs thereof, including compensation for the Architect's additional services made necessary by such failure; otherwise the State shall bear such costs, and an appropriate Change Order shall be issued.

7.7.3 Required certificates of inspection, testing or approval shall be secured by the Contractor and promptly delivered by him to the Architect.

7.7.4 If the Architect is to observe inspections, tests or approvals required by the Contract Documents, he will do so promptly.

7.8 INTEREST

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at a rate of twelve percent (12 %) per annum. A payment is NOT due and payable unless and until the State has received an invoice filled out correctly and completely with all required supporting documentation.

7.9 DISPUTE RESOLUTION PROCESS

Any claim, dispute or other matter in question not resolved by the process identified in Paragraph

2.2.14 of these General Conditions shall be subject to the following dispute resolution process: Contractor may seek review by the Commissioner of Buildings and General Services of the Architect's recommendation. Contractor must seek review by the Commissioner within ten (10) days of the Architect's written recommendation otherwise the recommendation shall be deemed accepted by the Contractor. Failing resolution by the Commissioner, the Contractor then may request that the parties submit the claim to non-binding mediation with a mutually agreed upon mediator utilizing the most current Construction Industry Mediation Rules of the American Arbitration Association.

ARTICLE 8

TIME

8.1 DEFINITIONS

8.1.1 Unless otherwise provided, the Contract Time is the period of time allotted in the Contract Documents for Substantial Completion of the Work as defined in Subparagraph 8.1.3 of these General Conditions, including authorized adjustments thereto.

8.1.2 The date of commencement of the Work is the date established in a notice to proceed. If there is no notice to proceed, it shall be the date indicated in State Contractor Agreement. In the absence of a notice to proceed and an express commencement date in the State Contractor Agreement, then the date of execution of the State Contractor Agreement shall be the commencement date.

8.1.3 The Date of Substantial Completion of the Work or designated portion thereof is the Date certified by the Architect when construction is sufficiently complete, in accordance with the Contract Documents, so the State can occupy or utilize the Work or designated portion thereof for the use for which it is intended. The Work shall not be considered substantially complete prior to the receipt of approved O & M manuals and record drawings as required by paragraph 4.11 and as required elsewhere in the Contract Documents.

8.1.3.1 Contract completion date shall be defined as: The contract work shall not be considered complete prior to the receipt of approved O & M manuals and record drawings as required by paragraph 4.11 and as required elsewhere in the contract documents.

8.1.4 The term day as used in the Contract Documents shall mean calendar day unless otherwise specifically designated.

8.2 PROGRESS AND COMPLETION

8.2.1 All time limits stated in the Contract Documents are material terms and time is the essence of the Contract. A failure by Contractor to do what is required by the time specified in the Contract Documents is a breach of the contract.

8.2.2 The Contractor shall begin the Work on the date of commencement as defined in

Subparagraph 8.1.2 of these General Conditions. He or She shall carry the Work forward expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

8.2.3 If in the sole opinion of the State, the Contractor fails to commence work on the project or to complete the work of said project within the time specified above, or to prosecute the work in such a manner that it appears that the completion date can be assured, the State shall have the right to notify the Contractor by Certified Mail that the terms of the Contract have been violated, and that effective immediately the Contract is terminated and the State has the right to and in fact is taking over and attending to completion of the project without prejudice to the State's remedies for any losses sustained

8.3 DELAYS AND EXTENSIONS OF TIME

8.3.1 If the Contractor is delayed at any time in the progress of the Work by any act or failure to act by the State or the Architect, or by any employee of either, or by any separate contractor employed by the State, or by changes ordered in the Work, fire, unusual delay in transportation, adverse weather conditions not reasonably anticipatable, unavoidable casualties, or any causes beyond the Contractor's control, or by delay authorized by the State pending alternative dispute resolution proceedings, or by any other cause which may justify the delay, then the Contract Time shall be extended by Change Order for such reasonable time as recommended by the Architect and approved by the State.

8.3.2 Any claim for extension of time shall be made in writing to the Architect not more than twenty days after the commencement of the delay; otherwise it shall be waived. In the case of a continuing delay only one claim is necessary. The Contractor shall provide an estimate of the probable effect of such delay on the progress of the Work.

8.3.3 This Paragraph 8.3 does not exclude the recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9

PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

9.1.1 The Contract Sum is stated in the State-Contractor Agreement and, including authorized adjustments thereto, is the total amount payable by the State to the Contractor for the performance of the Work under the Contract Documents.

9.2 SCHEDULE OF VALUES

9.2.1 Before the first Application for Payment, the Contractor shall submit to the Architect a schedule of values allocated to the various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used only as a basis for the Contractor's Applications for Payment.

9.3 APPLICATIONS FOR PAYMENT

9.3.1 At least ten days before the date for each progress payment established in the State-Contractor Agreement, the Contractor shall submit to the Architect an itemized Application for Payment, notarized if required, supported by such data substantiating the Contractor's right to payment as the State or the Architect may require. The application for payment must, at a minimum, reflect retainage and the required waivers of lien and any other support documentation enumerated elsewhere in the Contract Documents.

9.3.2 Unless otherwise provided in the Contract Documents, payments will be made on account of materials or equipment not incorporated in the Work but delivered and suitably stored at the site and, if approved in advance by the State, payments may similarly be made for materials or equipment suitably stored at some other location agreed upon in writing. Payments for materials or equipment stored on or off the site shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the State to establish the State's title to such materials or equipment or otherwise protect the State's interest, including applicable insurance and transportation to the site for those materials and equipment stored off the site.

9.3.3 The Contractor warrants that title to all Work, materials and equipment covered by an Application for Payment will pass to the State either by incorporation in the construction or upon the receipt of payment by the Contractor, whichever occurs first, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article 9 as "liens"; and that no Work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing Work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

9.4 CERTIFICATES FOR PAYMENT

9.4.1 The Architect will, within seven days after the receipt of the Contractor's completed Application for Payment, either issue a Certificate for Payment to the State, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor in writing his or her reasons for withholding a Certificate as provided in Subparagraph 9.6.1 of these General Conditions. In case of conflict between any time requirements in this paragraph and any time requirements for action by the Architect on Contractor’s Application for Payment contained in the State-Contractor Agreement, the time requirements contained in the State-Contractor Agreement shall control.

9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the State, based on his observations at the site as provided in Subparagraph 2.2.3 of these General Conditions and the data comprising the Application for Payment, that the Work has progressed to the point indicated; that, to the best of his or her knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to the results of any subsequent tests required by or performed under the Contract Documents, to minor deviations from the Contract Documents correctable prior to completion, and to any specific

qualifications stated in his Certificate); and that the Contractor is entitled to payment in the amount certified.

9.5 PROGRESS PAYMENTS

9.5.1 After the Architect has issued a Certificate for Payment, the State shall make payment in the manner and within the time provided in the Contract Documents.

9.5.2 The Contractor shall promptly pay each Subcontractor, upon receipt of payment from the State, out of the amount paid to the Contractor on account of such Subcontractor's Work, the amount to which said Subcontractor is entitled, reflecting the percentage actually retained, if any, from payments to the Contractor on account of such Subcontractor's Work. The Contractor shall, by an appropriate agreement with each Subcontractor, require each Subcontractor to make payments to his or her Sub-subcontractors in similar manner.

9.5.3 The Architect may, on request and at his discretion, furnish to any Subcontractor, if practicable, information regarding the percentages of completion or the amounts applied for by the Contractor and the action taken thereon by the Architect on account of Work done by such Subcontractor.

9.5.4 Neither the State nor the Architect shall have any obligation to pay or to see to the payment of any moneys to any Subcontractor.

9.5.5 No Certificate for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the Project by the State, shall constitute an acceptance of any Work not in accordance with the Contract Documents.

9.6 PAYMENTS WITHHELD

9.6.1 The Architect may decline to certify payment and may withhold his or her Certificate in whole or in part, to the extent necessary reasonably to protect the State, if in the Architect's opinion he or she is unable to make representations to the State as provided in Subparagraph 9.4.2 of these General Conditions. If the Architect is unable to make representations to the State as provided in the aforementioned Subparagraph 9.4.2 and to certify payment in the amount of the Application, he or she will notify the Contractor as provided in Subparagraph 9.4.1 of these General Conditions. If the Contractor and the Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which he or she is able to make such representations to the State. The Architect may also decline to certify payment or, because of subsequently discovered evidence or subsequent observations, he or she may nullify the whole or any part of any Certificate for Payment previously issued, to such extent as may be necessary in his or her opinion to protect the State from loss because of:

(a) Defective Work not remedied,
(b) Third party claims filed or reasonable evidence indicating probable filing of such claims,
(c) Failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment,
(d) Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum,

(e) Damage to the State or another contractor,
(f) Reasonable evidence that the Work will not be completed within the Contract Time, or
(g) Persistent failure to carry out the Work in accordance with the Contract Documents.

9.6.2 When the above grounds in Subparagraph 9.6.1 are removed, payment shall be made for amounts withheld because of them.

9.7 FAILURE OF PAYMENT

9.7.1 If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the State does not pay the Contractor within seven days after the date established in the Contract Documents any amount certified by the Architect or awarded by alternative dispute resolution proceedings, then the Contractor may, upon seven additional days written notice to the State and the Architect, stop the Work until payment of the amount owing has been received. The Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, which shall be effected by appropriate Change Order in accordance with Paragraph 12.3.

9.8 SUBSTANTIAL COMPLETION

9.8.1 When the Contractor considers that the Work, or a designated portion thereof which has been accepted in writing to by the State, is substantially complete as defined in Subparagraph 8.1.3 of these General Conditions, the Contractor shall prepare for submission to the Architect a list of items to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the Architect on the basis of an inspection determines that the Work or designated portion thereof is substantially complete, he will then prepare a Certificate of Substantial Completion which shall establish the Date of Substantial Completion, shall state the responsibilities of the State and the Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time, which shall not exceed thirty (30) days, within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall commence on the Date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the State and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate. The Work shall not be considered substantially complete prior to the receipt of approved O & M manuals and record drawings as required by paragraph 4.11 and as required elsewhere in the Contract Documents.

9.8.2 Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the Architect, the State shall make payment, reflecting adjustment in retainage, if any, for such Work or portion thereof, as provided in the Contract Documents.

9.9 FINAL COMPLETION AND FINAL PAYMENT

9.9.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such

inspection and, when he or she finds the Work acceptable under the Contract Documents and the Contract fully performed, he or she will promptly issue a final Certificate for Payment stating that to the best of his / her knowledge, information and belief, and on the basis of his or her observations and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor, and noted in said final Certificate, is due and payable. The Architect's final Certificate for Payment will constitute a further representation that the Contractor has fulfilled the conditions entitling him or her to final payment as set forth in Subparagraph 9.9.2 of these General Conditions.

9.9.2 Neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the State or its property might in any way be responsible, have been paid or otherwise satisfied; (2) consent of surety, if any, to final payment; (3) Other data establishing payment or satisfaction of all such obligations, including, but not limited to, receipts, releases, or other supporting documentation. and (4) final waivers of liens arising out of the Contract, to the extent and in such form as may be designated by the State. If any Subcontractor refuses to furnish a release or waiver required by the State, the Contractor may furnish a bond satisfactory to the State to indemnify him against any such lien. If any such lien remains unsatisfied after all payments are made, the Contractor shall refund to the State all moneys that the latter may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

9.9.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by the issuance of Change Orders affecting final completion, and the Architect so confirms, the State shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than the retainage stipulated in the Contract Documents, and if bonds have been furnished as required by the Contract Documents, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

9.9.4 The making of final payment shall constitute a waiver of all claims by the State except those arising from:

(a) unsettled liens,
(b) faulty or defective Work appearing after Substantial Completion,
(c) failure of the Work to comply with the requirements of the Contract Documents, or
(d) terms of any special warranties required by the Contract Documents.

9.9.5 The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and identified by the Contractor as unsettled at the time of the final Application for Payment.

ARTICLE 10

PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:

(a) all employees on the Work and all other persons who may be affected thereby;
(b) all the Work and all materials and equipment to be incorporated therein, whether in storage on or off-the site, under the care; custody or control of the Contractor or any of his Subcontractors or Sub-subcontractors; and
(c) other property at the site or adjacent thereto, including trees, shrubs; lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

10.2.2 The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the safety of persons or property or their protection from damage, injury or loss.

10.2.3 The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.

10.2.4 When the use or storage of explosives or other hazardous materials or equipment is necessary for the execution of the Work, the Contractor shall: (1) exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel; and (2) give the State notice, in writing, seven (7) days in advance of the planned activity of the Contractor's intent to store and/ or use explosives or other hazardous materials or equipment on the project site.

10.2.5 When the project involves the placement or replacement of roofing systems of all types on State- owned buildings, including flat, low-pitched and steep roofs, Contractor must comply with all requirements of the latest edition of VOSHA Safety and Health Standards for Construction (29 CFR 1926) including, but not limited to, Subpart M – Fall Protection. Prior to execution of a contract by BGS, contractors engaged in placement or replacement of roofing systems of all types must submit a signed certification statement attesting to their intention to comply with VOSHA Fall Protection Regulations. Such certification shall be submitted on a State-provided form along with proof of insurance.

10.2.6 The Contractor shall promptly remedy all damage or loss (consistent with Contractor's obligations described in Attachment C) to any property referred to in Clauses 10.2.1(b) and 10.2.1(c) of these General Conditions caused in whole or in part by the Contractor, any

Subcontractor, any Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under Clauses 10.2.1(b) and 10.2.1(c), except damage or loss attributable to the acts or omissions of the State or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to his obligations referenced under Paragraph 4.18.

10.2.7 The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the State and the Architect.

10.2.8 The Contractor shall not load or permit any part of the Work to be loaded so as to endanger its safety.

10.3 EMERGENCIES

10.3.1 In any emergency affecting the safety of persons or property, the Contractor shall act to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in Article 12 for Changes in the Work.

ARTICLE 11

INSURANCE

Insurance obligations of the parties to this agreement are fully set forth below:

Attachment "C", numbered paragraph 8 has been deleted in its entirety and the following provisions are applicable:

11 INSURANCE – GENERAL REQUIREMENTS

11.1 Insurance obtained by the Contractor to cover the below-listed requirements shall be procured from an insurance company registered and licensed to do business in the State of Vermont. Before the Contract is executed, the Contractor shall file with the State a certificate of insurance, executed by an insurance company or its licensed agent(s), on form(s) satisfactory to the State, stating that with respect to the Contract awarded, the Contractor carries insurance in accordance with the following requirements:

(a) Workers' Compensation Insurance: With respect to all operations performed, the Party shall carry workers' compensation insurance in accordance with the laws of the State of Vermont. Vermont will accept an out-of-state employer's workers' compensation coverage while operating in Vermont provided that the insurance carrier is licensed to write insurance in Vermont and an amendatory endorsement is added to the policy adding Vermont for coverage purposes. Otherwise, the party shall secure a Vermont workers' compensation policy, if necessary to comply with Vermont law.

(b) Commercial General Liability (CGL) Insurance: With respect to all operations performed by the Contractor and any Subcontractors, the Contractor shall carry Commercial General Liability (CGL) Insurance affording all major divisions of coverage including, but not limited to:

Premises Operations
Independent Contractors' Protective Products and Completed Operations
Personal Injury Liability
Contractual Liability
Broad Form Property Damage
Explosion, Collapse and Underground (XCU) Coverage
Fire Legal Liability

State may require additional specific liability coverage(s) when applicable.

Limits of Coverage shall be not less than:

$1,000,000 Each Occurrence
$2,000,000 General Aggregate Applying, In Total To This Project
Only $1,000,000 Products/Completed Operations Aggregate
$1,000,000 Personal Injury and Advertising Liability
$ 50,000 Fire Legal Liability
$ 5,000 Medical Expense

Aggregate Limits of Insurance (Per Project) Form must be included (or as excepted in f below) with the Commercial General Liability Policy.

(c) Automobile Liability Insurance: Contractor shall carry Automobile Liability Insurance covering all motor vehicles, including owned, hired, borrowed and non-owned vehicles, used in connection with the project. Limits of Coverage shall be not less than:

$1,000,000 Combined Single Limit

(d) The Contractor shall require each Subcontractor, if any, to maintain the same Workers' Compensation, Commercial General Liability, and Automobile Liability coverage as specified in paragraphs (a), (b), and (c) above.

(e) Scope of Insurance & Special Hazards: The insurance required under subparagraphs (b), (c), and (d) above shall provide protection for the Contractor and the Subcontractors, if any, against damage claims which may arise from work being performed. Special hazards, may be encountered by the insured or by any person directly or indirectly employed by the Contractor or a Subcontractor, and may be required.

(f) If Contractor is unable to provide Aggregate Limits of Insurance (Per Project) as required in (b) above, Contractor shall purchase an Owner’s Protective Liability Insurance Policy in the name of the State of Vermont to cover all exposures, including bodily injury and death, arising out of and in the course of this Contract. Limits of liability shall be the same as those required of the Contractor under paragraph (b) above.

Additional Insured. The General Liability and Property Damage coverages required for performance of this Agreement shall include the State of Vermont and its agencies, departments, officers and employees as Additional Insureds. If performance of this Agreement involves construction, or the transport of persons or hazardous materials, then the required Automotive Liability coverage shall include the State of Vermont and its agencies, departments, officers and employees as Additional Insureds. Coverage shall be primary and non-contributory with any other insurance and self-insurance.

Notice of Cancellation or Change. There shall be no cancellation, change, potential exhaustion of aggregate limits or non-renewal of insurance coverage(s) without thirty (30) days written prior written notice to the State of Vermont, Office of Purchasing & Contracting.

11.2 Insurance Requirements for Builder's Risk Insurance. The State of Vermont does not require Contractor to obtain Builder's Risk insurance for every construction project. The State of Vermont will evaluate each project prior to accepting bids to determine if the State will require the Contractor to obtain and maintain Builder's Risk insurance for the project.

Any project that involves NEW CONSTRUCTION will require the Contractor to obtain and maintain Builder's Risk insurance for the project.

At the discretion of the State, Contractor may not be required to obtain and maintain Builder's Risk insurance on CONSTRUCTION RENOVATION projects. Whether or not the State is going to require Contractor to obtain and maintain Builder's Risk insurance for a particular CONSTRUCTION RENOVATION project will be determined by the State prior to bidding the project and the requirement will be included in the Instructions to Bidders.

11.2.1 BUILDER'S RISK FOR NEW CONSTRUCTION PROJECTS. If the project is NEW CONSTRUCTION, then the following provisions apply:

(1) The State will require Contractor to purchase and maintain Builder's Risk Insurance. The Contractor shall name the Contractor and the State of Vermont as their interest may occur. Other parties shall be insured as the State may reasonably require.
(2) Contractor shall effect and maintain insurance on portions of the work stored off-site, on site and in transit. Boiler & Machinery Insurance may be used in conjunction with this coverage if it is required to meet the testing requirement.
(3) Any deductible applicable to loss covered by insurance provided hereunder shall be borne by the Contractor.
(4) Except as provided for in (1) above the State and Contractor waive all rights against each other and the
Subcontractor, Sub-subcontractors, agents and employees of the other.

11.2. 2 BUILDER'S RISK FOR CONSTRUCTION RENOVATION PROJECTS. If the project is CONSTRUCTION RENOVATION of an existing structure, and the State has already determined that Contractor will not be obligated to obtain and maintain Builder's Risk insurance, then the following provisions apply:

(1) The State will maintain property insurance upon the construction site and will not require Contractor to purchase and maintain Builder's Risk Insurance upon the entire work at the site.
(2) The decision of the State to waive the requirement that the Contractor maintain builder's risk coverage does not waive Contractor's liability for damage to the State's real and personal property. Contractor's liability for loss to the State's real and personal property will be limited to the first $100,000 of each and every property loss at the work site provided such loss is covered under the State's property insurance coverage. If the Contractor elects to meet this obligation by purchase of commercial insurance, this insurance shall name the Contractor and the State of Vermont as Named Insureds and shall include the interests of the Contractor and Subcontractors. Other parties shall be insured as the State may reasonably require.
(3) Contractor shall effect and maintain insurance on portions of the work stored off-site, on site and in transit. Boiler & Machinery Insurance may be used in conjunction with this coverage if it is required to meet the testing requirement. The cost of any deductible applicable to loss covered by insurance provided hereunder shall be borne by the Contractor.
(4) Except as provided for in 11.2.2 (1)-(3) above the State and Contractor waive all rights against each other and the Subcontractor, Sub-subcontractors, agents and employees of the other.

11.2.3 Builder's Risk – additional provisions

The insurance specified shall be maintained in force until final acceptance of the project by the State.

(5) Umbrella Excess Liability Policies may be used in conjunction with primary policies to comply with any of the limit requirements specified above.

(6) "Claims-made" coverage forms are not acceptable without the express written prior consent of the State. Each policy furnished shall contain a rider or non-cancellation clause reading in substance as follows:

Anything herein to the contrary notwithstanding, notice of any cancellation, termination or alteration to the insurance contracts must be delivered by registered mail to the Commissioner, Department of Buildings and General Services, State of Vermont, Montpelier, Vermont, at least 60 days before effective cancellation, termination or alteration date unless all work required to be performed under the terms of the Contract is satisfactorily completed as evidenced by the formal acceptance by the State of Vermont.

(7) No warranty is made that the coverages and limits listed herein are adequate to cover and protect the interests of the Contractor for the Contractor's operations. These are solely minimums that have been set to protect the interests of the State.

11.3 The State shall have power to adjust and settle any loss with the insurers.

ARTICLE 12

CHANGES IN THE WORK

12.1 CHANGE ORDERS

12.1.1 A Change Order is a written order to the Contractor signed by the State, the Architect, and the Contractor issued after execution of the Contract, authorizing a change in the Work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time may be changed only by Change Order. A Change Order signed by the Contractor indicates his agreement therewith, including the adjustment in the Contract Sum or the Contract Time. A Proposed Change Order (PCO) is a written request submitted to the Architect by either the Contractor or the State requesting a change to the contract price and / or schedule. A Construction Change Directive (CCD) is a written document prepared by the State and / or Architect directing the Contractor to make changes in the Work where the State and the Contractor have not reached an agreement on proposed changes in the contract sum or contract time. A Construction Change Directive becomes part of a PCO.

Payment for changes in the Work will only be made after a Change Order is signed by the Contractor and Architect and executed by the State.

12.1.2 The State, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the Work REQUIRE AGREEMENT IN WRITING BY THE ACHITECT, STATE AND CONTRACTOR AND shall be authorized by A P R O P O S E D Change Order (PCO), and shall be performed under the applicable conditions of the Contract Documents. The State will prescribe a Proposed Change Order form for use by the Contractor. The Contractor shall submit all requests for Proposed Change Orders on the prescribed form.

The process, by which changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, is as follows:

(1) A Proposed Change Order (PCO) is submitted to the Architect for review. Said PCO is to be submitted on the State approved form.
(2) If the PCO originated with the Contractor, the Architect will review the PCO and if the Architect approves the PCO, it is then presented to the State for approval.
(3) The PCO is signed by the Project Manager.
(4) The Project Manager shall coordinate with the Contractor through email or other written documentation every 30 days as to the merit of issuing a Change Order. If the Project Manager and Contractor agree that a Change Order should be submitted, the Architect will compile all approved PCOs and incorporate them into one (1) Change Order.
(5) The Change Order is then submitted to the Project Manager who immediately processes the CO with OPC as required by Bulletin 3.5 and BGS' Contracting Plan.

12.1.3 The cost or credit to the State resulting from a change in the Work shall be determined in one or more of the following ways:

(a) by mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
(b) by unit prices stated in the Contract Documents or subsequently agreed upon;
(c) by cost to be determined in a manner agreed upon by the parties and a mutually

acceptable fixed or percentage fee; or

(d) by the method provided in Subparagraph 12.1.4.

12.1.4 If none of the methods set forth in Clauses 12.1.3(a) –(d) is agreed upon, or cannot be agreed upon at the time due to the nature of the change, emergent conditions, or lack of required information, the Contractor, provided he receives a Construction Change Directive (CCD)) signed by the State, shall promptly proceed with the Work involved. Upon receipt of the CCD, the Contractor shall proceed with implementation of the CCD. The cost of such Work shall then be recommended by the Architect on the basis of the reasonable expenditures and savings of those performing the Work attributable to the change, including, in the case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. In such case, and also under Clauses 12.1.3(c) and 12.1.3(d) above, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data for inclusion in the CCD. Unless otherwise provided in the Contract Documents, cost shall be limited to the following: cost of materials, cost of delivery; cost of labor, including social security, medicare and unemployment insurance, and fringe benefits required by agreement or custom; workers' or workmen's compensation insurance; bond premiums; rental value of equipment and machinery; and the additional costs of supervision and field office personnel directly attributable to the change. Pending final determination of cost to the State, payments on account shall be made on the State's Certificate for Payment. The amount of credit to be allowed by the Contractor to the State for any deletion or change which results in a net decrease in the Contract Sum will be the amount of the actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in any one change, the allowance for Overhead and profit shall be figured on the basis of the net increase, if any, with respect to that change. It is the Project Manager’s responsibility to ensure that All CCD’s are converted / incorporated into a PCO within Thirty (30) days of completion of the changes to the Work that was the subject of the CCD. The parties agree to utilize the CCD form provided or approved by the State.

12.1.5 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a Proposed Change Order that application of the agreed unit prices to the quantities of Work proposed will cause substantial in- equity to the State or the Contractor, the applicable unit prices shall be equitably adjusted.

12.2 CONCEALED CONDITIONS

12.2.1 Should concealed conditions encountered in the performance of the Work below the surface of the ground, or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Contract Documents or should unknown physical conditions below the surface of the ground or should concealed or unknown conditions in an existing structure of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract, be encountered, the Contract Sum shall be equitably adjusted by Change Order upon claim by either

party made within twenty days after the first observance of the conditions.

12.3 CLAIMS FOR ADDITIONAL COST

12.3.1 If the Contractor wishes to make a claim for an increase in the Contract Sum, he shall give the Architect written notice thereof within twenty days after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with Paragraph 10.3 of these General Conditions. No such claim shall be valid unless so made. If the State and the Contractor cannot agree on the amount of the adjustment in the Contract Sum, it shall be determined by the Architect. Any change in the Contract Sum resulting from such claim shall be authorized by Change Order.

12.3.2 If the Contractor claims that additional cost is involved because of, but not limited to, (1) any order by the State to stop the Work pursuant to Paragraph 3.3 of these General Conditions where the Contractor was not at fault, or (2) failure of payment by the State pursuant to Paragraph 9.7(of these General Conditions), the Contractor shall make such claim as provided in Subparagraph 12.3.1 of this agreement.

12.3.3 The Architect will have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order and shall be binding on the State and Contractor within 10 days unless the Contractor or the State objects to the change in writing.

ARTICLE 13

UNCOVERING AND CORRECTION OF WORK

13.1 UNCOVERING OF WORK

13.1.1 If any portion of the Work should be covered contrary to the request of the Architect or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Architect, be uncovered for his or her observation and shall be replaced at the Contractor's expense.

13.1.2 If any other portion of the Work has been covered which the Architect has not specifically requested to observe prior to being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is found in accordance with the Contract Documents, the cost of uncovering and replacement shall, by appropriate Change Order, be charged to the State. If such Work is found not to be in accordance with the Contract Documents, the Contractor shall pay such costs unless it is found that this condition was caused by the State or a separate contractor as provided in Article 6 of these General Conditions, in which event the State shall be responsible for the payment of such costs.

13.2 CORRECTION OF WORK

13.2.1 The Contractor shall be responsible for correcting all Work which the Architect has found to be defective or which fails to conform to the Contract Documents whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including compensation for the Architect's and the State's additional services made necessary thereby.

The Architect, upon a finding of defect or failure to conform, shall immediately notify the State and Contractor, in writing, of the defect. The Contractor shall begin correcting the defective or non-conforming Work within ten (10) days unless the State agrees to a Change Order which reflects the reduction in Contract Sum due to the value of diminishment of the defective or nonconforming Work.

13.2.2 If, within one year after the Date of Substantial Completion of the Work or designated portion thereof or within one year after acceptance by the State of designated equipment or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of a written notice from the State to do so unless the State has previously given the Contractor a written acceptance of such condition. This obligation shall survive termination of the Contract. The State shall give such notice promptly after discovery of the condition.

13.2.3 The Contractor shall remove from the site all portions of the Work which are defective or non-conforming and which have not been corrected under Subparagraphs 4.5.1, 13.2.1 and 13.2.2 of these General Conditions, unless removal is waived by the State.

13.2.4 If the Contractor fails to correct defective or nonconforming Work as provided in Subparagraphs 4.5.1, 13.2.1 and 13.2.2, the State may correct it in accordance with Paragraph 3.4 of these General Conditions.

13.2.5 If the Contractor does not proceed with the correction of such defective or non- conforming Work within a reasonable time fixed by written notice from the Architect, the State may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten days thereafter, the State may upon ten additional days written notice sell such Work at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Contractor, including compensation for the Architect's and the State's additional services and expenses made necessary thereby. If such proceeds of sale do not cover all costs which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the State.

13.2.6 The Contractor shall bear the cost of making good all work of the State or separate contractors destroyed or damaged by such correction or removal.

13.2.7 Nothing contained in this Paragraph 13.2 shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the

Contract Documents, including Paragraph 4.5 of these General Conditions. The establishment of the time period of one year after the Date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which his obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to his obligations other than specifically to correct the Work.

13.3 ACCEPTANCE OF DEFECTIVE OR NON-CONFORMING WORK

13.3.1 The State may accept defective or nonconforming Work pursuant to Paragraph 13.2.1 of this agreement. If the State elects to accept the defective or nonconforming Work, a Change Order will be issued to reflect a reduction in the Contract Sum. The Architect will recommend to the State the value of diminishment of the defective or nonconforming Work. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 14

TERMINATION AND SUSPENSION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR

If the Work is stopped for a period of thirty days under an order of any court or other public authority having jurisdiction, or as a result of an act of government, such as a declaration of a national emergency making materials unavailable, through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing any of the Work under a contract with the Contractor, or if the Work should be stopped for a period of thirty days by the Contractor because the Architect has not issued a Certificate for Payment as provided in Paragraph 9.7 of these General Conditions or because the State has not made payment thereon as provided in Paragraph 9.7, then the Contractor may, upon seven additional days written notice to the State and the Architect, terminate the Contract and recover from the State payment for all Work executed and for any proven loss sustained upon any materials, equipment, tools, construction equipment and machinery, including reasonable profit and damages.

14.2 TERMINATION BY THE STATE FOR CAUSE

14.2.1 If the Contractor is adjudged a bankrupt, or if he or she makes a general assignment for the benefit of his/ her creditors, or if a receiver is appointed on account of his/ her insolvency, or if he or she persistently or repeatedly refuses or fails, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or if he or she fails to make prompt payment to Subcontractors or for materials or labor, or persistently disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, or otherwise is guilty of a substantial violation of a provision of the Contract Documents, then the State, upon certification by the Architect that sufficient cause exists to justify such action, may, without prejudice to any right or remedy and after giving the Contractor and his surety, if any, seven days written notice, terminate the employment of the Contractor and take possession of the

site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and may finish the Work by whatever method he may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the Work is finished.

14.2.2 If the costs of finishing the Work, including compensation for the Architect's and State's additional services and expenses made necessary thereby, exceed the unpaid balance of the Contract Sum, the Contractor shall pay the difference to the State.

If the unpaid balance of the Contract Sum exceeds the costs of finishing the Work, including compensation for the Architect's and the State's additional services and expenses made necessary thereby, such excess shall be paid to the Contractor.

The amount owed by Contractor to the State shall be certified by the Architect, upon application, in the manner provided in section 9.4 of these General Conditions, and this obligation for payment shall survive the termination of the Contract.

14.3 TERMINATION BY STATE FOR CONVENIENCE

14.3.1 The State may, at any time, terminate this agreement for the State's convenience and without cause.

14.3.2 Upon receipt of written notice from the State of such termination for the State's convenience, the Contractor shall:

(a) cease operations as directed by the State in the notice;
(b) take actions necessary, or that the State may direct, for the protection and preservation of the Work; and
(c) except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

14.3.3 In case of such termination for the State's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

14.4 SUSPENSION BY STATE FOR CONVEVIENCE

14.4.1 The State may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the State may determine.

14.4.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in section 14.4.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent:

(a) that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
(b) that an equitable adjustment is made or denied under another provision of this Contract.

VERMONT STATE HOUSE PANDEMIC MITIGATION / RENOVATION PROJECT
115 STATE STREET, MONTPELIER, VT

DESIGN DEVELOPMENT - 100% SET
NOT FOR CONSTRUCTION
OCTOBER 23, 2026

OWNER

State of Vermont - Dept of Buildings & General Services
133 State Street, 5th Floor
Montpelier, VT 05633
(802) 828-3519

ARCHITECT

Freeman French Freeman, Inc.
81 Maple Street
Burlington, VT 05401
(802) 864-6844

LANDSCAPE ARCHITECT

Company Name

CIVIL ENGINEER

Engineering Ventures
208 Flynn Ave
Burlington, VT 05401
(802) 863-6225

STRUCTURAL ENGINEER

Engineering Ventures
208 Flynn Ave
Burlington, VT 05401
(802) 863-6225

MEP ENGINEER

Salas O'Brien
71 Water Street
Laconia, NH 03246
(603) 524-4647

SPECIFICATIONS

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21 Eliot Street
Natick, MA 01760
(617) 964-5477

CODE CONSULTANT

Tom Bursey Designs
50 Lakeside Ave H7
Burlington, VT 05401
(802) 777-4261

GEOTECHNICAL ENGINEER

John Turner Consulting
15 Rye Street, Suite 125
Portsmouth, NH 03801
(603) 379-9162

COMMISSIONING AGENT

CX Associates
209 Battery Street
Burlington, VT 05401
(802) 861-2715

CONSTRUCTION MANAGER

Company Name

fff
freeman | french | freeman

81 Maple Street · Burlington Vermont 05401
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Architecture · Planning · Interiors

LOCATION MAP



STATE HOUSE



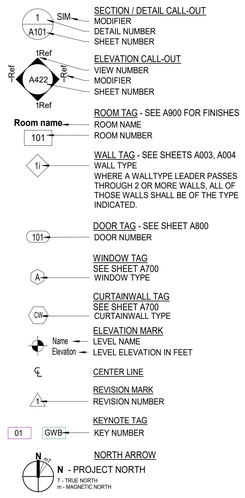
GENERAL NOTES

1. ALL WORK TO BE DONE IN ACCORDANCE WITH STATE AND LOCAL CODES AND ORDINANCES.
2. ALL WORK PERFORMED TO BE OF ACCEPTED INDUSTRY STANDARDS AND PRACTICES GOVERNING THE HIGHEST DEFINED QUALITY OF WORKMANSHIP.
3. CONTRACTOR TO COORDINATE KEYING REQUIREMENTS WITH THE OWNER AND THOSE SCHEDULED WITHIN THESE DOCUMENTS.
4. FIRE PROTECTION DEVICES, FIRE ALARM DEVICES, EXIT SIGNS AND EMERGENCY LIGHTING ARE TO BE LOCATED AS DIRECTED AND REQUIRED BY CODE AND / OR AUTHORITIES HAVING JURISDICTION.
5. ALL EXTERIOR WOOD BLOCKING AND ALL WOOD IN CONTACT WITH CONCRETESLABS AND / OR MASONRY TO BE PRESSURE TREATED.
6. CONTRACTOR TO VERIFY LAYOUT AND DIMENSIONS PRIOR TO THE START OF CONSTRUCTION AND TO CONSULT WITH THE ARCHITECT REGARDING ANY DISCREPANCIES THAT EXIST WITHIN THESE CONSTRUCTION DOCUMENTS.
7. CONTRACTOR TO COORDINATE WITH THE OWNER FOR ANY ITEMS TO BE PROVIDED BY THE OWNER AND INSTALLED BY THE CONTRACTOR.
8. CONTRACTOR IS RESPONSIBLE FOR PERMITS, FEES, ETC. ASSOCIATED WITH THE EXECUTION AND COMPLETION OF THE WORK AS DEFINED IN THE CONTRACT.
9. PROVIDE FIRE TREATED WOOD BLOCKING IN PARTITIONS AS REQUIRED FOR MOUNTING OF CABINETS, SHELVING, GRAB BARS, TACK BOARDS, ETC.
10. ALL WOOD FRAMING/ BLOCKING AND UNIT MASONRY SIZES ARE NOMINAL, UNO.
11. ALL EXPOSED INTERIOR STEEL TO BE PAINTED, EXPOSED EXTERIOR STEEL TO BE GALVANIZED, UNO.
12. ALL INTERIOR PLAN DIMENSIONS ARE FROM FINISHED FACE OF WALLS, UNO.
13. WHERE WALLS OR PARTITIONS ON EITHER SIDE OF A DOOR ARE SHOWN AS SOUND, SMOKE, OR FIRE RATED, THE WALL OR PARTITION OVER THE DOOR SHALL BE RATED TO THE HIGHEST RATING OF THE ADJACENT WALLS AND PARTITIONS, UNLESS OTHERWISE NOTED.
14. THE DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY TO EACH OTHER AS DEFINED IN THE A201 GENERAL CONDITIONS. BRING CONFLICTING INFORMATION TO THE ATTENTION OF THE ARCHITECT. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONFLICTING REQUIREMENTS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT AND THE ARCHITECT WILL RENDER A DECISION ON HOW TO RESOLVE THE CONFLICT AT A LATER DATE. THE CONTRACTOR IS RESPONSIBLE FOR THE HIGHER COST OF THE CONFLICTING REQUIREMENTS UNLESS CLARIFIED IN WRITING WITHIN OR PRIOR TO SUBMITTING THE BID OR PROPOSAL.

MATERIALS LEGEND

- METAL STUD FRAMING
- CONCRETE
- MASONRY - BRICK
- MASONRY - CMU
- BATT INSULATION
- RIGID FOAM INSULATION
- RIGID MINERAL FIBER INSULATION
- SPRAY FOAM INSULATION
- EARTH
- GYPSUM BOARD
- STEEL
- ALUMINUM
- CRUSHED STONE
- PLYWOOD

SYMBOLS LEGEND



SECTION / DETAIL CALL-OUT
MODIFIER
DETAIL NUMBER
SHEET NUMBER

ELEVATION CALL-OUT
VIEW NUMBER
MODIFIER
SHEET NUMBER

ROOM TAG - SEE A900 FOR FINISHES
ROOM NAME
ROOM NUMBER

WALL TAG - SEE SHEETS A003, A004
WALL TYPE
WHERE A WALLTYPE LEADER PASSES THROUGH 2 OR MORE WALLS, ALL OF THOSE WALLS SHALL BE OF THE TYPE INDICATED.

DOOR TAG - SEE SHEET A800
DOOR NUMBER

WINDOW TAG
SEE SHEET A700
WINDOW TYPE

CURTAINWALL TAG
SEE SHEET A700
CURTAINWALL TYPE

ELEVATION MARK
LEVEL NAME
LEVEL ELEVATION IN FEET

CENTER LINE

REVISION MARK
REVISION NUMBER

KEYNOTE TAG
KEY NUMBER

NORTH ARROW
N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

ABBREVIATIONS

ACM	ALUMINUM COMPOSITE PANEL	MATL	MATERIAL
ACT	ACOUSTICAL CEILING TILE	MAX	MAXIMUM
ADA	AMERICANS WITH DISABILITIES ACT	MECH	MECHANICAL
		MFR	MANUFACTURER
AFF	ABOVE FINISH FLOOR	MIN	MINIMUM
ALUM	ALUMINUM	MISC	MISCELLANEOUS
APPROX	APPROXIMATELY	MO	MASONRY OPENING
		MTD	MOUNTED
BD	BOARD	MTL	METAL
BLDG	BUILDING	NA	NOT APPLICABLE
BOD	BASIS OF DESIGN	NIC	NOT IN CONTRACT
CG	CORNER GUARD	NTS	NOT TO SCALE
CJ	CONTROL JOINT	OC	ON CENTER
CL	CENTER LINE	OD	OVERFLOW ROOF DRAIN
CLG	CEILING	OFF	OFFICE
CLR	CLEAR	OH	OPPOSITE HAND OR OVERHEAD
CMP	COMPOSITE METAL PANEL		
CMU	CONCRETE MASONRY UNIT	OPP	OPPOSITE
COL	COLUMN	OFOI	OWNER FURNISHED OWNER INSTALLED
CONC	CONCRETE		
CONT	CONTINUOUS	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CORR	CORRIDOR		
CPT	CARPET	PJ	PANEL JOINT
CT	CERAMIC TILE	PL	PLATE
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED	PLAM/P-LAM	PLASTIC LAMINATE
		PLYWD	PLYWOOD
CFOI	CONTRACTOR FURNISHED OWNER INSTALLED	PREFAB	PREFABRICATED
		PT	PRESSURE TREATED
DF	DRINKING FOUNTAIN	PTD	PAINTED
DIA	DIAMETER	QT	QUARRY TILE
DIM	DIMENSION	RCP	REFLECTED CEILING PLAN
DN	DOWN	RD	ROOF DRAIN
DTL	DETAIL	REF	REFERENCE/ REFRIGERATOR
DWG	DRAWING	REQD	REQUIRED
EJ	EXPANSION JOINT	RESIL	RESILIENT
EL/ELEV	ELEVATION	REV	REVISION
ELEC	ELECTRIC	RM	ROOM
EMER	EMERGENCY	RO	ROUGH OPENING
ENGR	ENGINEER	SCHED	SCHEDULE
EQ	EQUAL	SECT	SECTION
EQUIP	EQUIPMENT	SHT	SHEET
EWC	ELECTRIC WATER COOLER	SIM	SIMILAR
EX/EXIST	EXISTING	SPEC	SPECIFICATION
EXT	EXTERIOR	STD	STANDARD
ETR	EXISTING TO REMAIN	STL	STEEL
FD	FLOOR DRAIN	SS, ST. STL.	STAINLESS STEEL
FEC	FIRE EXTINGUISHER CABINET	STOR	STORAGE
FIN FLR	FINISH FLOOR	STRUCT	STRUCTURAL
FIN	FINISH	TEL	TELEPHONE
FLR	FLOOR	TOC	TOP OF CONCRETE
FRM	FIRE RESISTIVE MATERIAL	TOS	TOP OF STEEL
FT	FOOT OR FEET	TOW	TOP OF WALL
GALV	GALVANIZED	TYP	TYPICAL
GWB	GYPSUM WALL BOARD	UNO	UNLESS NOTED OTHERWISE
GYP	GYPSUM	UC	UNDER CONTROL
HC	HANDICAP	VB	VINYL BASE
HDW	HARDWARE	VCT	VINYL COMPOSITION TILE
HM	HOLLOW METAL	VERT	VERTICAL
HORIZ	HORIZONTAL	VEST	VESTIBULE
HR	HANDRAIL	W/	WITH
HT	HEIGHT	WC	WATER CLOSET
INSUL	INSULATION	WD	WOOD
INT	INTERIOR	W/O	WITHOUT
IN	INCHES		
JAN	JANITOR		
JC	JANITOR CLOSET		
LAV	LAVATORY		

SCHEDULE OF DRAWINGS

GENERAL + CODE SUMMARY

G000 COVER SHEET
G102 FIRST FL SCOPE C NARRATIVE SCOPE
G200 CODE PLANS - LEVEL 1
G201 CODE PLANS - MEZZ & L2
G202 CODE PLAN - LEVEL 3

CIVIL

C101 EXISTING CONDITIONS & DEMOLITION PLAN
C201 SITE PLAN
C202 GRADING PLAN
C203 VEHICLE MOVEMENTS
C204 VEHICLE MOVEMENTS
C301 MECHANICAL UNIT PLAN & PROFILE
C501 SITE DETAILS, C502 STORMWATER DETAILS
C502 STORMWATER DETAILS
C503 SANITARY SEWER DETAILS

LANDSCAPE

L100 LANDSCAPE GRADING PLAN
L200 LANDSCAPE LAYOUT PLAN
L300 LANDSCAPE DETAILS
L301 LANDSCAPE DETAILS
L400 PLANTING PLAN
L500 PLANTING DETAILS

STRUCTURAL

S001 GENERAL NOTES
S002 GENERAL NOTES
S100 FIRST FLOOR FOUNDATION PLAN
S101 MEZZANINE LEVEL FRAMING PLAN
S102 LEVEL 2.2 FRAMING PLAN
S103 THIRD FLOOR MECHANICAL ROOM FRAMING PLAN
S200 TYPICAL FOUNDATION DETAILS
S201 TYPICAL FOUNDATIONS DETAILS
S202 FOUNDATION DETAILS
S301 FRAMING DETAILS
S401 BUILDING SECTIONS
S402 BUILDING SECTIONS

ARCHITECTURAL

A001 MOUNTING AND CLEARANCE STANDARDS
A002 ENCLOSURE INTEGRITY STANDARDS
A004 WALL TYPES
AD100 DEMO PLAN - L1 & MEZZ
AD101 DEMO PLAN - L2 & L3
A100 OVERALL PLAN - LEVEL 1
A101 OVERALL PLAN - MEZZ & L2
A102 OVERALL PLAN - LEVEL 3
A103 OVERALL ROOF PLAN
A110 ENLARGED PLAN LEVEL 1 - WEST
A111 ENLARGED PLAN LEVEL 1 - EAST
A120 REFLECTED CEILING PLAN - LEVEL 1
A130 FINISH PLANS
A200 WEST EXTERIOR ELEVATION
A201 SOUTH EXTERIOR ELEVATION
A202 EAST EXTERIOR ELEVATION
A203 NORTH EXTERIOR ELEVATION
A300 BUILDING SECTIONS - SOUTH
A301 BUILDING SECTION - NORTH
A302 BUILDING SECTIONS
A303 BUILDING SECTIONS
A304 BUILDING SECTION
A310 WALL SECTIONS
A311 WALL SECTIONS
A420 INTERIOR ELEVATIONS
A421 ENLARGED PLAN & INTERIOR ELEVATIONS
A422 ENLARGED PLAN & ELEVATIONS
A500 SECTION DETAILS - ENTRY
A620 STAIR PLANS
A621 STAIR SECTIONS
A622 STAIR SECTIONS
A700 WINDOW TYPES - SCHEDULES, FRAMES AND NOTES
A800 DOOR TYPES - SCHEDULES, FRAMES AND NOTES
A801 DOOR DETAILS
A900 FINISH SCHEDULE AND NOTES

FIRE PROTECTION

FP000 FIRE PROTECTION LEGEND, NOTES & ABBREVIATIONS
FPD121 LEVEL 1 FIRE PROTECTION DEMOLITION PLAN
FP121 LEVEL 1 FIRE PROTECTION PLAN

PLUMBING

P001 PLUMBING LEGEND, NOTES & ABBREVIATIONS
PD121 LEVEL 1 PLUMBING DEMOLITION PLAN
P120 BASEMENT PLUMBING PLAN
P121 LEVEL 1 PLUMBING PLAN
P122 ROOF PLUMBING PLAN
P200 PLUMBING SCHEDULES

MECHANICAL

M001 MECHANICAL LEGENDS, NOTES, & ABBREVIATIONS
M121 LEVEL 1 DUCTWORK PLAN
M122 MEZZANINE & LEVEL 2 DUCTWORK PLAN
M123 LEVEL 3 DUCTWORK PLAN
M221 LEVEL 1 PIPING PLAN
M223 LEVEL 3 PIPING PLAN
M301 RADIANT FLOOR PLAN
M302 MECHANICAL SECTIONS
M421 MECHANICAL SCHEDULES
M501 MECHANICAL DETAILS
M502 MECHANICAL DETAILS
M601 MECHANICAL CONTROLS
M602 MECHANICAL CONTROLS
M603 MECHANICAL CONTROLS
M604 MECHANICAL CONTROLS
MD121 LEVEL 1 DUCTWORK DEMOLITION PLAN

ELECTRICAL - FIRE ALARM

FA021 FIRE ALARM LEGENDS, NOTES & ABBREVIATIONS
FAD121 LEVEL 1 FIRE ALARM DEMOLITION PLAN
FAD122 MEZZANINE FIRE ALARM PLAN
FAD123 LEVELS 2 & 3 PARTIAL FIRE ALARM DEMOLITION PLANS
FA121 LEVEL 1 FIRE ALARM PLAN
FA122 MEZZANINE FIRE ALARM PLAN
FA123 LEVELS 2 & 3 PARTIAL FIRE ALARM PLANS

ELECTRICAL

E021 ELECTRICAL LEGENDS, NOTES & ABBREVIATIONS
E022 EQUIPMENT SCHEDULE & PARTIAL ONE-LINE DIAGRAM
E023 PANELBOARD SCHEDULES
ED121 LEVEL 1 LIGHTING DEMOLITION PLAN
ED122 MEZZANINE LIGHTING DEMOLITION PLAN
ED123 LEVELS 2 & 3 LIGHTING PARTIAL DEMOLITION PLAN
ED221 LEVEL 1 POWER DEMOLITION PLAN
ED222 MEZZANINE POWER DEMOLITION PLAN
E121 LEVEL 1 LIGHTING PLAN
E122 MEZZANINE LIGHTING PLAN
E123 LEVELS 2 & 3 PARTIAL LIGHTING PLANS
E221 BASEMENT & LEVEL 1 POWER PLANS
E223 ROOF POWER PLAN
E421 LIGHTING FIXTURE SCHEDULE & DETAILS
ES21 ELECTRICAL DETAILS
ES101 ELECTRICAL SITE PLAN
ES21 ELECTRICAL SITE DETAILS

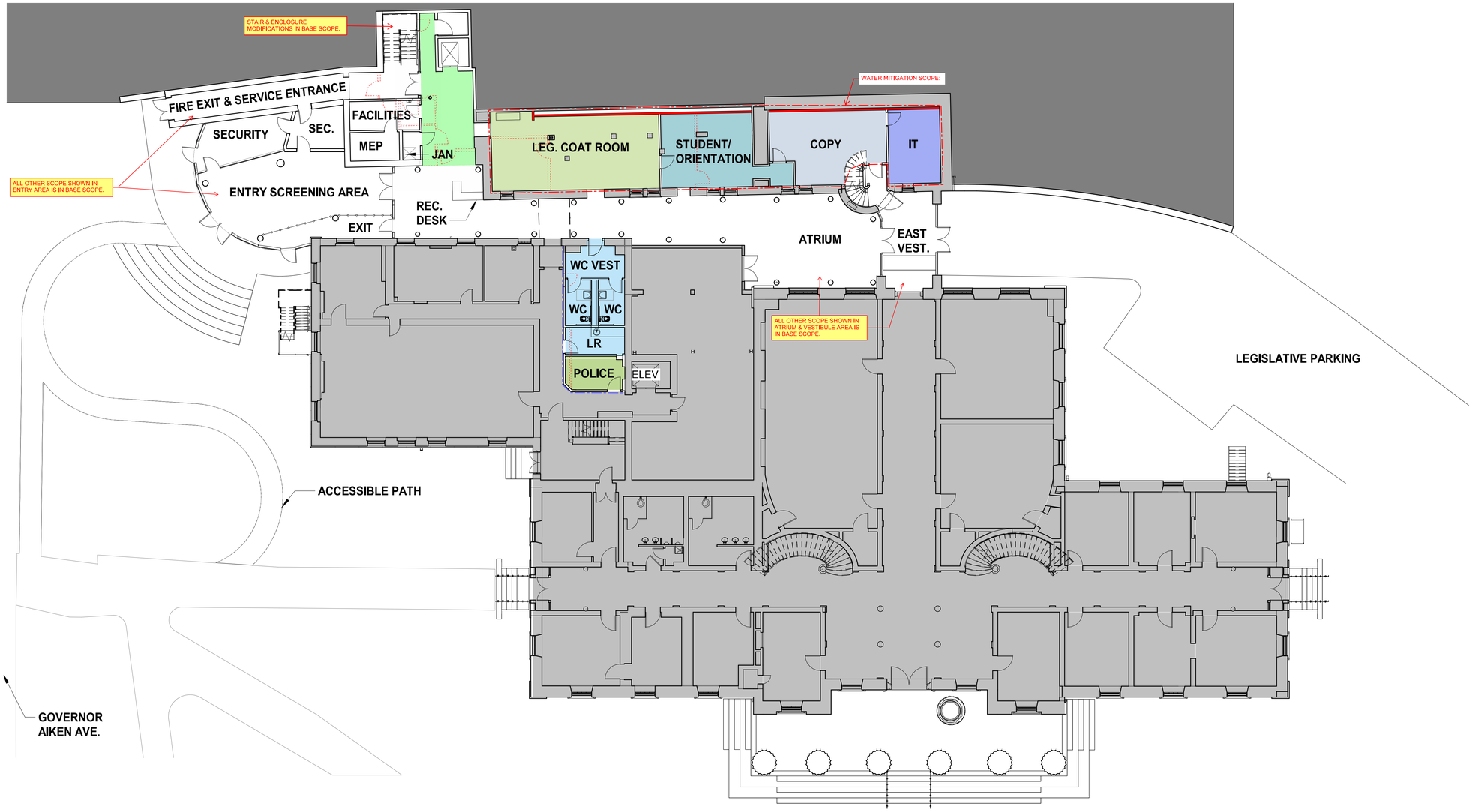
ELECTRICAL - SECURITY

SEC001 SECURITY LEGENDS, NOTES & ABBREVIATIONS
SEC121 LEVEL 1 SECURITY PLAN

ELECTRICAL - TELECOM

T001 TELECOM LEGENDS, NOTES & ABBREVIATIONS
T121 LEVEL 1 TELECOM PLAN

IMPORTANT – COST ESTIMATOR NOTE:
ALTERNATE C WAS CHOSEN, THEREFORE G102 IS SHOWN WITH THE INFOMARTION.



SCOPE C PROGRAM:

Proposed Approach

Flooring
Existing carpet and plywood underlayment will be removed to expose the concrete slab, lower the finished floor elevation, and better align with adjacent areas. Once exposed, the slab will receive a post-applied vapor retarder to control moisture. Two post-applied vapor retarder options are available for this condition: liquid-applied and sheet-applied systems.

Both systems are technically viable. A liquid-applied vapor retarder is preferred due to improved continuity and reduced risk of discontinuities at seams, penetrations, and irregular slab conditions, while a sheet-applied system may be considered if slab defects would require extensive surface repair prior to liquid application. Removal of existing porous materials is expected to reduce odor sources. A low-profile resilient flooring system such as VCT is recommended, and the selected flooring finish and adhesive system must be compatible with the vapor retarder and manufacturer moisture requirements.

Foundation Walls
All existing wall finishes on the north and east exterior foundation walls, as well as on all sides of the stone and brick wall separating the 1899 structure from the 1928 addition, should be removed. Moisture-sensitive finishes such as gypsum wallboard are not recommended in these locations due to the potential for ongoing vapor drive from behind the foundation walls.

As noted in Gale's report, elevated moisture levels within wall materials may be contributing to reported odors. Following removal of wall finishes during construction, exposed conditions should be visually reviewed, with particular attention to wall-to-slab interfaces, transitions between differing wall materials, and wall-to-ceiling joints. If feasible, Gale should return at that time to assist in confirming appropriate treatment extents.

For budgeting and comparative evaluation, the estimator should carry side-by-side pricing for the following two wall moisture control approaches identified by Gale:

Option A – Negative-Side Crystalline Waterproofing
For estimating purposes, assume application over approximately half the wall height, including treatment at the wall-to-slab interface. This approach is appropriate for unreinforced fieldstone or brick construction where no embedded steel is present. Because negative-side treatment limits inward moisture migration without stopping exterior water entry, it is not recommended where rust staining, reinforced concrete, or other indicators of embedded steel are observed, due to the potential for moisture entrapment and accelerated corrosion.

Option B – Curtainwall Grouting:
This approach involves positive-side injection grouting through the foundation walls. Geological information should be obtained prior to implementation, as this method introduces potential risks related to hydrostatic pressure and structural loading.

Additional Considerations
Gale has also identified items related to existing exterior walls and roofing that are outside the scope of the current interior work. These items are noted here for future planning purposes. Except for conditions at the east wall, they would not necessarily need to be addressed once the proposed infill is in place and are not considered prerequisites to the approaches described above. However, since the proposed infill is not scheduled to be constructed for at least another two years, the work on the exterior should also be considered for the next summer of construction.

End of Memo

FIRST FLOOR SCOPE C NARRATIVE SKETCH

VERMONT

1 / G102 LEVEL 1 - C NARRATIVE SKETCH
SCALE: 1/8" = 1'-0"

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE
0 4' 8' 16'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 05/27/26
SCALE: 1/8" = 1'-0"
DRAWN BY: FFF
CHECKED BY: CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: FIRST FL SCOPE C NARRATIVE SCOPE

SHEET NO: G102

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APPLICABLE CODES

LIST NOT INCLUSIVE OF ALL RELEVANT, APPLICABLE OR REFERENCED CODES.

State Codes

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Federal Guidance

• 2010 ADA Standards for Accessible Design	2010 edition

CODE PLAN LEGEND

BUILDING FRONTAGE:

- - - - - - - - - - - - ACCESSIBLE PERIMETER

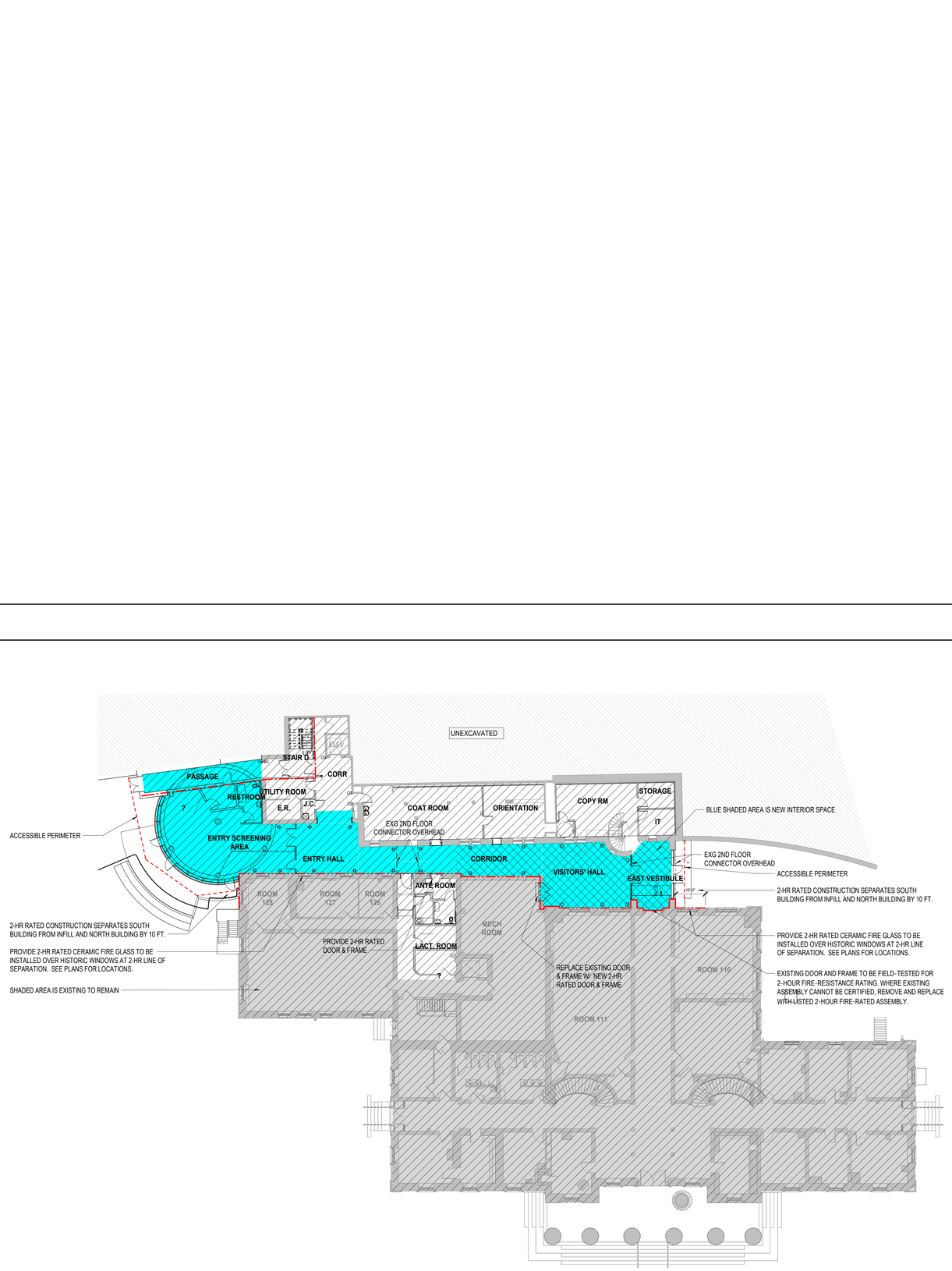
RATED CONSTRUCTION:

	WALL/PARTITION	CEILING/ FLOOR ASSEMBLY ABOVE
	SMOKE PARTITION	
	SMOKE BARRIER	
	1/2 HOUR RATING	
	1 HOUR RATING	
	2 HOUR RATING	
	3 HOUR RATING	

OTHER:

	CODE RELATED DISTANCE OR PATH OF TRAVEL
FE OR FEC	FIRE EXTINGUISHER (CABINET) LOCATION
AP	FIRE ALARM ANNUNCIATOR PANEL
FDC	FIRE DEPARTMENT CONNECTION
SP	STAND PIPE
EXIT EXIT EXIT	EXIT SIGN LOCATION
NAME / CAP. | OCC.	SPACE, EGRESS CAPACITY AND NUMBER OF OCCUPANTS
NAME / CAP. | OCC.	EXIT, EXIT CAPACITY AND NUMBER USING EGRESS COMPONENT

- EXISTING BUSINESS USE
- EXISTING BUSINESS USE BEING RENOVATED
- NEW BUSINESS USE
- STORAGE / MECHANICAL / BUILDING SUPPORT / USE TYPICALLY NOT REGULARLY OCCUPIED SPACE
- EXISTING ASSEMBLY USE AT 100 SF / OCCUPANT
- EXISTING ASSEMBLY USE AT 50 SF / OCCUPANT
- EXISTING ASSEMBLY USE AT 15 SF / OCCUPANT
- NEW ASSEMBLY USE?



1 / G200 LEVEL 1 CODE PLAN
SCALE: 1/16" = 1'-0"

CODE SUMMARY

BUILDING IS NOT FULLY PROTECTED WITH AN NFPA-13 SPRINKLER SYSTEM

CONSTRUCTION TYPE: (NFPA 101) [IBC]
UNPROTECTED NON-COMBUSTIBLE (II-000) *[IIB]*

USE GROUP: (NFPA 101) [IBC]
BUILDING IS TREATED AS (MIXED) USE, (SEPARATED & UNSEPARATED)

USE GROUP 1	*(ASSEMBLY)*	*[A3]*
USE GROUP 2	*(BUSINESS)*	*[B]*

BUILDING HEIGHT EXISTING TO REMAIN CODE MAX. ZONING MAX.
EXISTING TO REMAIN

BUILDING AREA PROPOSED CODE MAX.

LARGEST FLOOR	*25,055* GSF	*x,xxx* GSF
TOTAL	*x,xxx* GSF	*x,xxx* GSF

SQUARE FOOTAGES	EXISTING	RENOVATION	NEW	PROPOSED TOTAL
LEVEL 1	*20,806* GSF	*3,198* GSF	*3,550* GSF	*24,356* GSF
'MEZZANINE' LEVEL	*3,955* GSF	*240* GSF	*0* GSF	*3,955* GSF
LEVEL 2	*25,055* GSF	*210* GSF	*0* GSF	*25,055* GSF
LEVEL 3	*6,033* GSF	*117* GSF	*0* GSF	*6,033* GSF

OCCUPANCY:

LEVEL 1: TOTAL OCCUPANCY: *391* OCCUPANTS
USE *A3* = *2,075* NSF / *15* NSF PER OCCUPANT = *138.33* OCCUPANTS (REPORTED 68)
USE *A3* = *7,801* NSF / *50* NSF PER OCCUPANT = *156.16* OCCUPANTS
EX USE *B* = *9,576* GSF / *100* GSF PER OCCUPANT = *95.76* OCCUPANTS

SHOULD THESE TWO ROOMS BE CALCULATED TOGETHER FROM TOM'S SPREADSHEET?

'MEZZANINE' LEVEL: TOTAL OCCUPANCY: *40* OCCUPANTS
USE *B* = *3,955* GSF / *100* GSF PER OCCUPANT = *39.55* OCCUPANTS

LEVEL 2: TOTAL OCCUPANCY:
USE *A3* = *15,522* NSF / *YY* NSF PER OCCUPANT = *ZZ* OCCUPANTS
USE *B* = *3,604* GSF / *YY* GSF PER OCCUPANT = *135* OCCUPANTS ???? HOW DID TOM GET THIS??

HOW DO WE ACCOUNT FOR THE NEW SPACE THAT IS JUST CORRIDOR? A 50 SF PP?

LEVEL 3: TOTAL OCCUPANCY: *110* OCCUPANTS
USE *A3* = *1,306* NSF / *50* NSF PER OCCUPANT = *26.12* OCCUPANTS
USE *A3* = *775* NSF / *18" BENCH* PER OCCUPANT = *53* OCCUPANTS
USE *B* = *3,042* GSF / *100* GSF PER OCCUPANT = *30.42* OCCUPANTS

FIRE RESISTANCE RATINGS (IN HOURS)

EXTERIOR BEARING WALLS:	*0*
EXTERIOR NONBEARING WALLS UP TO 10' SEPARATION:	*1*
EXTERIOR NONBEARING WALLS GREATER THAN 30' SEPARATION:	*0*
INTERIOR BEARING WALLS SUPPORTING MORE THAN ONE FLOOR, COLUMNS, OR OTHER BEARING WALLS:	*0*
INTERIOR BEARING WALLS SUPPORTING A ROOF ONLY:	*0*
INTERIOR CORRIDOR WALLS:	*X*
OTHER INTERIOR NONBEARING WALLS:	*0*
COLUMNS SUPPORTING MORE THAN ONE FLOOR, COLUMNS, OR OTHER BEARING WALLS:	*0*
COLUMNS SUPPORTING A ROOF ONLY:	*0*
BEAMS, GIRDERS, TRUSSES, AND ARCHES SUPPORTING MORE THAN ONE FLOOR, COLUMNS, OR OTHER BEARING WALLS:	*0*
BEAMS, GIRDERS, TRUSSES, AND ARCHES SUPPORTING A ROOF ONLY:	*0*
FLOOR CONSTRUCTION:	*0*
ROOF CONSTRUCTION:	*0*
ELEVATORS, STAIRS AND SHAFTS UP TO 3 STORIES	*1*
ELEVATORS, STAIRS AND SHAFTS 4 OR MORE STORIES	*2*
FIRE SEPARATIONS (OCCUPANCY X TO OCCUPANCY Y):	*X*

ADDITIONAL NOTES

DESIGN MEETS REQUIREMENTS OF VERMONT COMMERCIAL BUILDING ENERGY STANDARDS (2020).

{PROJECT SPECIFIC REQUIREMENTS}

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE
0 8' 16' 32'

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vhb

STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	As indicated
DRAWN BY: FFF	CHECKED BY: CP/SB

ISSUE LOG:

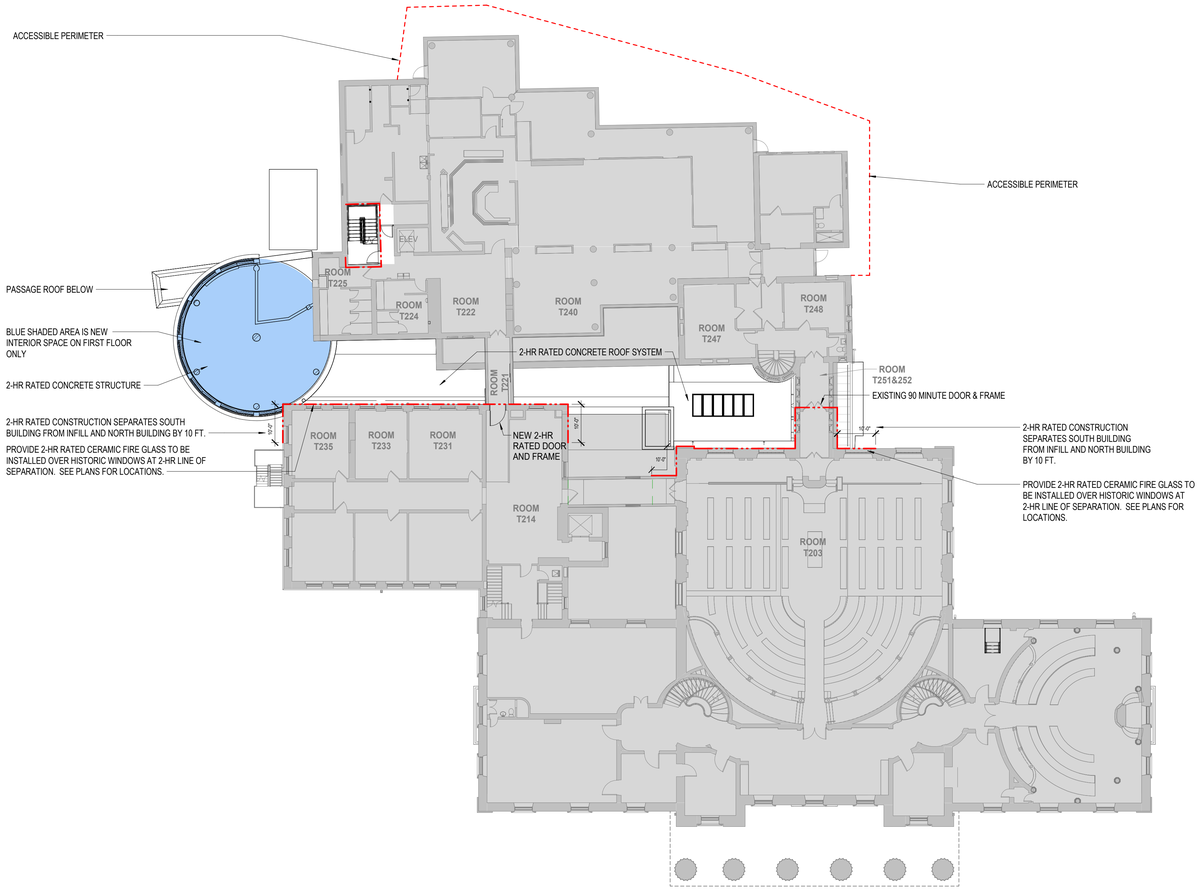
SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:
CODE PLANS - LEVEL 1

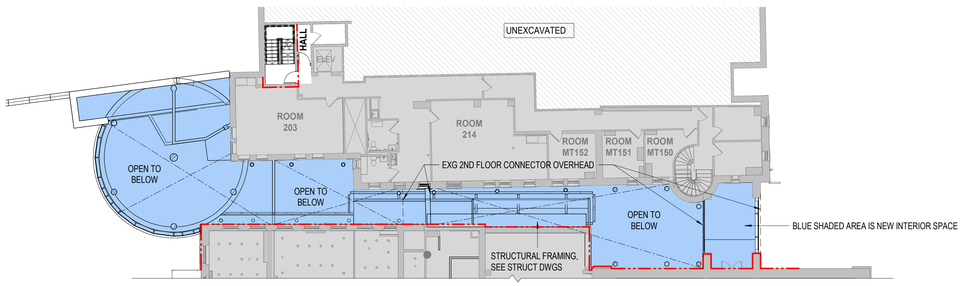
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2 LEVEL 2 CODE PLAN
G201 SCALE: 1/16" = 1'-0"



1 MEZZANINE CODE PLAN
G201 SCALE: 1/16" = 1'-0"

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CODE PLAN LEGEND

BUILDING FRONTAGE:

ACCESSIBLE PERIMETER

RATED CONSTRUCTION:

	WALL/PARTITION	CEILING/ FLOOR ASSEMBLY ABOVE
	SMOKE PARTITION	
	SMOKE BARRIER	
	1/2 HOUR RATING	
	1 HOUR RATING	
	2 HOUR RATING	
	3 HOUR RATING	

OTHER:

	CODE RELATED DISTANCE OR PATH OF TRAVEL
FE OR FEC	FIRE EXTINGUISHER (CABINET) LOCATION
AP	FIRE ALARM ANNUNCIATOR PANEL
FDC	FIRE DEPARTMENT CONNECTION
SP	STAND PIPE
EXIT EXIT EXIT	EXIT SIGN LOCATION
NAME CAP. OCC.	SPACE, EGRESS CAPACITY AND NUMBER OF OCCUPANTS
NAME CAP. OCC.	EXIT, EXIT CAPACITY AND NUMBER USING EGRESS COMPONENT

EXISTING BUSINESS USE
EXISTING BUSINESS USE BEING RENOVATED
NEW BUSINESS USE
STORAGE / MECHANICAL / BUILDING SUPPORT / USE TYPICALLY NOT REGULARLY OCCUPIED SPACE
EXISTING ASSEMBLY USE AT 100 SF / OCCUPANT
EXISTING ASSEMBLY USE AT 50 SF / OCCUPANT
EXISTING ASSEMBLY USE AT 15 SF / OCCUPANT
NEW ASSEMBLY USE?

CODE SUMMARY

BUILDING IS NOT FULLY PROTECTED WITH AN NFPA-13 SPRINKLER SYSTEM

CONSTRUCTION TYPE: (NFPA 101) [IBC]
UNPROTECTED NON-COMBUSTIBLE (II-000) *[IIB]*

USE GROUP: (NFPA 101) [IBC]
BUILDING IS TREATED AS (MIXED) USE; (SEPARATED & UNSEPARATED)

USE GROUP 1 *(ASSEMBLY)* *[A3]*
USE GROUP 2 *(BUSINESS)* *[B]*

BUILDING HEIGHT **EXISTING TO REMAIN** **CODE MAX.** **ZONING MAX.**
EXISTING TO REMAIN

BUILDING AREA	**PROPOSED**	**CODE MAX.**
LARGEST FLOOR	*25,055* GSF	*x,xxx* GSF
TOTAL	*x,xxx* GSF	*x,xxx* GSF

SQUARE FOOTAGES	**EXISTING**	**RENOVATION**	**NEW**	**PROPOSED TOTAL**
LEVEL 1	*20,806* GSF	*3,198* GSF	*3,550* GSF	*24,356* GSF
'MEZZANINE' LEVEL	*3,955* GSF	*240* GSF	*0* GSF	*3,955* GSF
LEVEL 2	*25,055* GSF	*210* GSF	*0* GSF	*25,055* GSF
LEVEL 3	*6,033* GSF	*117* GSF	*0* GSF	*6,033* GSF

OCCUPANCY:

LEVEL 1: TOTAL OCCUPANCY: *391* OCCUPANTS
USE *A3* = *2,075* NSF / *15* NSF PER OCCUPANT = *138.33* OCCUPANTS (REPORTED 68)
USE *A3* = *7,801* NSF / *50* NSF PER OCCUPANT = *156.16* OCCUPANTS
EX USE *B* = *9,576* GSF / *100* GSF PER OCCUPANT = *95.76* OCCUPANTS
SEE LOAD CALCULATIONS SHEET FOR CLARIFICATION ON HOW WE ARRIVED AT THESE NUMBERS. HOW DO WE TOMS SPREADSHEET?

'MEZZANINE' LEVEL: TOTAL OCCUPANCY: *40* OCCUPANTS
USE *B* = *3,955* GSF / *100* GSF PER OCCUPANT = *39.55* OCCUPANTS

LEVEL 2: TOTAL OCCUPANCY:
USE *A3* = *15,522* NSF / *YY* NSF PER OCCUPANT = *ZZ* OCCUPANTS
USE *B* = *3,604* GSF / YY GSF PER OCCUPANT = *135* OCCUPANTS ????? HOW DID TOM GET THIS??
HOW DO WE ACCOUNT FOR THE NEW SPACE THAT IS JUST CORRIDOR? A 50 SF PP?

LEVEL 3: TOTAL OCCUPANCY: *110* OCCUPANTS
USE *A3* = *1,306* NSF / *50* NSF PER OCCUPANT = *26.12* OCCUPANTS
USE *A3* = *775* NSF / *18" BENCH* PER OCCUPANT = *53* OCCUPANTS
USE *B* = *3,042* GSF / *100* GSF PER OCCUPANT = *30.42* OCCUPANTS

FIRE RESISTANCE RATINGS (IN HOURS)

EXTERIOR BEARING WALLS:	*0*
EXTERIOR NONBEARING WALLS UP TO 10' SEPARATION:	*1*
EXTERIOR NONBEARING WALLS GREATER THAN 30' SEPARATION:	*0*
INTERIOR BEARING WALLS SUPPORTING MORE THAN ONE FLOOR, COLUMNS, OR OTHER BEARING WALLS:	*0*
INTERIOR BEARING WALLS SUPPORTING A ROOF ONLY:	*0*
INTERIOR CORRIDOR WALLS:	*X*
OTHER INTERIOR NONBEARING WALLS:	*0*
COLUMNS SUPPORTING MORE THAN ONE FLOOR, COLUMNS, OR OTHER BEARING WALLS:	*0*
COLUMNS SUPPORTING A ROOF ONLY:	*0*
BEAMS, GIRDERS, TRUSSES, AND ARCHES SUPPORTING MORE THAN ONE FLOOR, COLUMNS, OR OTHER BEARING WALLS:	*0*
BEAMS, GIRDERS, TRUSSES, AND ARCHES SUPPORTING A ROOF ONLY:	*0*
FLOOR CONSTRUCTION:	*0*
ROOF CONSTRUCTION:	*0*
ELEVATORS, STAIRS AND SHAFTS UP TO 3 STORIES	*1*
ELEVATORS, STAIRS AND SHAFTS 4 OR MORE STORIES	*2*
FIRE SEPARATIONS (OCCUPANCY X TO OCCUPANCY Y):	*X*

ADDITIONAL NOTES

DESIGN MEETS REQUIREMENTS OF VERMONT COMMERCIAL BUILDING ENERGY STANDARDS (2020).

{PROJECT SPECIFIC REQUIREMENTS}

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE
0 8' 16' 32'

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vhb

STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	As Indicated
DRAWN BY: FFF	CHECKED BY: CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: CODE PLANS - MEZZ & L2

SHEET NO: G201

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1 / G202 LEVEL 3 CODE PLAN

SCALE: 1/16" = 1'-0"

10/23/2026 3:39:56 PM

APPLICABLE CODES

LIST NOT INCLUSIVE OF ALL RELEVANT, APPLICABLE OR REFERENCED CODES.

State Codes

• Vermont Fire and Building Safety Code	2025 edition
• Vermont Electrical Safety Rules	2025 edition
Vermont Plumbing Rules	2025 edition
• Vermont Elevator Safety Rules	2014 edition
• Vermont Access Rules (ADA)	2012 edition
• Vermont Commercial Building Energy Standards	2020 edition
• VOSHA - Safety & Health Standard	

Model Codes Adopted by Inclusion or Reference

• NFPA 1 Uniform Fire Code	2021 edition
• NFPA 101 Life Safety Code	2021 edition
• International Building Code (IBC)	2021 edition
• NFPA 70 National Electrical Code	2023 edition
• ICC International Plumbing Code	2024 edition
• The National Board Inspection Code, National Board of Boiler & Pressure Vessel Inspectors	2021 edition

Federal Guidance

• 2010 ADA Standards for Accessible Design	2010 edition

CODE PLAN LEGEND

BUILDING FRONTAGE:

ACCESSIBLE PERIMETER

RATED CONSTRUCTION:

	WALL/PARTITION	CEILING/ FLOOR ASSEMBLY ABOVE
	SMOKE PARTITION	
	SMOKE BARRIER	
	1/2 HOUR RATING	
	1 HOUR RATING	
	2 HOUR RATING	
	3 HOUR RATING	

OTHER:

	CODE RELATED DISTANCE OR PATH OF TRAVEL
FE OR FEC	FIRE EXTINGUISHER (CABINET) LOCATION
AP	FIRE ALARM ANNUNCIATOR PANEL
FDC	FIRE DEPARTMENT CONNECTION
SP	STAND PIPE
EXIT EXIT EXIT	EXIT SIGN LOCATION
NAME CAP. OCC.	SPACE, EGRESS CAPACITY AND NUMBER OF OCCUPANTS
NAME CAP. OCC.	EXIT, EXIT CAPACITY AND NUMBER USING EGRESS COMPONENT

- EXISTING BUSINESS USE
- EXISTING BUSINESS USE BEING RENOVATED
- NEW BUSINESS USE
- STORAGE / MECHANICAL / BUILDING SUPPORT / USE TYPICALLY NOT REGULARLY OCCUPIED SPACE
- EXISTING ASSEMBLY USE AT 100 SF / OCCUPANT
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CONSTRUCTION TYPE: (NFPA 101) [IBC]
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USE GROUP: (NFPA 101) [IBC]
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USE GROUP 1 *(ASSEMBLY)* *[A3]*
USE GROUP 2 *(BUSINESS)* *[B]*

BUILDING HEIGHT EXISTING TO REMAIN CODE MAX. ZONING MAX.
EXISTING TO REMAIN

BUILDING AREA	**PROPOSED**	**CODE MAX.**
LARGEST FLOOR	*25,055* GSF	*x,xxx* GSF
TOTAL	*x,xxx* GSF	*x,xxx* GSF

SQUARE FOOTAGES	**EXISTING**	**RENOVATION**	**NEW**	**PROPOSED TOTAL**
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EX USE *B* = *9,576* GSF / *100* GSF PER OCCUPANT = *95.76* OCCUPANTS

SHOULD THESE BE CALCULATED AND COUNT TOGETHER FROM TOM'S SPREADSHEET?

'MEZZANINE' LEVEL: TOTAL OCCUPANCY: *40* OCCUPANTS
USE *B* = *3,955* GSF / *100* GSF PER OCCUPANT = *39.55* OCCUPANTS

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USE *A3* = *775* NSF / *18" BENCH* PER OCCUPANT = *53* OCCUPANTS
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INTERIOR BEARING WALLS SUPPORTING A ROOF ONLY:	*0*
INTERIOR CORRIDOR WALLS:	*X*
OTHER INTERIOR NONBEARING WALLS:	*0*
COLUMNS SUPPORTING MORE THAN ONE FLOOR, COLUMNS, OR OTHER BEARING WALLS:	*0*
COLUMNS SUPPORTING A ROOF ONLY:	*0*
BEAMS, GIRDERS, TRUSSES, AND ARCHES SUPPORTING MORE THAN ONE FLOOR, COLUMNS, OR OTHER BEARING WALLS:	*0*
BEAMS, GIRDERS, TRUSSES, AND ARCHES SUPPORTING A ROOF ONLY:	*0*
FLOOR CONSTRUCTION:	*0*
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ELEVATORS, STAIRS AND SHAFTS UP TO 3 STORIES	*1*
ELEVATORS, STAIRS AND SHAFTS 4 OR MORE STORIES	*2*
FIRE SEPARATIONS (OCCUPANCY X TO OCCUPANCY Y):	*X*

ADDITIONAL NOTES

DESIGN MEETS REQUIREMENTS OF VERMONT COMMERCIAL BUILDING ENERGY STANDARDS (2020).

(PROJECT SPECIFIC REQUIREMENTS)

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE
0 8' 16' 32'

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vhb

STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 01/26/26
SCALE: As indicated
DRAWN BY: FFF
CHECKED BY: CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: CODE PLAN - LEVEL 3

SHEET NO: G202

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SURVEY NOTES

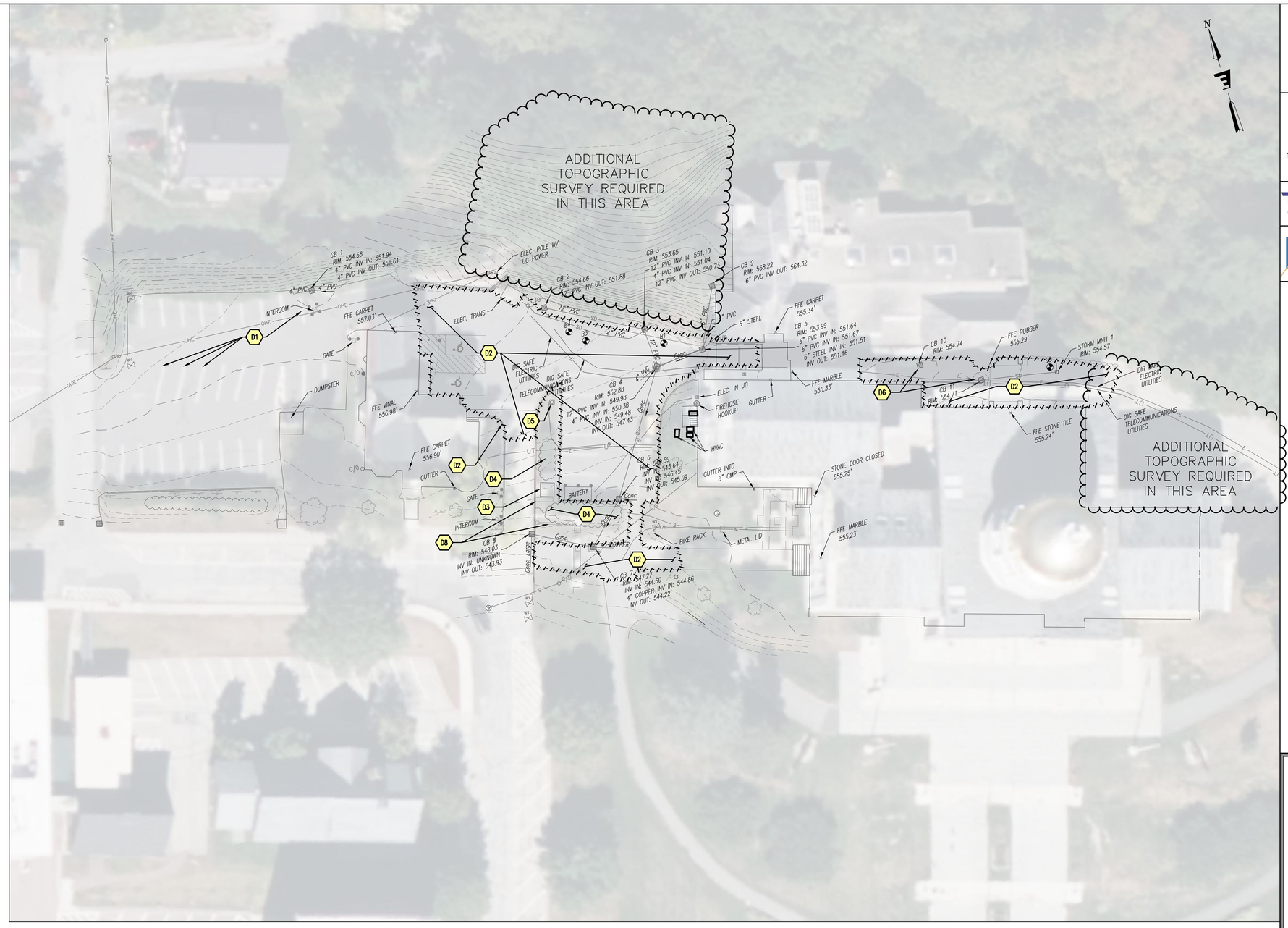
1. EXISTING PHYSICAL FEATURES AND TOPOGRAPHY SHOWN HERE ARE BASED ON A PLAN TITLED: "VERMONT STATEHOUSE TOPO" BY NATE YAGER, LATITUDES LAND SURVEYING, DATED 09/12/2025.
2. UNDERGROUND UTILITY INFORMATION IS BASED ON UNDERGROUNG UTLITY MAPPING PERFORMED BY BUTTON UNDERGROUND, JUNE 2026. MARKED POINTS WERE LATER SURVEYED BY LATITUDES LAND SURVEYING, JULY 2026.
3. UTILITIES SHOWN DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATED UPON OR ADJACENT TO THE SURVEYED PREMISES.
4. NORTH ORIENTATION IS REFERENCED TO APPROXIMATE VERMONT GRID NORTH.

GENERAL NOTES

1. EXACT OBJECT LOCATIONS MAY DIFFER FROM THAT AS SHOWN, AND ADDITIONAL SUB-SURFACE AND SURFACE UTILITIES AND STRUCTURES MAY EXIST. THE CONTRACTOR IS TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK.
2. UTILITIES SHOWN DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATION UPON OR ADJACENT TO THE SURVEYED PREMISES. EXISTING UTILITY LOCATIONS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES. ALL DISCREPANCIES SHALL BE REPORTED TO THE OWNER AND ENGINEER. SITE CONTRACTOR SHALL CALL UTILITY LOCATOR SERVICE AND UTILITY OWNERS 72 HOURS, EXCLUSIVE OF WEEKENDS AND HOLIDAYS, PRIOR TO ANY DIGGING, DRILLING, OR BLASTING.
   A. DIG SAFE (TEL: #811)
   B. NON DIG SAFE MEMBER FACILITY OPERATORS IF KNOWN. A LIST OF DIG SAFE MEMBERS BY STATE CAN BE FOUND ON THE DIG SAFE WEB SITE WWW.DIGSAFE.COM
3. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL FROM THE ENGINEER.
4. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
5. THE CONTRACTOR SHALL RESTORE LAWNS, DRIVEWAYS, CULVERTS, SIGNS AND OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO EXISTING CONDITIONS OR BETTER AS DETERMINED BY THE ENGINEER. ANY DAMAGED TREES, SHRUBS AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, UNLESS NOTED OTHERWISE.
6. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
7. THE CONTRACTOR WILL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A VERMONT STATE LICENSED LAND SURVEYOR.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS, AND COORDINATE WORK WITH ALL CONTRACTS FOR THE SITE.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT EXPLORATORY TEST PITS AS MAY BE REQUIRED TO DETERMINE UNDERGROUND CONDITIONS.
10. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS FOR CONSTRUCTION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
12. MAINTAIN FLOW FOR ALL EXISTING UTILITIES, UNLESS NOTED OTHERWISE.
13. ALL SITE FILL SHALL MEET SELECTED FILL STANDARDS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
14. CONTRACTOR TO GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND IMPERVIOUS SURFACES.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT. THE CONTRACTOR SHALL PROVIDE MARKED-UP AS-BUILT PLANS FOR ALL UTILITIES SHOWING CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES AND INVERTS. AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND HIS REPRESENTATIVES BEFORE UTILITIES WILL BE ACCEPTED.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION, MONITORING, MAINTENANCE AND REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES AND TAKING PRECAUTIONARY STEPS TO AVOID ANY SEDIMENT TRANSFER TO NEIGHBORING SITES OR WATERS OF THE STATE.

DEMOLITION SCHEDULE

- D1 PAINT OVER OR REMOVE EXISTING PARKING STRIPING
- D2 SAW CUT AND REMOVE PAVEMENT, CURBING, AND SIDEWALK WITHIN THE SHOWN BOUNDARY
- D3 DEMOLISH EXISTING GUARD HOUSE
- D4 REMOVE SHRUBS
- D5 REMOVE LIGHT POLE, COORDINATE WITH MEP
- D6 REMOVE CATCH BASINS. REFER TO MEP PLANS FOR EXISTING PIPING RECONNECTION AND DISCHARGE
- D7 REMOVE SANITARY SEWER CLEAN OUT
- D8 REMOVE GRANITE FEATURES, SAVE FOR POTENTIAL REUSE



GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 30" x 42"

LEGEND

C/O CLEAN OUT	WATER SHUT OFF	WATERCOURSE	WATER LINE
MANHOLE	LIGHT POLE	TREELINE	UNDERGROUND ELECTRIC
CATCH BASIN	UTILITY POWER POLE	FENCE	OVERHEAD ELECTRIC
STORM MANHOLE	SIGN	CONTOUR	UNDERGROUND TELEPHONE
TAPPING SLEEVE AND VALVE	SPOT ELEVATION	PROPERTY LINE	ROOF DRAIN
GATE VALVE	TREE	EDGE OF PAVEMENT	STEAM LINE
HYDRANT	SURVEY POINT	SANITARY SEWER LINE	RIGHT-OF-WAY LINE
	HANDICAP SYMBOL	STORM LINE	SETBACK

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MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 10/22/26
SCALE: 1" = 20'
DRAWN BY: WBF
CHECKED BY: KW

ISSUE LOG:
SCHEMATIC DESIGN 07/25/2025
75% DD SET/OWNER REV. 09/29/2025

SHEET CONTENTS:
EXISTING CONDITIONS & DEMOLITION PLAN

SHEET NO:
C101

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SCHEMATIC DESIGN 07/25/2025

CONSTRUCTION SCHEDULE

- C1 BUILDING ADDITION
- C2 NEW SIDEWALK WITH HANDRAILS
- C3 NEW SIDEWALK
- C4 GRANITE CURBING
- C5 ADA COMPLIMENT CROSSWALK
- C6 ADA COMPLIMENT PARKING SPACES
- C7 RETAINING WALL, REFER TO STRUCTURAL PLANS
- C8 PAVED AREA
- C9 PEDESTRIAN LIGHTING, REFER TO MEP PLANS
- C10 EXIT STAIR FROM SENATE CHAMBER WITH ACCESS TO PUBLIC WAY. NOT AN ACCESSIBLE ROUTE
- C11 FROST PROTECTED CONCRETE PAD

STORMWATER SCHEDULE

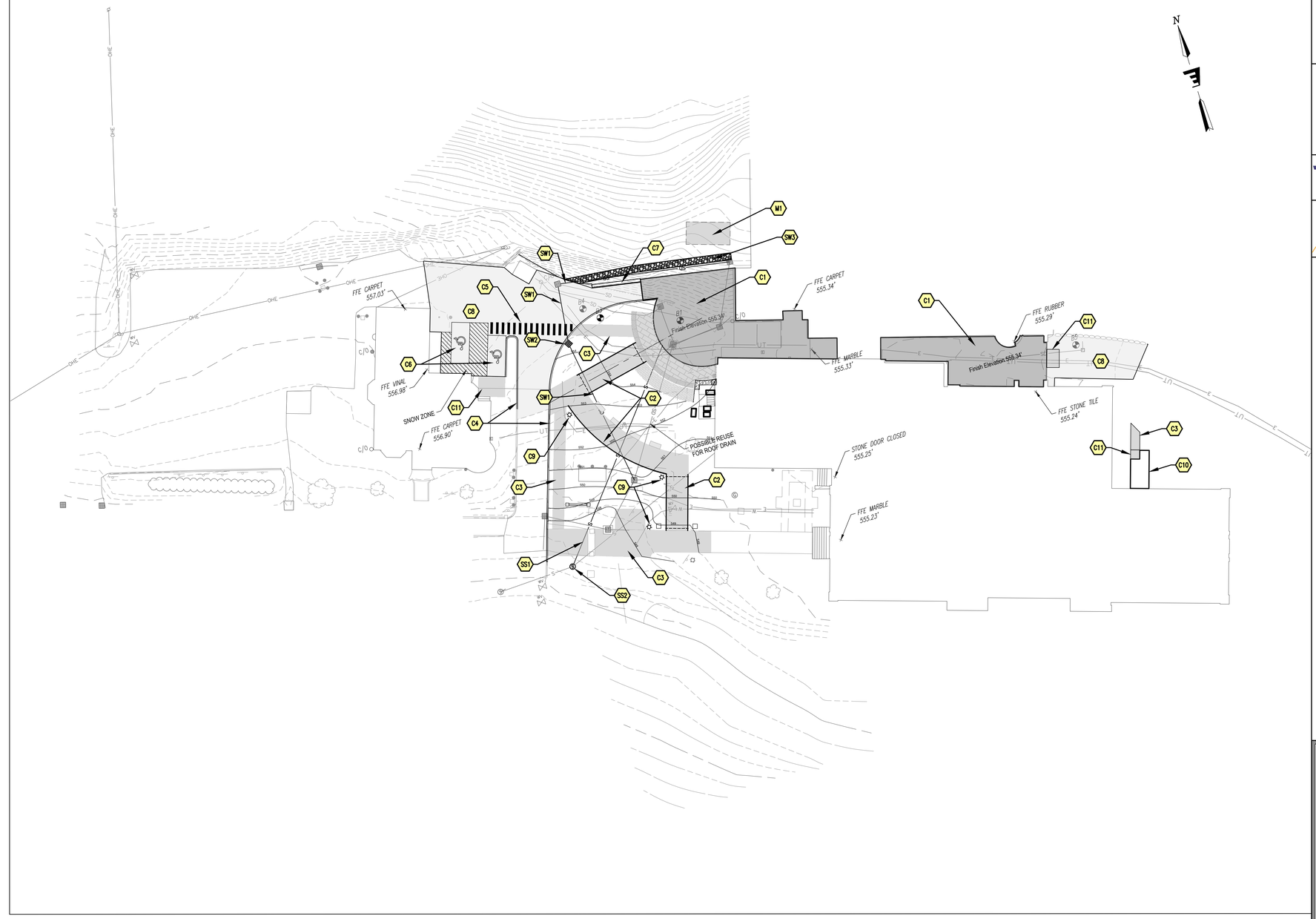
- SW1 NEW STORM DRAIN
- SW2 NEW CATCH BASIN
- SW3 RIP-RAP SWALE

SANITARY SEWER SCHEDULE

- SS1 NEW 8" PVC SANITARY SEWER 2% MIN
- SS2 NEW 5' I.D. SANITARY SEWER MANHOLE

MECHANICAL SCHEDULE

- M1 CONCRETE PAD FOR A MECHANICAL SYSTEM. REFER TO MEP PLANS FOR UNIT SPECIFICATIONS. REFER TO STRUCTURAL PLANS FOR CONCRETE MIX AND DESIGN.



GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.
for sheet size 30" x 42"

LEGEND

EXISTING FEATURES		PROPOSED FEATURES	EXISTING FEATURES		PROPOSED FEATURES	EXISTING FEATURES		PROPOSED FEATURES	EXISTING FEATURES		PROPOSED FEATURES
C/O	CLEAN OUT	C/O		WATER SHUT OFF			WATERCOURSE		W	WATER LINE	W
S	MANHOLE	S		LIGHT POLE			TREELINE		E	UNDERGROUND ELECTRIC	UGE
	CATCH BASIN			UTILITY POWER POLE		O O	FENCE	O O	OHW	OVERHEAD ELECTRIC	OHE
D	STORM MANHOLE	D		SIGN		100	CONTOUR	100	UT	UNDERGROUND TELEPHONE	UT
WV	TAPPING SLEEVE AND VALVE		+ 100.00	SPOT ELEVATION	+ 100.5		PROPERTY LINE		RD	ROOF DRAIN	RD
GV	GATE VALVE			TREE			EDGE OF PAVEMENT		STM	STEAM LINE	STM
				SURVEY POINT		S	SANITARY SEWER LINE	S		RIGHT-OF-WAY LINE	
				HANDICAP SYMBOL		SD	STORM LINE	SD		SETBACK	

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MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
10/22/26	1" = 20'
DRAWN BY:	CHECKED BY:
WBF	KW

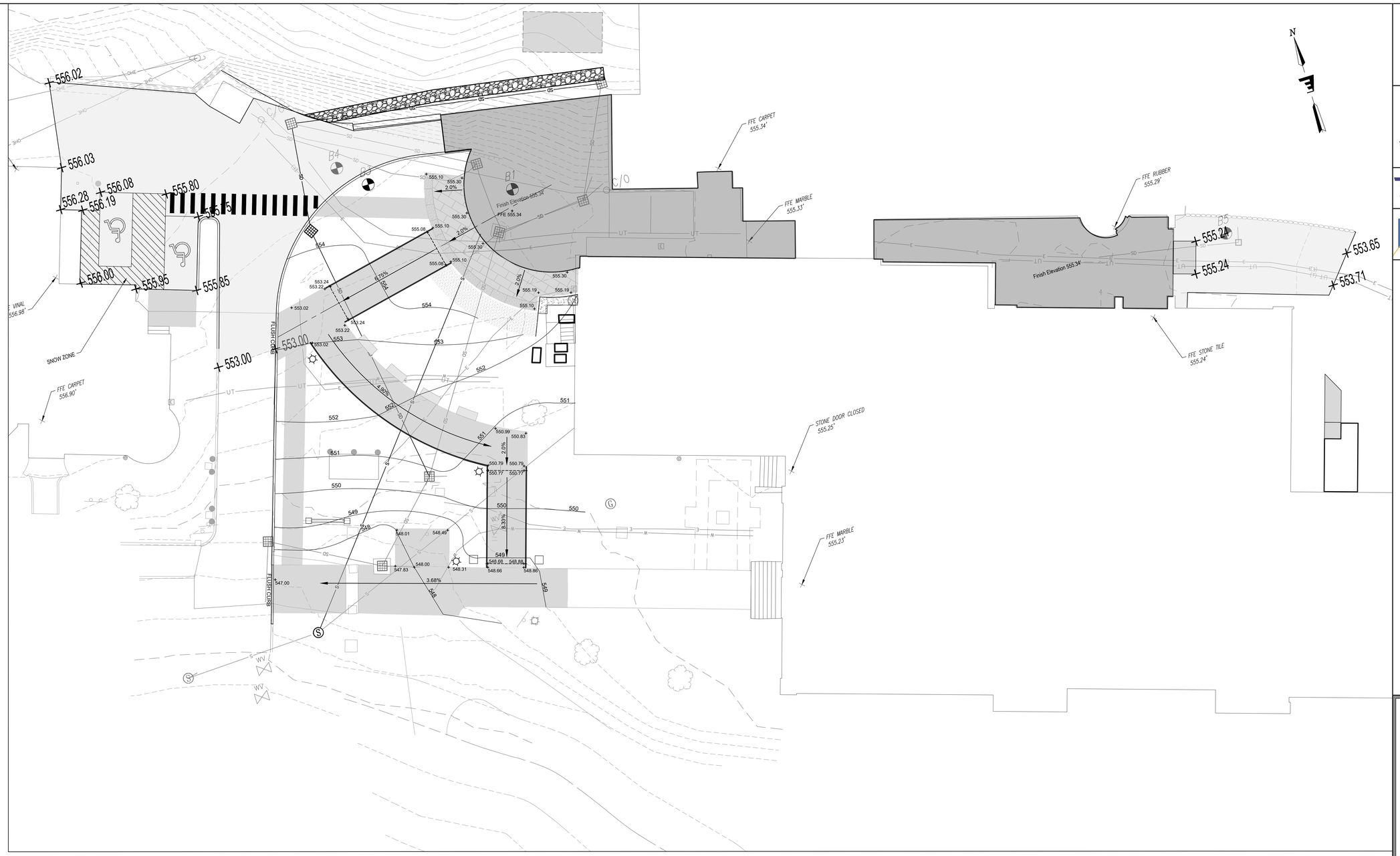
ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
70% DD SET/OWNER REV.	05/29/2025

SHEET CONTENTS: SITE PLAN

SHEET NO: C201

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SCHEMATIC DESIGN 07/25/2025



GRAPHIC SCALE

10 5 5 10 20 40

1 inch = 10 ft.
for sheet size 30" x 42"

LEGEND

EXISTING FEATURES		PROPOSED FEATURES	EXISTING FEATURES		PROPOSED FEATURES	EXISTING FEATURES		PROPOSED FEATURES	EXISTING FEATURES		PROPOSED FEATURES
C/O	CLEAN OUT	C/O		WATER SHUT OFF			WATERCOURSE		W	WATER LINE	W
S	MANHOLE	S		LIGHT POLE			TREELINE		E	UNDERGROUND ELECTRIC	UGE
CB	CATCH BASIN	CB		UTILITY POWER POLE			FENCE		OHW	OVERHEAD ELECTRIC	OHE
D	STORM MANHOLE	D		SIGN		100	CONTOUR	100	UT	UNDERGROUND TELEPHONE	UT
WV	TAPPING SLEEVE AND VALVE	WV	100.00	SPOT ELEVATION	100.5		PROPERTY LINE		RD	ROOF DRAIN	RD
GV	GATE VALVE	GV		TREE			EDGE OF PAVEMENT		STM	STEAM LINE	STM
				SURVEY POINT		S	SANITARY SEWER LINE	S		RIGHT-OF-WAY LINE	
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ENGINEERING VENTURES PC

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MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 10/22/26
SCALE: 1" = 10'
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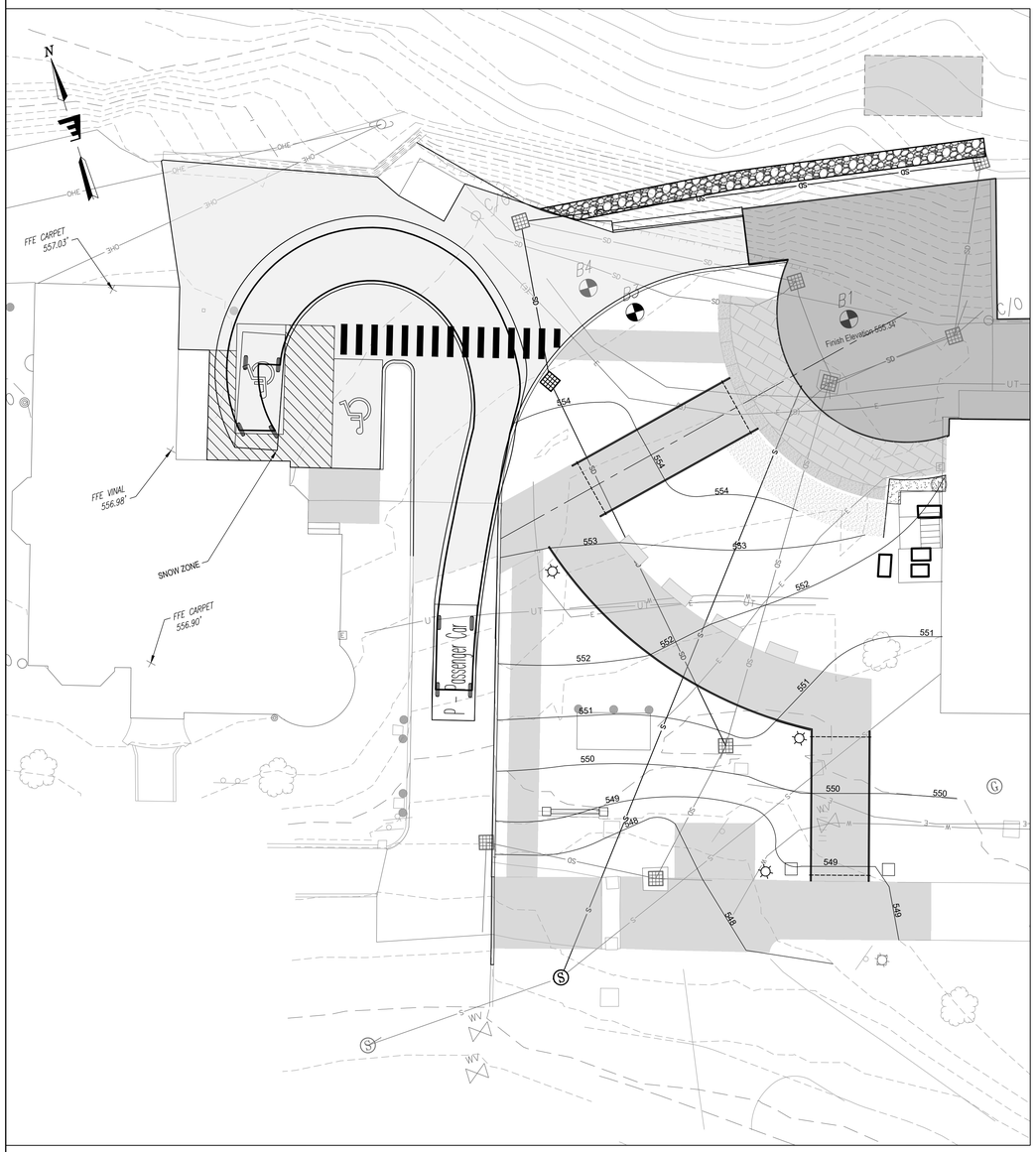
ISSUE LOG:
SCHEMATIC DESIGN 07/25/2025
75% DD SET/OWNER REV. 05/29/2025

SHEET CONTENTS: GRADING PLAN

SHEET NO: C202

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SCHEMATIC DESIGN 07/25/2025

ADA PASSANER VEHICLE TURNING MOVEMENT



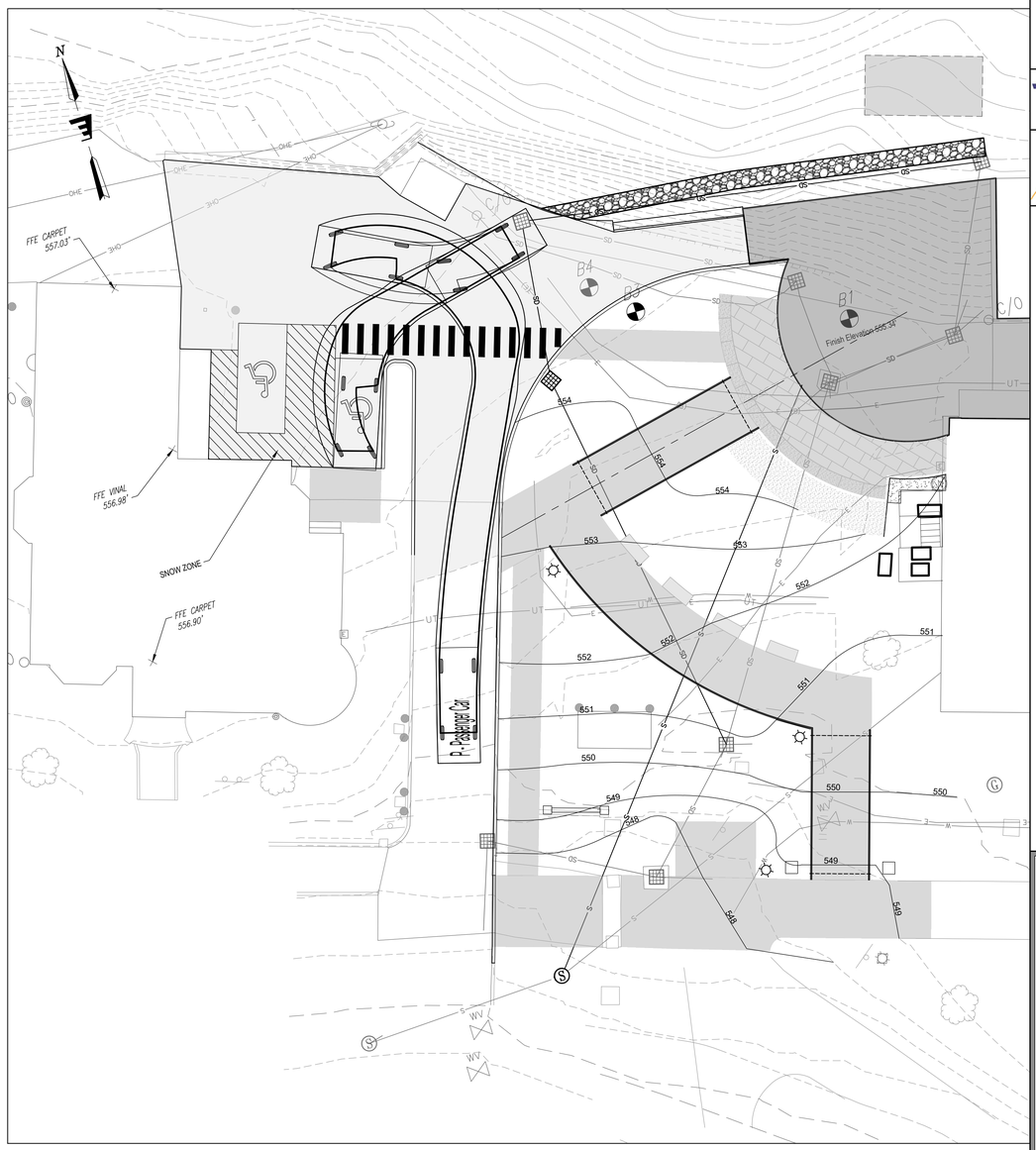
GRAPHIC SCALE

10 0 5 10 20 40

1 inch = 10 ft.
for sheet size 30" x 42"

P – Passenger Car	
Overall Length	19.000ft
Overall Width	7.000ft
Overall Body Height	4.300ft
Min Body Ground Clearance	1.115ft
Track Width	6.000ft
Lock–to–lock time	4.00s
Max Steering Angle (Virtual)	31.60°

VEHICLE PROFILE



GRAPHIC SCALE

10 0 5 10 20 40

1 inch = 10 ft.
for sheet size 30" x 42"

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ENGINEERING VENTURES PC

RFS engineering

MONTPELIER, VT

FF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
10/22/26	AS NOTED
DRAWN BY:	CHECKED BY:
WBF	KW

ISSUE LOG:

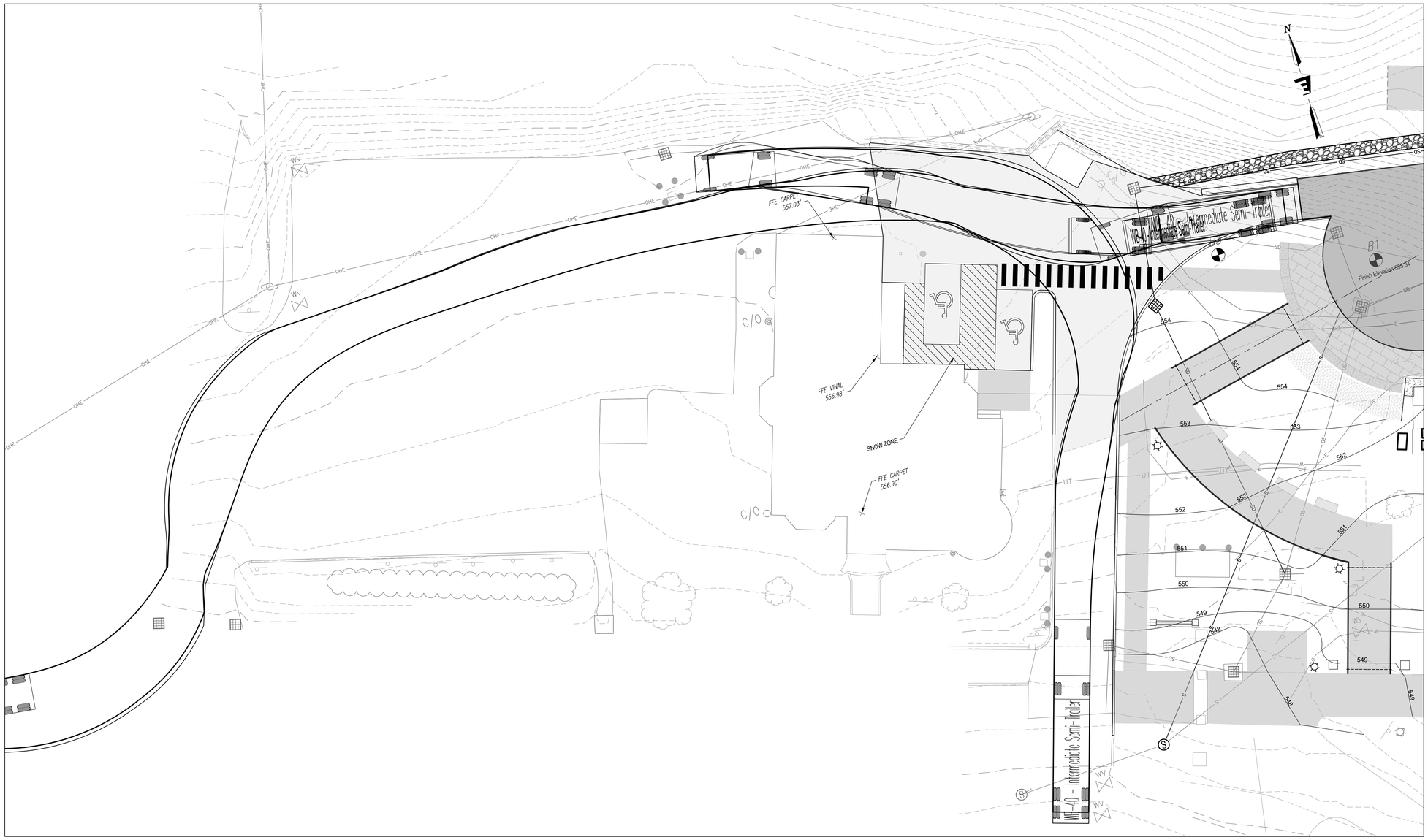
SCHEMATIC DESIGN	07/25/2025
70% DD SET/OWNER REV.	09/29/2025

SHEET CONTENTS: Vehicle Movements

SHEET NO: C203

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SCHEMATIC DESIGN 07/25/2025

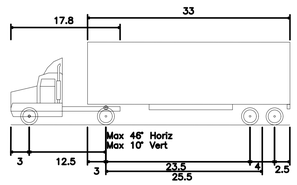
WB-40 TURNING MOVEMENT



GRAPHIC SCALE

10 0 5 10 20 40

1 inch = 10 ft.
for sheet size 30" x 42"



WB-40 – Intermediate Semi-Trailer	
Overall Length	45.499ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Track Width	8.000ft
Lock-to-lock time	4.00s
Max Steering Angle (Virtual)	20.30°

VEHICLE PROFILE

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MONTPELIER, VT

FF PROJECT NO:
2248

ORIGINATION DATE:	SCALE:
10/22/26	1" = 10'
DRAWN BY:	CHECKED BY:
WBF	KW

ISSUE LOG:

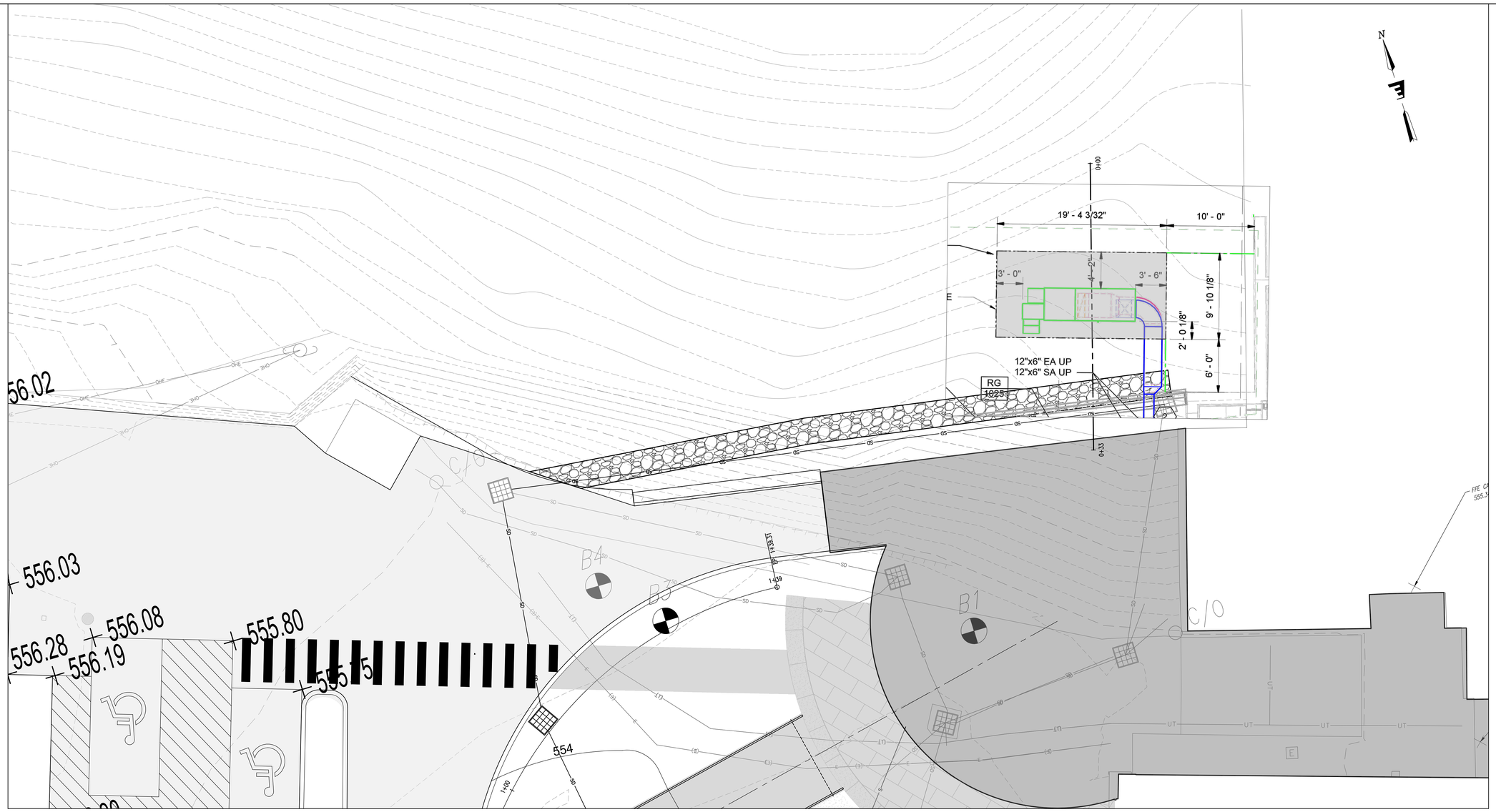
SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2025

SHEET CONTENTS:
Vehicle Movements

SHEET NO:
C204

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SCHEMATIC DESIGN 07/25/2025



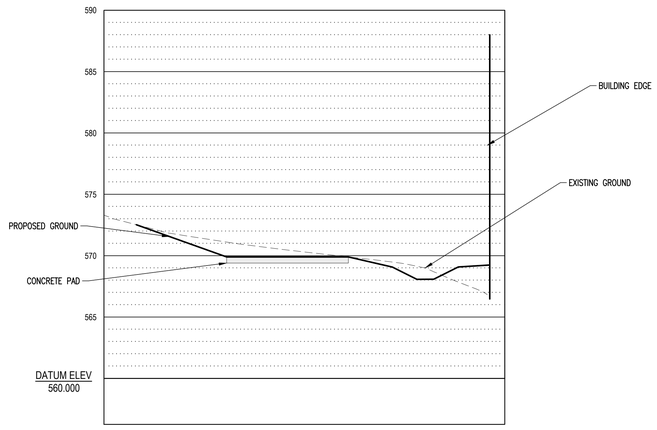
PLAN VIEW

SCALE: 1" = 5'

GRAPHIC SCALE

5 0 2.5 5 10 20

1 inch = 5 ft.
for sheet size 30" x 42"



PROFILE VIEW

SCALE: HORIZ 1" = 5'
VERT. 1" = 5'

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MONTPELIER, VT

FF PROJECT NO:
2248

ORIGINATION DATE: 10/22/26
SCALE: 1" = 10'
DRAWN BY: WBF
CHECKED BY: KW

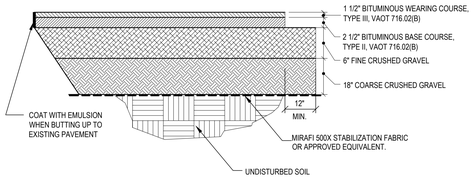
ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2025

SHEET CONTENTS:
MECHANICAL UNIT PLAN & PROFILE

SHEET NO:
C301

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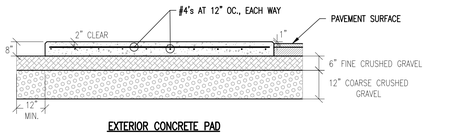


PAVEMENT PATCHING NOTES:

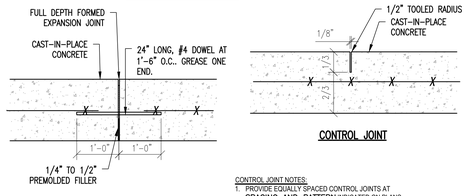
1. IN ALL PAVEMENT AREAS TO BE PATCHED, SAW CUT AND REMOVE EXISTING PAVEMENT.
2. EXCAVATE BASE MATERIAL AND SUB-BASE MATERIAL IF INADEQUATE.
3. ALL SUBBASE MATERIALS SHALL BE PLACED IN 6" LIFTS AND COMPACTED TO 95% MAXIMUM DENSITY ACCORDING TO ASTM D-1557 (MODIFIED PROCTOR).

TYPICAL PAVEMENT DETAIL

SCALE: NONE (1)



EXTERIOR CONCRETE PAD



EXPANSION JOINT

CONTROL JOINT

CONTROL JOINT NOTES:

1. PROVIDE EQUALLY SPACED CONTROL JOINTS AT SPACING AND PATTERN INDICATED ON PLANS (NOT TO EXCEED 5'-0").

CONCRETE NOTES:

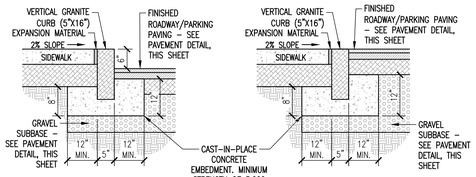
1. CAST-IN-PLACE CONCRETE TO BE 4,500 psi CONCRETE, 5%-7% AIR ENTRAINMENT WITH REINFORCING AS SHOWN.
2. BROOM FINISH WITH SMOOTH TROWELED EDGES. TREAT WITH SILANE-SILOXANE OR EQUAL.
3. WHERE PAD IS ADJACENT TO CURB, BOLLARD OR OTHER HARD FEATURE, INSTALL 1/2" EXPANSION MATERIAL (FULL DEPTH OF PAD), BETWEEN FEATURE AND PAD.
4. REFER TO SITE PLAN FOR SIZE AND LOCATION.

EXPANSION JOINT NOTES:

1. PROVIDE (1) EXPANSION JOINT EVERY 20'-0" MAX.
2. PROVIDE (2) EXPANSION JOINTS AT EVERY DRIVEWAY INTERSECTION
3. WHERE SIDEWALK IS ADJACENT TO CURB, BOLLARD OR OTHER HARD FEATURE, INSTALL 1/2" EXPANSION MATERIAL (FULL DEPTH OF SLAB), BETWEEN FEATURE AND CONCRETE.
4. WHERE CONCRETE IS ADJACENT TO ENTRY/EXIT DOOR PADS WITH FROST WALL FOUNDATIONS, CONCRETE SHALL BE DOWELED TO PAD WITH 24" LONG #4 DOWELS (CENTERED) AT 1'-6" oc (PORTION OF DOWEL IN PAD TO BE GREASED).
5. CAULK ALL EXPANSION JOINTS WITH COLOR MATCHING SILICONE CAULKING.

EXTERIOR CONCRETE PAD DETAIL

SCALE: NONE (2)



DETAIL A – VERTICAL CURB

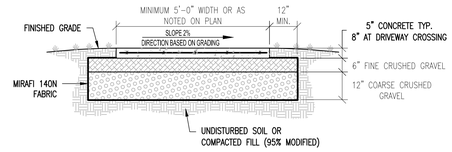
DETAIL B – FLUSH CURB

VERTICAL GRANITE CURB NOTES:

1. GRANITE CURBS SHALL BE INSTALLED IN ACCORDANCE WITH PROJECT AND STATE SPECIFICATIONS.
2. WHERE CURB IS ADJACENT TO ENTRY/EXIT DOOR PADS WITH FROST WALL FOUNDATIONS, CURB SHALL BE DOWELED TO PAD WITH 24" LONG #4 DOWELS (CENTERED) AT 1'-6"oc (PORTION OF DOWEL IN CURB TO BE GREASED).
3. WHERE CURB IS ADJACENT TO SIDEWALK, BOLLARD OR OTHER HARD FEATURE, BACKSIDE OF CURB SHALL BE SAW CUT. 1/4" EXPANSION MATERIAL (FULL DEPTH OF CURB), SHALL BE INSTALLED BETWEEN FEATURE AND CURB.

GRANITE CURB DETAILS

SCALE: NONE (3)



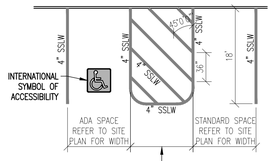
SIDEWALK DETAIL

NOTES:

1. PLACE A TOOLED JOINT 1/8" WIDE AND AT LEAST 1/3 OF THE DEPTH, TYPICALLY AT INTERVALS MATCHING THE SIDEWALK WIDTH, OR AS NOTED ON PLANS (NOT TO EXCEED 10'-0").
2. PLACE EXPANSION JOINT AS INDICATED ON PLANS, NOT TO EXCEED 20'-0" MAX.
3. BROOM FINISH WITH SMOOTH TROWELED EDGES. TREAT WITH SILANE-SILOXANE OR EQUAL.
4. CAST-IN-PLACE CONCRETE TO BE 4500 psi CONCRETE, 4%-6% AIR ENTRAINMENT
5. WHERE SIDEWALK IS ADJACENT TO ENTRY/EXIT DOOR PADS WITH FROST WALL FOUNDATIONS, SIDEWALK SHALL BE DOWELED TO PAD WITH 24" LONG #4 DOWELS (CENTERED) AT 1'-6" oc (PORTION OF DOWEL IN SIDEWALK TO BE GREASED).
6. WHERE SIDEWALK IS ADJACENT TO CURB, BOLLARD OR OTHER HARD FEATURE, INSTALL 1/2" EXPANSION MATERIAL (FULL DEPTH OF SIDEWALK), BETWEEN FEATURE AND SIDEWALK.
7. BOTTOM OF CUT HALL BE SLOPED BASED ON GRADING

CONCRETE SIDEWALK DETAIL

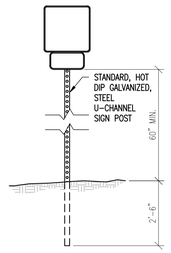
SCALE: NONE (4)



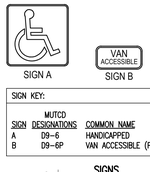
PARKING LOT STRIPING

PAVEMENT MARKINGS DETAIL

SCALE: NONE (5)



SIGN POST INSTALLATION



SIGN A

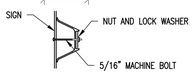
SIGN B

SIGN KEY:

SIGN	MUTCD DESIGNATIONS	COMMON NAME	SIZE
A	D9-6	HANDICAPPED	24" x 24"
B	D9-6P	VAN ACCESSIBLE (PLAQUE)	18" x 9"

SIGNS





POST SECTION AND SIGN MOUNTING

SIGN AND POST DETAILS

SCALE: NONE (6)

EARTHWORK NOTES

1. PRIOR TO THE START OF WORK, A PRE-CONSTRUCTION MEETING WILL BE HELD WITH THE CONTRACTOR, OWNER, PROJECT ENGINEER AND TOWN DPW TO REVIEW PROCEDURES AND IDENTIFY RESPONSIBILITIES. 4 WEEKS NOTICE SHALL BE GIVEN TO THE TOWN PRIOR TO START OF CONSTRUCTION. UNLESS OTHERWISE STATED, ALL MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE VTRANS SPECIFICATIONS.

2. CLEARING AND GRUBBING- SITE TO BE RESTORED TO PRE-CONSTRUCTION CONDITIONS, INCLUDING DRIVEWAYS, STONE WALLS, AND GRASS AREAS. THE DRIVEWAY SUB-GRADE MATERIAL SHALL EXTEND ONE FOOT BEYOND THE EDGE OF PAVING.

3. COMPACTION OF ALL MATERIALS SHALL BE PERFORMED USING VIBRATORY ROLLERS AND WATER IN LIFTS OF NO GREATER THAN TWELVE INCHES. COMPACTION SHALL BE PERFORMED UNTIL THE REQUIRED DENSITY IS ACHIEVED. DENSITY SHALL BE DETERMINED BY ASTM D2922 AND SHALL NOT BE LESS THAN THE REQUIRED AMOUNT AS DETERMINED IN ACCORDANCE WITH ASTM D1557.

4. COMPACTION TESTING SHALL BE PERFORMED FOR EVERY LAYER OF MATERIAL PLACED AND FOR EVERY 2500 SQUARE FEET OF AREA.

5. PAVEMENT SHALL MEET THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AS PUBLISHED BY VTRANS.

6. PAVEMENT SHALL NOT BE INSTALLED WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT, NOR WHEN THE ROAD BASE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT. PAVEMENT SHALL NOT FALL BELOW 185 DEGREES FAHRENHEIT PRIOR TO THE COMPLETION OF ROLLING. PAVEMENT SHALL NOT BE INSTALLED WHEN THE SUBGRADE IS FROZEN OR THE GRADES ARE INCORRECT.

7. ALL REMAINING DISTURBED AREAS SHALL BE FERTILIZED AND SEEDED IN ACCORDANCE WITH APPLICABLE STATE SPECIFICATIONS FOR EROSION CONTROL.

8. THE SEEDING OF 10% OR GREATER SLOPES SHALL REQUIRE THE USE OF EROSION CONTROL MATTING.

9. ALL EARTHWORK MATERIALS SHALL BE OBTAINED FROM APPROVED SOURCES. THEY SHALL CONSIST OF SATISFACTORILY GRADED, FREE DRAINING MATERIAL. REASONABLY FREE FROM LOAM, SILT, CLAY AND ORGANIC MATERIAL. EARTHWORK MATERIALS SHALL MEET THE REQUIREMENTS OF THE FOLLOWING TABLES:

A. SAND BLANKET/BEDDING:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1-1/2 INCHES	90 - 100
1/2 INCH	70 - 100
NO. 4	60 - 100
NO. 100	0 - 20
NO. 200	0 - 8

B. 3/4" CRUSHED STONE:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
1 INCH	100
3/4 INCHES	90 - 100
3/8 INCH	20 - 55
NO. 4	0 - 10
NO. 8	0 - 5

C. 1 1/2" CRUSHED STONE:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
1 3/4 INCH	100
1 1/2 INCH	90 - 100
1 INCH	20 - 55
3/4 INCH	0 - 15
3/8 INCH	0 - 5

D. COARSE CRUSHED GRAVEL:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
4 INCHES	95 - 100
NO. 4	25 - 50
NO. 100	0 - 12
NO. 200	0 - 6

E. FINE CRUSHED GRAVEL:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1–8 INCHES	90 - 100
NO. 4	30 - 60
NO. 100	0 - 12
NO. 200	0 - 6

F. GRANULAR BACKFILL:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
3 INCHES	100
2 1/2 INCHES	90 - 100
NO. 4	45 - 75
NO. 100	0 - 12
NO. 200	0 - 6

G. TYPE I STONE FOR STONE FILL

THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM 1 INCH TO 12 INCHES, AND AT LEAST 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF FOUR INCHES.

H. TYPE II STONE FOR STONE FILL

THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM TWO INCHES TO 36 INCHES, AND AT LEAST 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF 12 INCHES.

I. TOPSOIL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS:

1. THE pH OF THE MATERIAL SHALL BE BETWEEN 5.5 AND 7.6.
2. THE ORGANIC CONTENT SHALL BE NOT LESS THAN 2% NOR MORE THAN 20%.
3. GRADATION:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
2 INCHES	100
1 INCH	85 - 100
1/4 INCH	65 - 100
NO. 200	20 - 80

THE CONTRACTOR MAY AMEND NATURAL TOPSOIL WITH APPROVED MATERIALS AND BY APPROVED METHODS TO MEET THE ABOVE SPECIFICATIONS.

J. DRAINAGE AGGREGATE:

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
1 INCH	100
3/4 INCH	90 - 100
3/8 INCH	20 - 55
NO. 4	60 - 100
NO. 100	0 - 10
NO. 200	0 -5

K. AGGREGATE FOR EROSION PREVENTION AND SEDIMENT CONTROL

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
4 INCH	80 - 100
3 INCH	40 - 60
2 INCH	0 - 20

L. DENSE GRADED CRUSHED STONE FOR SUBBASE

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
3 1/2 INCH	100
3 INCH	90 - 100
2 INCH	75 - 100
1 INCH	50 - 80
1/2" INCH	30 - 60
NO. 4	15 - 40
NO. 200	0 - 6

M. 2" CRUSHED STONE

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVES
3 INCH	100
2 INCH	75 - 100
1 INCH	0 - 10
1/4" INCH	0 - 5

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STATE HOUSE MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 10/22/26 | SCALE: AS NOTED

DRAWN BY: WBF | CHECKED BY: KW

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2025

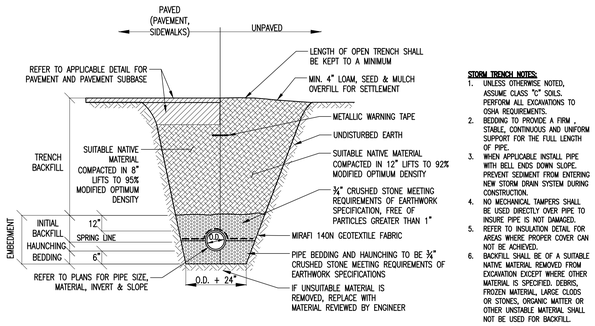
SHEET CONTENTS: SITE DETAILS

SHEET NO: C501

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SCHEMATIC DESIGN 07/25/2025

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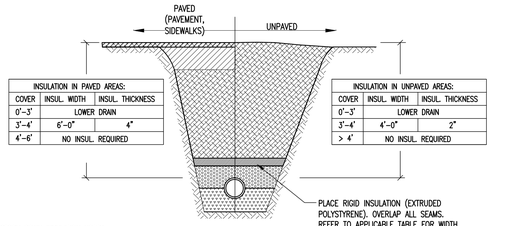


STORM TRENCH NOTES:

1. UNLESS OTHERWISE NOTED, ASSUME CLASS "C" SOILS. PERFORM ALL EXCAVATIONS TO OSHA REQUIREMENTS.
2. BEDDING TO PROVIDE A FIRM , STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR THE FULL LENGTH OF PIPE.
3. WHEN APPLICABLE INSTALL PIPE WITH BELL ENDS DOWN SLOPE. PREVENT SEDIMENT FROM ENTERING NEW STORM DRAIN SYSTEM DURING CONSTRUCTION.
4. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER PIPE TO INSURE PIPE IS NOT DAMAGED.
5. REFER TO INSULATION DETAIL FOR AREAS WHERE PROPER COVER CAN NOT BE ACHIEVED.
6. BACKFILL SHALL BE OF A SUITABLE NATIVE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER OR OTHER UNSTABLE MATERIAL SHALL NOT BE USED FOR BACKFILL.

TYPICAL STORM DRAIN TRENCH

SCALE: NONE — 1



INSULATION IN PAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'-3'	LOWER DRAIN	
3'-4'	6'-0"	4"
4'-6'	NO INSUL. REQUIRED	

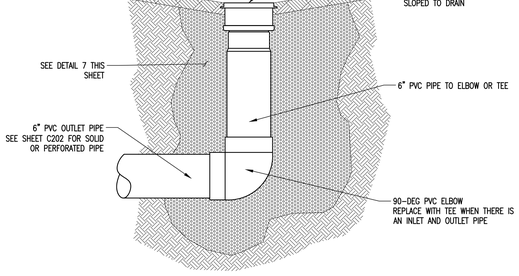
INSULATION IN UNPAVED AREAS:		
COVER	INSUL. WIDTH	INSUL. THICKNESS
0'-3'	LOWER DRAIN	
3'-4'	4'-0"	2"
> 4'	NO INSUL. REQUIRED	

STORM DRAIN INSULATION NOTES:

1. REFER TO APPLICABLE TRENCH DETAIL FOR SPECIFIC BACKFILL INFORMATION.
2. RIGID EXTRUDED POLYSTYRENE INSULATION SHALL CONFORM WITH ASTM C578 – STANDARD SPECIFICATION FOR RIGID CELLULAR POLYSTYRENE THERMAL INSULATION AND SHALL BE DOW STYROFOAM HIGH LOAD 40 OR EQUIVALENT.

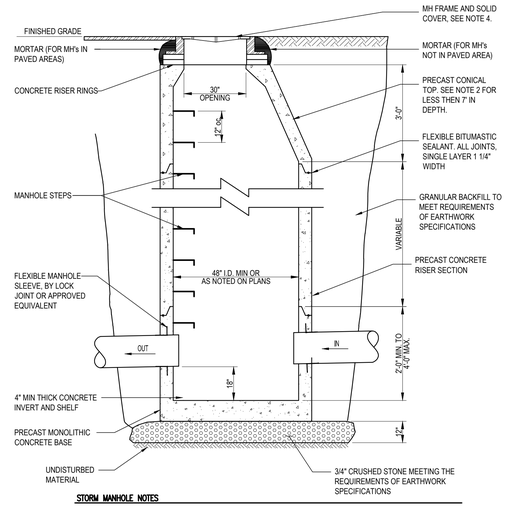
INSULATION OVER SHALLOW DRAIN DETAIL

SCALE: NONE — 2



AREA/YARD DRAIN DETAIL

SCALE: NONE — 3



STORM MANHOLE NOTES

1. PROVIDE SMOOTH SWEEPING TRANSITIONS BETWEEN INVERTS OF INTERSECTING PIPE.
2. IF DEPTH OF MANHOLE IS 7 ft. OR LESS FROM RIM TO CENTERLINE INVERT, THEN A FLAT TOP WILL BE INSTALLED. IF DEPTH OF MANHOLE FROM RIM TO CENTERLINE INVERT IS MORE THAN 7 ft., THEN A CONICAL TOP WILL BE INSTALLED.
3. MANHOLE AND COVER SHALL BE DESIGNED FOR H20 LOADING.
4. PROVIDE A NEENAH FOUNDRY R-1564 OR APPROVED EQUIVALENT, CAST THE WORD "STORM" IN TOP COVER
5. MANHOLE SHALL BE PRECAST CONCRETE SUPPLIED BY AN APPROVED MANUFACTURER.

STORM MANHOLE DETAIL

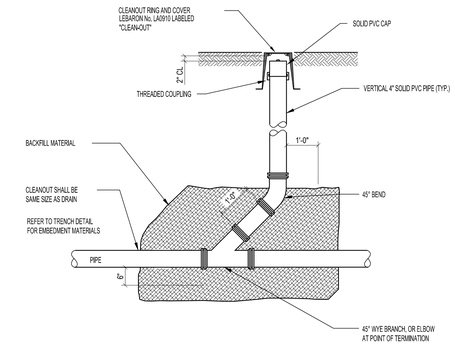
SCALE: NONE — 4

CATCH BASIN NOTES

1. IF DEPTH OF CATCH BASIN IS 7 FEET OR LESS FROM RIM TO CENTERLINE INVERT THEN A FLAT TOP WILL BE INSTALLED. IF DEPTH OF CATCH BASIN FROM RIM TO CENTERLINE INVERT IS MORE THAN 7 FEET THEN A CONICAL TOP WILL BE INSTALLED.
2. PROVIDE A LEBARON 24"x24" TYPE E OR APPROVED EQUIVALENT, 3 FLANGE GRATE AND FRAME NEXT TO CURBS AND 4 FLANGE GRATE AND FRAME AT ALL OTHER LOCATIONS.
3. CATCH BASIN AND GRATE SHALL BE DESIGNED FOR H20 LOADING.
4. CATCH BASIN SHALL BE PRECAST CONCRETE AS MANUFACTURED BY S.T. GRISWOLD & CO., INC. OR APPROVED EQUIVALENT.

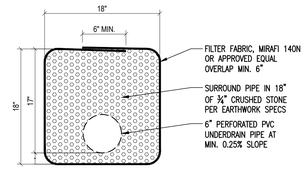
STORM CATCH BASIN DETAIL

SCALE: NONE — 5



CLEANOUT DETAIL

SCALE: NONE — 6

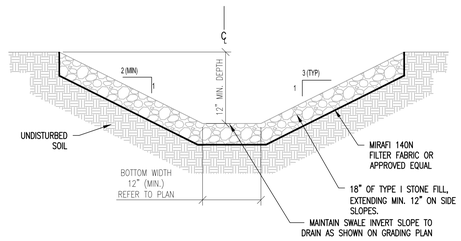


UNDERDRAIN NOTES:

1. REFER TO SITE PLAN FOR INVERT ELEVATIONS & OUTLET LOCATIONS.
2. PLACE IN MAXIMUM 6" LIFTS AND COMPACT TO 95% STANDARD OPTIMUM DENSITY.

TYPICAL FOUNDATION DRAIN DETAIL

SCALE: NONE — 7



STONE LINED SWALE

STONE LINED CONVEYANCE SWALE

SCALE: NONE — 8

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STATE HOUSE MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE:	SCALE:
10/22/26	AS NOTED
DRAWN BY:	CHECKED BY:
WBF	KW

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2025

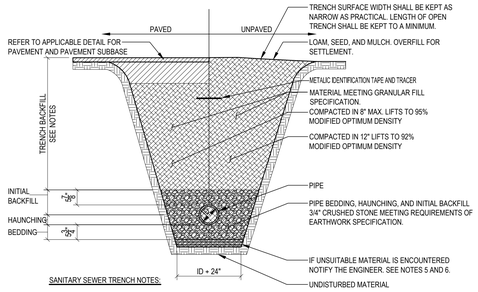
SHEET CONTENTS: **STORMWATER DETAILS**

SHEET NO: **C502**

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SCHEMATIC DESIGN 07/25/2025

1/2/2026 2:29:14 PM

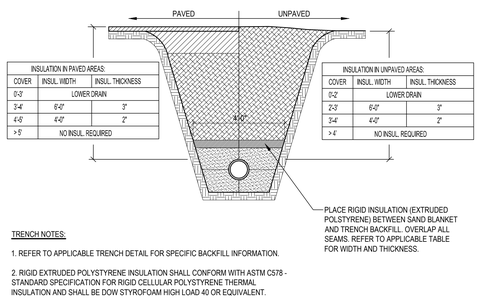


SANITARY SEWER TRENCH NOTES:

1. UNLESS OTHERWISE NOTED, ASSUME CLASS "C" SOILS. PERFORM ALL EXCAVATIONS TO OSHA REQUIREMENTS.
2. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR FULL LENGTH OF PIPE.
3. FOR BUILDING SEWERS THE MINIMUM DEPTH TO THE TOP OF THE PIPE SHALL BE 4'-0". WHERE BUILDING SEWERS ARE TO BE INSTALLED AT A DEPTH LESS THAN 3'-0" UNDER DRIVEWAYS, EXTRA HEAVY CAST IRON OR OTHER HIGH STRENGTH PIPE SHALL BE USED. OTHERWISE, REFER TO INSULATION OVER SHALLOW SEWER LINE DETAIL.
4. FOR SEWER COLLECTION SYSTEMS THE MINIMUM DEPTH TO THE TOP OF THE PIPE SHALL BE 5'-0". THIS DEPTH SHALL BE INCREASED TO 6'-0" IN AREAS TO BE PLOWED DURING THE WINTER MONTHS. OTHERWISE, REFER TO INSULATION OVER SHALLOW SEWER LINE DETAIL.
5. BACKFILL SHALL BE OF A SUITABLE NATIVE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER OR OTHER UNSTABLE MATERIAL SHALL NOT BE USED FOR BACKFILL.
6. LEDGE, ROCK, BOULDERS AND LARGE STONES SHALL BE REMOVED TO PROVIDE A MINIMUM CLEARANCE OF FOUR INCHES BELOW AND ON EACH SIDE OF ALL PIPES.
7. SEWERS ON 20 PERCENT SLOPES OR GREATER SHALL BE ANCHORED SECURELY WITH CONCRETE ANCHORS OR EQUIVALENT, SPACED AS FOLLOWS:
   A. NOT OVER 36 FEET CENTER TO CENTER ON GRADES 20 PERCENT AND UP TO 35 PERCENT
   B. NOT OVER 24 FEET CENTER TO CENTER ON GRADES 35 PERCENT AND UP TO 50 PERCENT
   C. NOT OVER 16 FEET CENTER TO CENTER ON GRADES 50 PERCENT AND OVER

SANITARY SEWER TRENCH DETAIL (1)

SCALE: NONE



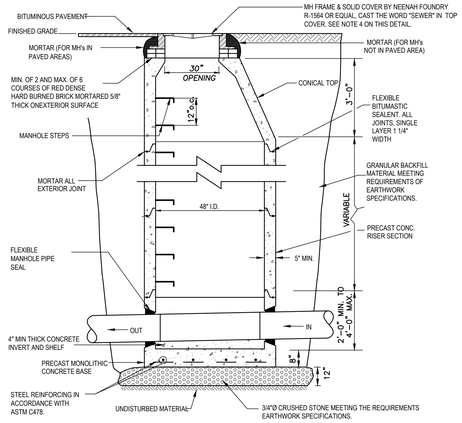
TRENCH NOTES:

1. REFER TO APPLICABLE TRENCH DETAIL FOR SPECIFIC BACKFILL INFORMATION.

2. RIGID EXTRUDED POLYSTYRENE INSULATION SHALL CONFORM WITH ASTM C578 - STANDARD SPECIFICATION FOR RIGID CELLULAR POLYSTYRENE THERMAL INSULATION AND SHALL BE DOW STYROFOAM HIGH LOAD 40 OR EQUIVALENT.

INSULATION OVER SHALLOW SEWER LINE DETAIL (2)

SCALE: NONE



MANHOLE NOTES

1. PROVIDE SMOOTH SWEEPING TRANSITIONS BETWEEN INVERTS OF INTERSECTING PIPE.

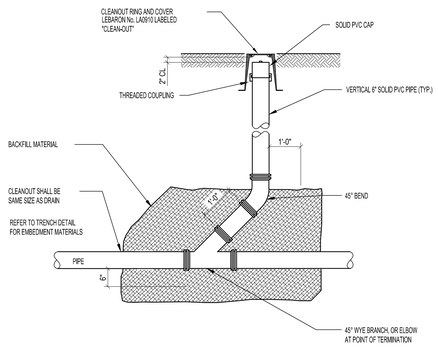
2. IF DEPTH OF MANHOLE IS 7 ft. OR LESS FROM RIM TO CENTERLINE INVERT, THEN A FLAT TOP WILL BE INSTALLED. IF DEPTH OF MANHOLE FROM RIM TO CENTERLINE INVERT IS MORE THAN 7 ft., THEN A CONICAL TOP WILL BE INSTALLED.

3. MANHOLE AND COVER SHALL BE DESIGNED FOR H20 LOADING.

4. FOR MANHOLES THAT ARE NOTED ON THE PLAN AS HAVING A BOLTABLE COVER PROVIDE A COVER THAT IS BOLTS TO THE FRAME WITH A MINIMUM OF (2) - 3/8" STAINLESS STEEL BOLTS.

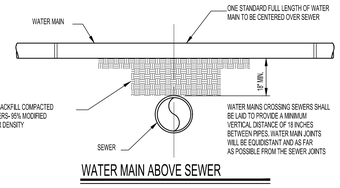
MANHOLE DETAIL (3)

SCALE: NONE



SEWER CLEANOUT DETAIL (4)

SCALE: NONE



WATER MAIN ABOVE SEWER

SEPARATION NOTES:

1. WATER MAIN RELATIONS TO SEWER SHALL BE IN ACCORDANCE WITH THE 'ENVIRONMENTAL PROTECTION RULES, CHAPTER 21, WATER SUPPLY' RULE (VWSR), SECTIONS 8.5 AND 8.6'

2. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWERS. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IF THIS DISTANCE CANNOT BE OBTAINED, THEN THE PIPES SHALL BE INSTALLED IN A SEPARATE TRENCH AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

3. WHEN IT IS IMPOSSIBLE TO MAINTAIN 18" VERTICAL SEPARATION OR WHERE THE SEWER MUST BE LAID ABOVE THE WATER MAIN, 1) THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AS POSSIBLE FROM WATER JOINTS.

TYPICAL SEWER/WATER SEPARATION DETAIL (5)

SCALE: NONE

SEWER NOTES

CONTRACTOR SHALL CONFORM TO GUIDELINES DETAILED IN THE VERMONT STATE SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR READING AND FOLLOWING THE FULL COMPLETE EDITION PROVIDED BY THE STATE.

A. THE BUILDING SEWER SHALL BE CONSTRUCTED IN A MANNER WHICH WILL PREVENT LEAKING, BREAKING OR CLOGGING.

B. SIZING AND SLOPE: MINIMUM BUILDING SEWER SIZE IS 4 INCHES (UNLESS SHOWN ON THE PLAN) AND A MINIMUM SLOPE IS 1/8" PER FOOT.

C. CLEANOUTS: CLEANOUTS SHALL BE PROVIDED AT EACH HORIZONTAL CHANGE IN DIRECTION OF THE BUILDING SEWER GREATER THAN 45 DEGREES AND WHERE INDICATED ON THE DESIGN DRAWINGS. BUILDING SEWER CHANGES IN DIRECTION WHICH EXCEED 45 DEGREES SHOULD BE MADE WITH TWO 45 DEGREE ELLS OR LONG SWEEP FITTINGS. MANHOLES ARE ACCEPTABLE IN LIEU OF CLEANOUTS. WHERE BUILDING SEWERS ARE TO BE INSTALLED AT A DEPTH OF LESS THAN 3 FEET UNDER DRIVEWAYS ARE ANTICIPATED, EXTRA HEAVY CAST IRON PIPE SHALL BE USED.

D. LEAKAGE: BUILDING SEWERS SHALL MEET THE LEAKAGE STANDARDS PRESCRIBED IN THE STATE OF VERMONT SPECIFICATIONS (EPR- CHAPTER 1). SEE BELOW FOR MORE DETAIL.

E. SLOPE, VELOCITY: ALL GRAVITY SEWER LINES SHALL BE INSTALLED WITH NOT LESS THAN THE SLOPES SHOWN BELOW:

PIPE SIZE (INCHES)	SLOPE (FEET/100 FEET)
4"	2%
6"	1%
8"	0.4%

F. CHANGES IN PIPE SIZE: WHEN A SMALLER SEWER JOINS A LARGE ONE, THE INVERT OF THE LARGER SEWER SHALL BE LOWERED SUFFICIENTLY TO MAINTAIN THE SAME ENERGY GRADIENT.

G. MATERIAL: PVC SDR 35, ASTM D3034, WITH PUSH-ON GASKETED JOINTS. GASKETS SHALL CONFORM TO ASTM D3212. SEWER JOINTS SHALL BE CONSTRUCTED TO MINIMIZE INFILTRATION AND TO PREVENT THE ENTRANCE OF ROOTS INTO THE SYSTEM.

H. TRENCHING: LEDGE, ROCK, BOULDERS AND LARGE STONES SHALL BE REMOVED TO PROVIDE A MINIMUM CLEARANCE OF FOUR INCHES BELOW AND ON EACH SIDE OF ALL PIPES.

I. BEDDING: SEE TRENCH DETAIL DRAWING FOR MATERIALS. TRENCH BACKFILL SHALL BE OF A SUITABLE NATIVE MATERIAL FREE FROM DEBRIS, FROZEN MATERIAL, LARGE CLODS OR STONES, ORGANIC MATTER, OR OTHER UNSTABLE MATERIALS.

J. LEAKAGE TESTS: UPON COMPLETION OF SEWER LINE CONSTRUCTION, THE SEWER LINE SHALL BE TESTED IN ACCORDANCE WITH THE STATE OF VERMONT SPECIFICATIONS (EPR - CHAPTER 1, APPENDIX "A").

LEAKAGE TESTS FOR GRAVITY SEWERS

PERFORM A PRESSURIZED AIR TEST ON THE GRAVITY LINE IN ACCORDANCE WITH THE VERMONT ENVIRONMENTAL PROTECTION RULES ON EACH SECTION OF THE GRAVITY SEWER. THE ENGINEER SHALL BE GIVEN 72 HOURS NOTICE BEFORE THE TEST IS CONDUCTED. TEST MUST BE WITNESSED BY THE ENGINEER.

PLUG ALL OPENINGS IN THE TEST SECTION. ADD AIR UNTIL THE INTERNAL PRESSURE OF THE LINE IS RAISED TO APPROXIMATELY 4.0 POUNDS/SQUARE INCH (PSI) GREATER THAN THE AVERAGE PRESSURE OF ANY GROUND WATER. AFTER THIS PRESSURE IS REACHED, ALLOW THE PRESSURE TO STABILIZE. THE PRESSURE WILL NORMALLY DROP AS THE AIR TEMPERATURE STABILIZES. THIS USUALLY TAKES 2 TO 5 MINUTES DEPENDING ON THE PIPE SIZE. THE PRESSURE MAY BE REDUCED TO 3.5 PSI BEFORE STARTING THE TEST.

WHEN THE PRESSURE HAS STABILIZED AND IS AT OR ABOVE THE STARTING TEST PRESSURE OF 3.5 PSI ABOVE THE PIPE, START THE TEST. IF THE PRESSURE DROPS MORE THAN 1.0 PSI DURING THE TEST TIME, THE LINE IS PRESUMED TO HAVE FAILED THE TEST. IF A 1.0 PSI DROP DOES NOT OCCUR WITHIN THE TEST TIME, THE LINE HAS PASSED THE TEST. THE TEST TIME SHALL BE DERIVED FROM THE FOLLOWING TABLE. IF THE SECTION OF LINE TO BE TESTED INCLUDES MORE THAN ONE PIPE SIZE, CALCULATE THE TEST TIME FOR EACH SIZE AND ADD THE TEST TIMES TO ARRIVE AT THE TOTAL TEST TIME FOR THE SECTION.

PIPE SIZE (IN)	T (TIME) (MIN./100FT)
3	0.2
4	0.3
6	0.7
8	1.2

K. INSTALLATION: PIPE SHALL BE LAID WITH BELL ENDS FACING UPGRADE AND LAYING SHALL START AT THE DOWNGRADE END.

L. WATER LINE SEPARATION

a. HORIZONTAL SEPARATION: SEWERS SHALL BE LAID FLAT AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.

WHERE IMPOSSIBLE OR IMPRACTICABLE TO MAINTAIN THE TEN FOOT SEWER/WATER PIPE HORIZONTAL SEPARATION, (DUE TO LEDGE, BOULDERS OR OTHER UNUSUAL CONDITIONS) THE WATER LINE MAY BE IN A SEPARATE TRENCH OR ON AN EARTH SHELF IN THE SEWER TRENCH PROVIDED THAT THE BOTTOM OF THE WATER LINE IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER. WHEREVER IMPOSSIBLE OR IMPRACTICAL TO MAINTAIN THE 18 INCH VERTICAL SEPARATION, THE SEWER LINE SHALL BE CONSTRUCTED USING PRESSURE PIPE TO NORMAL WATER LINE STANDARDS AND PRESSURE TESTED TO 50 PSI FOR 15 MINUTE PRIOR TO BACKFILLING.

b. CROSSINGS: SEWERS CROSSING WATER MAINS SHALL BE LAID BENEATH THE WATER MAIN WITH AT LEAST 18 INCHES VERTICAL CLEARANCE BETWEEN THE OUTSIDE OF THE SEWER AND THE OUTSIDE OF THE WATER MAIN. WHEN IT IS IMPOSSIBLE TO MAINTAIN THE 18 INCH VERTICAL SEPARATION;

1.) THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AWAY AS POSSIBLE FROM WATER JOINTS;
2.) THE SEWER PIPE MUST BE CONSTRUCTED TO WATER MAIN STANDARDS FOR A MINIMUM DISTANCE OF 20 FEET EITHER SIDE OF THE CROSSING OR A TOTAL OF THREE PIPE LENGTHS, WHICHEVER IS GREATER;
3.) THE SECTION CONSTRUCTED TO WATER MAIN STANDARDS MUST BE PRESSURE TESTED TO MAINTAIN 50 PSI FOR 15 MINUTES WITHOUT LEAKAGE PRIOR TO BACKFILLING BEYOND ONE FOOT ABOVE THE PIPE TO ASSURE WATER TIGHTNESS;
4.) WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.

M. MANHOLES

a. DIAMETER: THE MINIMUM DIAMETER OF MANHOLES SHALL BE 48 INCHES; LARGE DIAMETERS ARE PREFERRED FOR CONNECTION TO LARGE DIAMETER SEWERS. A MINIMUM ACCESS DIAMETER OF 24 INCHES SHALL BE PROVIDED.
b. FLOW CHANNEL: FLOW CHANNELS SHALL BE PROVIDED IN THE BASE OF ALL MANHOLES AND THE FLOW CHANNEL THROUGH MANHOLES SHOULD BE MADE TO CONFORM IN SHAPE AND SLOPE TO THAT OF THE SEWERS.
c. MANHOLES SHALL BE OF THE PRE-CAST CONCRETE OR POUR-IN PLACE CONCRETE TYPE. MANHOLES SHALL BE WATERPROOFED ON THE EXTERIOR.
d. INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A RUBBER-GASKETED FLEXIBLE WATERTIGHT CONNECTION THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL TO TAKE PLACE.
e. ALL MANHOLES SHALL BE TESTED FOR LEAKAGE. LEAKAGE TESTING OF GRAVITY SEWERS UTILIZING THE WATER TESTING PROCEDURES TAKES INTO ACCOUNT THE LEAKAGE FROM ONE MANHOLE IN THE TEST SECTION. OTHERWISE, MANHOLES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH THE FOLLOWING PROCEDURE:

AFTER THE MANHOLE HAS BEEN ASSEMBLED IN PLACE, ALL LIFTING HOLES AND EXTERIOR JOINTS SHALL BE FILLED WITH AND POINTED WITH AN APPROVED NON-SHRINKING MORTAR. ALL PIPES AND OTHER OPENINGS INTO THE MANHOLE SHALL BE SUITABLY PLUGGED AND THE PLUGS PLACED TO PREVENT BLOWOUT.

EACH MANHOLE SHALL BE CHECKED FOR INFILTRATION BY FILLING WITH WATER TO THE TOP OF THE CONE SECTION. A STABILIZATION PERIOD OF ONE HOUR SHALL BE PROVIDED TO ALLOW FOR ABSORPTION. AT THE END OF THIS PERIOD, THE MANHOLE SHALL BE REFILLED TO THE TOP OF THE CONE. IF NECESSARY, AND THE MEASURING TIME OF AT LEAST SIX HOURS BEGUN. AT THE END OF THE TEST PERIOD, THE MANHOLE SHALL BE REFILLED TO THE TOP OF THE CONE MEASURING THE VOLUME OF WATER ADDED. THIS AMOUNT SHALL BE CONVERTED TO A 24 HOUR RATE AND THE LEAKAGE DETERMINED ON THE BASIS OF DEPTH. THE LEAKAGE FOR EACH MANHOLE SHALL NOT EXCEED ONE GALLON PER VERTICAL FOOT FOR A 24 HOUR PERIOD FOR EXFILTRATION AND THERE SHALL BE NO VISIBLE INFILTRATION. IF AN AIR TEST IF PERFORMED ON THE MANHOLE, INSTEAD OF THE WATER TEST, THE MANHOLE SHALL REMAIN UN-BACKFILLED DOWN TO THE SEWER LINE INVERTS DURING THE AIR TEST.

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STATE HOUSE MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 10/22/26
SCALE: AS NOTED
DRAWN BY: WBF
CHECKED BY: KW

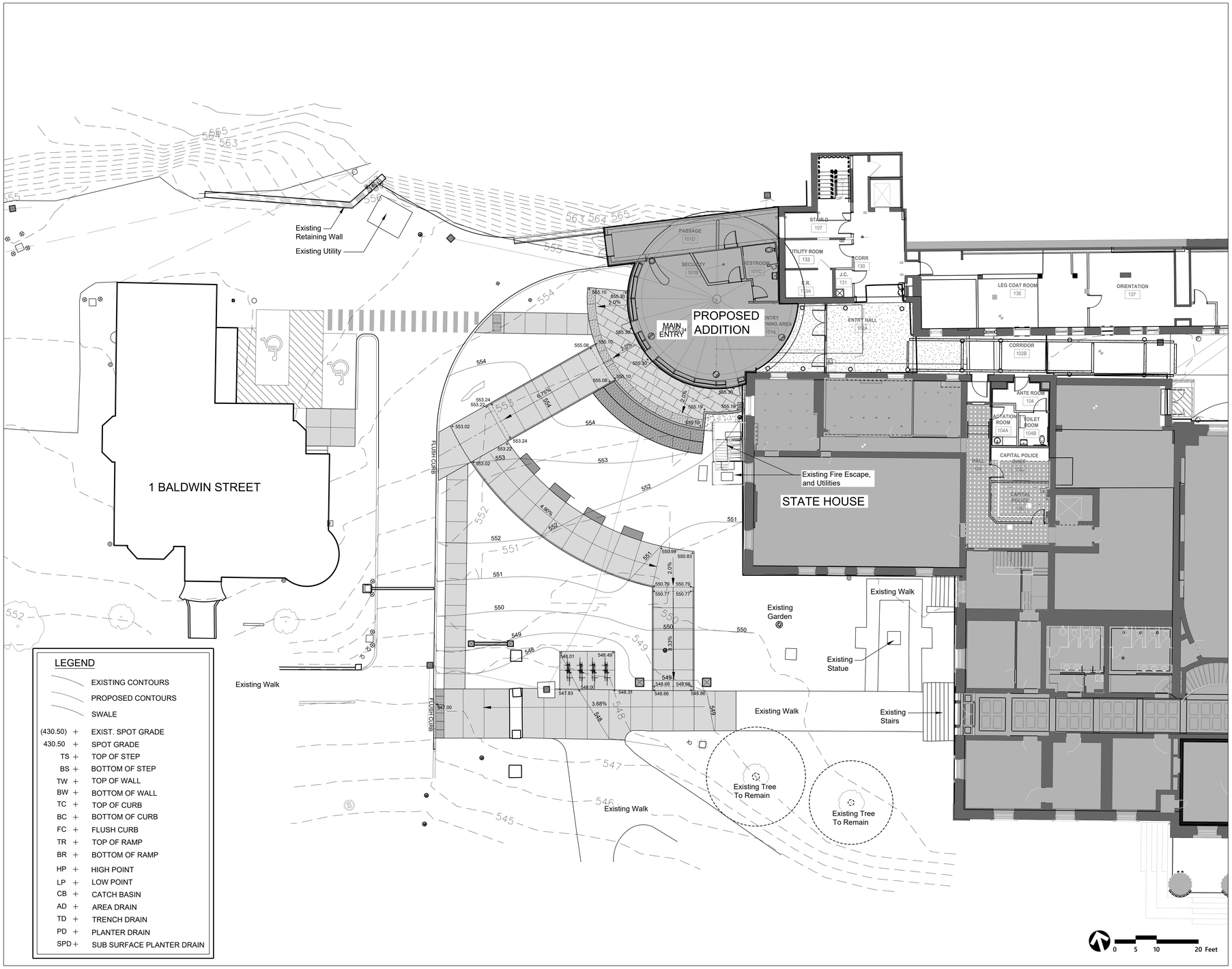
ISSUE LOG:
SCHEMATIC DESIGN 07/25/2025
75% DD SET/OWNER REV. 05/29/2025

SHEET CONTENTS: SANITARY SEWER DETAILS

SHEET NO: C503

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SCHEMATIC DESIGN 07/25/2025

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LEGEND

		EXISTING CONTOURS
		PROPOSED CONTOURS
		SWALE
(430.50)	+	EXIST. SPOT GRADE
430.50	+	SPOT GRADE
TS	+	TOP OF STEP
BS	+	BOTTOM OF STEP
TW	+	TOP OF WALL
BW	+	BOTTOM OF WALL
TC	+	TOP OF CURB
BC	+	BOTTOM OF CURB
FC	+	FLUSH CURB
TR	+	TOP OF RAMP
BR	+	BOTTOM OF RAMP
HP	+	HIGH POINT
LP	+	LOW POINT
CB	+	CATCH BASIN
AD	+	AREA DRAIN
TD	+	TRENCH DRAIN
PD	+	PLANTER DRAIN
SPD	+	SUB SURFACE PLANTER DRAIN

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	1"=10'
DRAWN BY:	CHECKED BY:
MKW	MKW

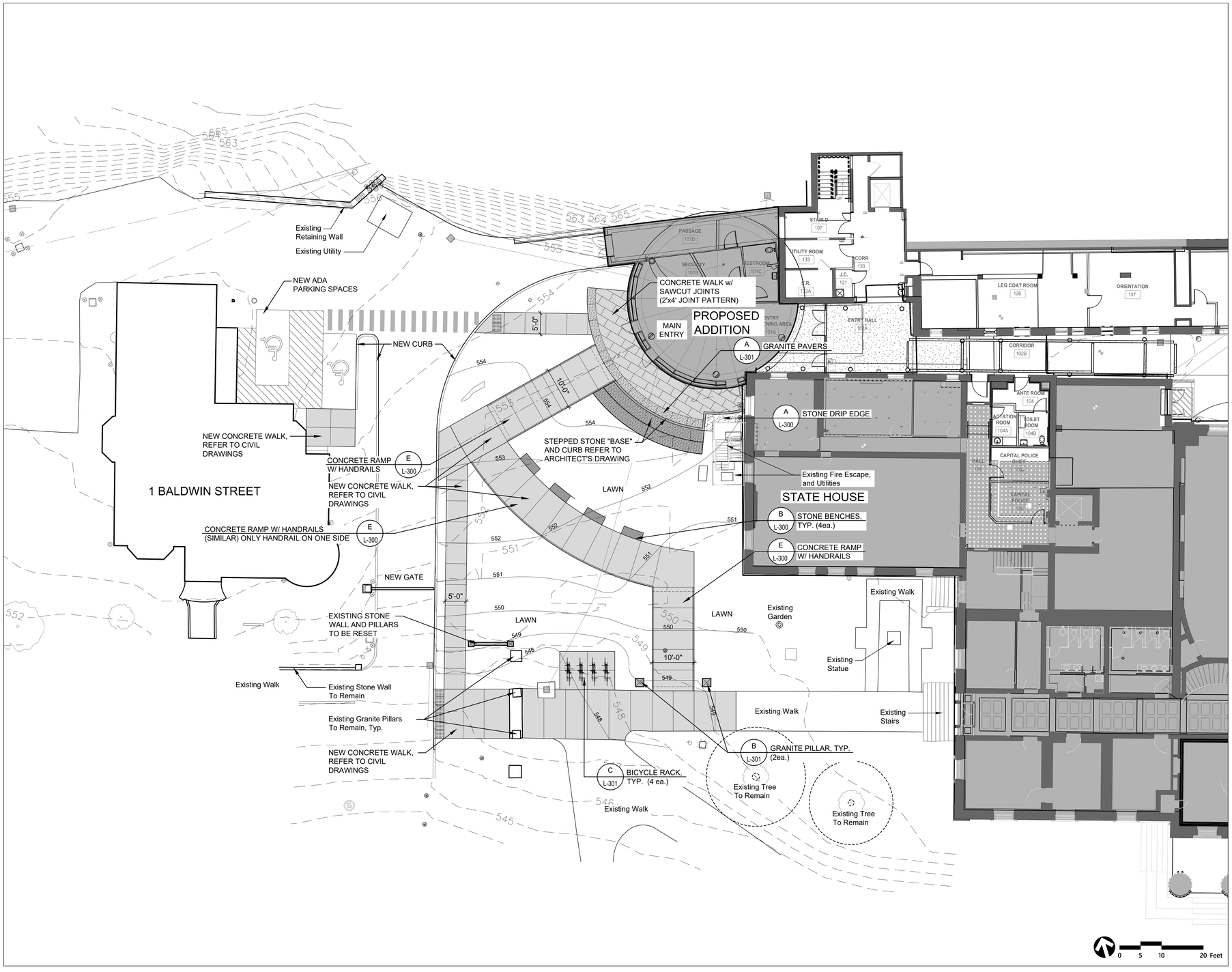
ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: LANDSCAPE GRDING PLAN

SHEET NO: **L100**

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	1"=10'
DRAWN BY:	CHECKED BY:
MKW	MKW

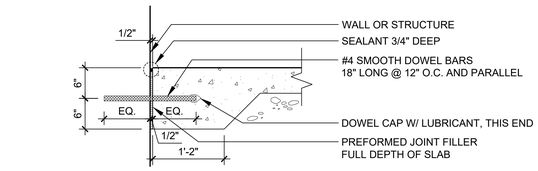
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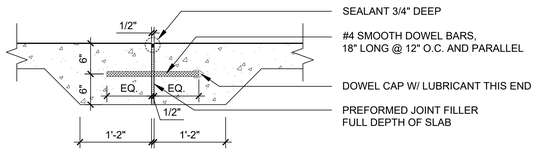
SHEET CONTENTS: LANDSCAPE LAYOUT PLAN

SHEET NO: **L200**

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ISOLATION JOINT @ STRUCTURES

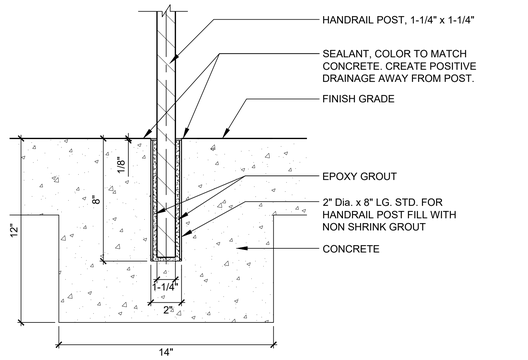


DOWELED EXPANSION JOINT

D JOINTS - CONCRETE PAVEMENT

SCALE 1" = 1'-0"

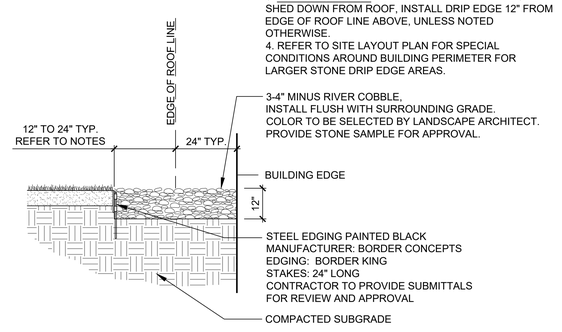
NOTES:
1. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF HANDRAIL AND POST LOCATIONS FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT.



C HANDRAIL POST ANCHOR

SCALE 3" = 1'-0"

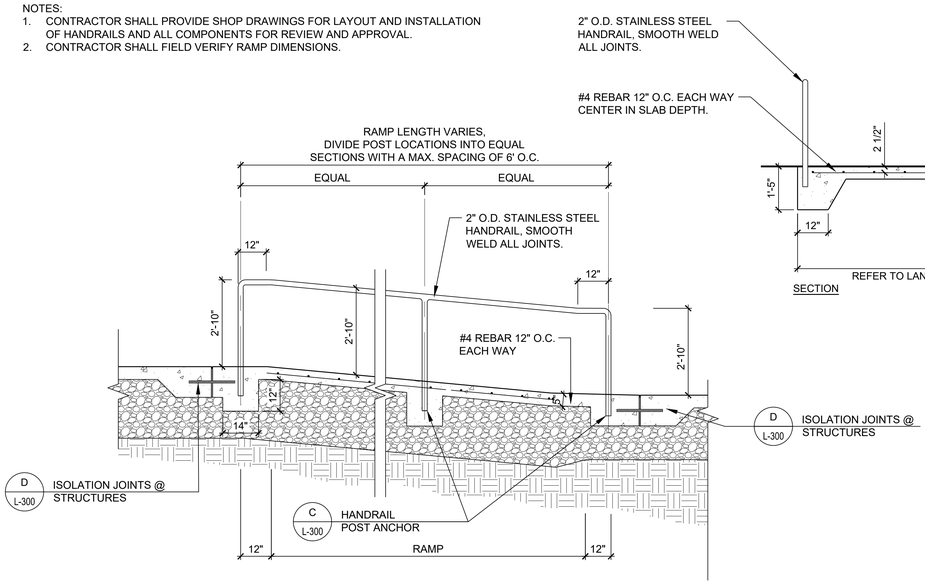
NOTE:
1. AREAS AROUND BUILDING WHERE WATER DOES NOT SHED DOWN FROM THE ROOF, INSTALL DRIP EDGE 24" FROM FACE OF BUILDING.
2. MAIN BUILDING: IN AREAS WHERE WATER DOES SHED DOWN FROM ROOF, INSTALL DRIP EDGE 24" FROM EDGE OF ROOF LINE ABOVE, UNLESS NOTED OTHERWISE.
3. RETAIL BUILDINGS: IN AREAS WHERE WATER DOES SHED DOWN FROM ROOF, INSTALL DRIP EDGE 12" FROM EDGE OF ROOF LINE ABOVE, UNLESS NOTED OTHERWISE.
4. REFER TO SITE LAYOUT PLAN FOR SPECIAL CONDITIONS AROUND BUILDING PERIMETER FOR LARGER STONE DRIP EDGE AREAS.



A STONE DRIP EDGE

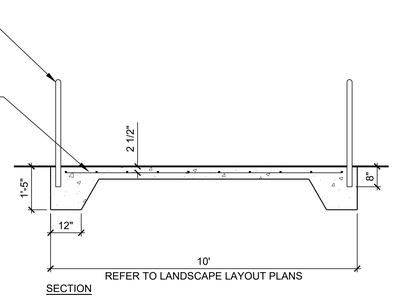
SCALE 1/2" = 1'-0"

NOTES:
1. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR LAYOUT AND INSTALLATION OF HANDRAILS AND ALL COMPONENTS FOR REVIEW AND APPROVAL.
2. CONTRACTOR SHALL FIELD VERIFY RAMP DIMENSIONS.

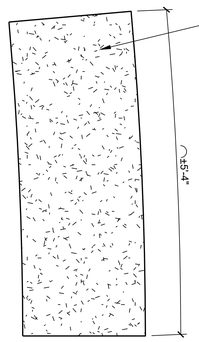


E CONCRETE RAMP W/ HANDRAILS

SCALE 1/2" = 1'-0"



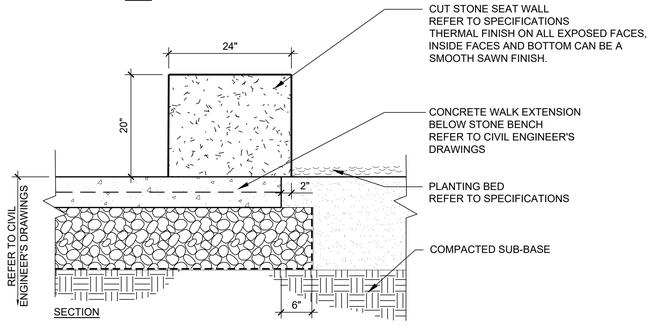
SECTION



CUT STONE SEAT WALL
REFER TO SPECIFICATIONS
THERMAL FINISH ON ALL FACES.

NOTES:
1. REFER TO LAYOUT DRAWINGS FOR HORIZONTAL LAYOUT INFORMATION
2. COORDINATE FINISHED GRADES WITH GRADING PLAN DRAWINGS.
3. DRILL MARKS ARE NOT ACCEPTABLE ON ANY FACE OF STONE MATERIAL
4. SAW CUT INTERIOR ENDS OF STONE PIECES.
5. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO FABRICATION.

PLAN



SECTION

B STONE BENCH

SCALE 1" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	
DRAWN BY: MKW	CHECKED BY: MKW

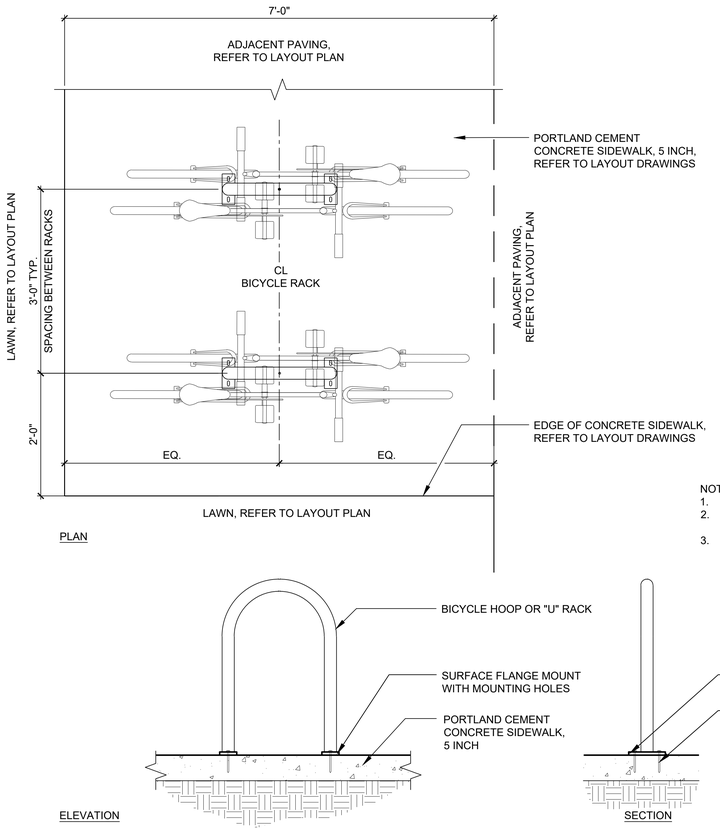
ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: **LANDSCAPE DETAILS**

SHEET NO: **L300**

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PLAN

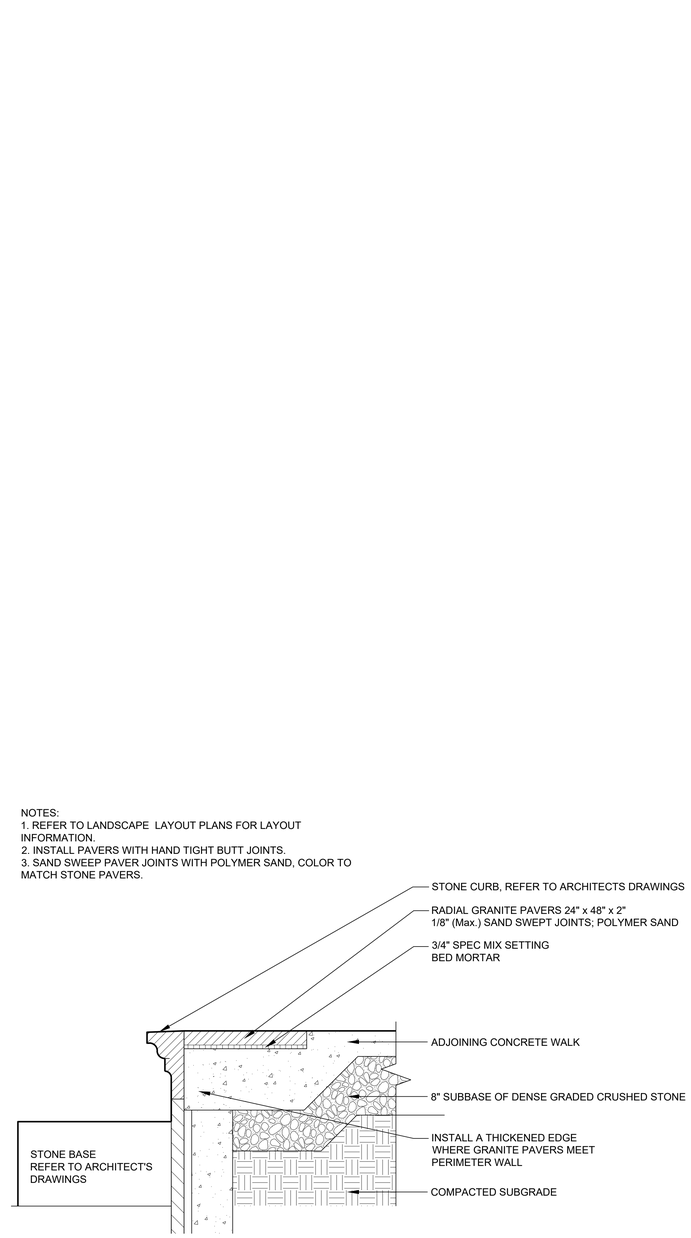
NOTES:
1. COLOR SHALL BE BLACK POWDERCOAT.
2. SURFACE MOUNT PER MANUFACTURER'S RECOMMENDATIONS.
3. REFER TO LANDSCAPE PLAN SHEET FOR BICYCLE RACK LOCATION AND LAYOUT.

ELEVATION

SECTION

C BICYCLE RACK
SCALE 1" = 1'

NOTES:
1. REFER TO LANDSCAPE LAYOUT PLANS FOR LAYOUT INFORMATION.
2. INSTALL PAVERS WITH HAND TIGHT BUTT JOINTS.
3. SAND SWEEP PAVER JOINTS WITH POLYMER SAND, COLOR TO MATCH STONE PAVERS.



A GRANITE PAVERS
SCALE 1" = 1'-0"



FRONT

SIDE

B GRANITE PILLARS
SCALE: NTS

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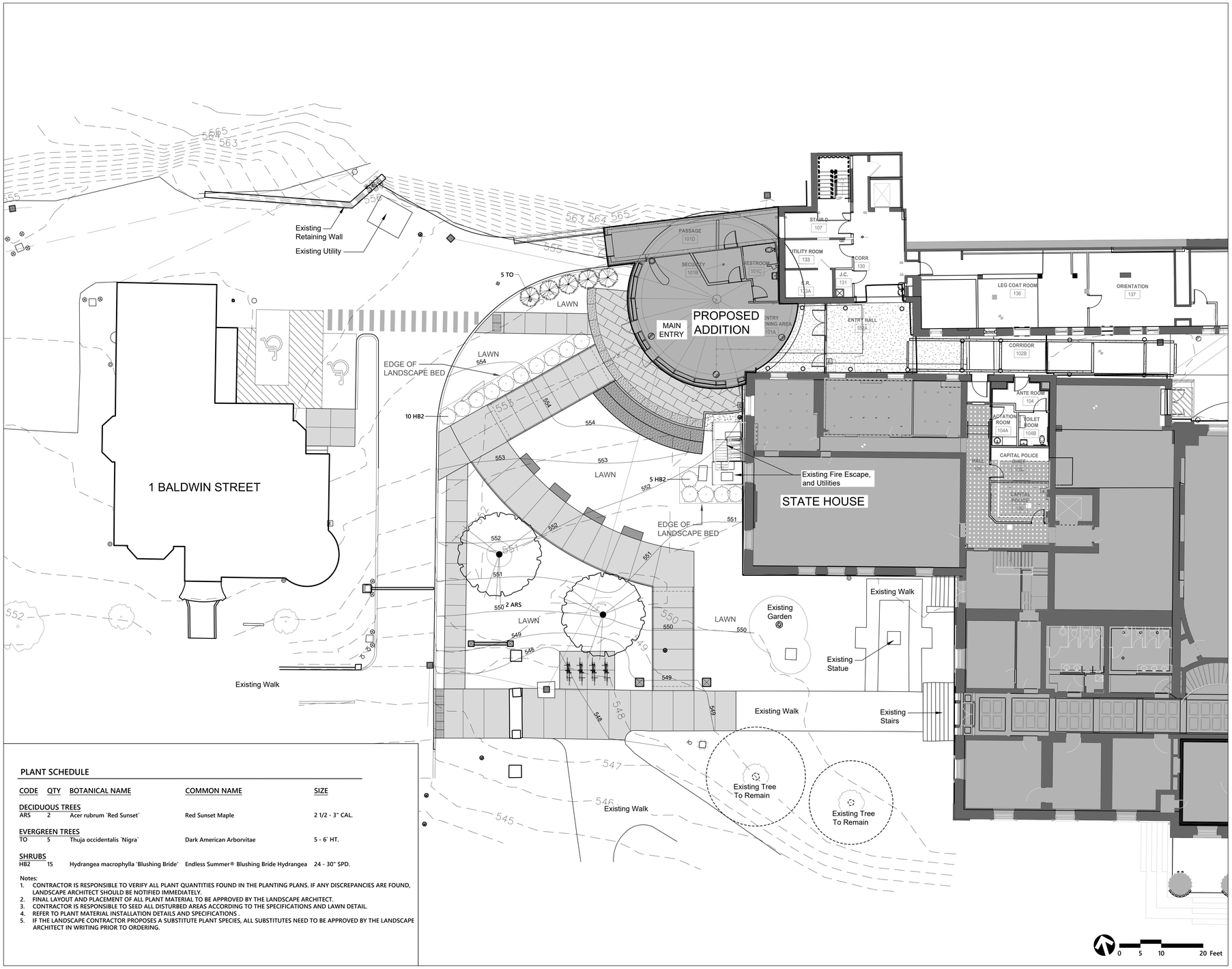
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100% DD SET	10/23/2026

SHEET CONTENTS: LANDSCAPE DETAILS

SHEET NO: L301

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PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
DECIDUOUS TREES				
ARS	2	Acer rubrum `Red Sunset`	Red Sunset Maple	2 1/2 - 3" CAL.
EVERGREEN TREES				
TO	5	Thuja occidentalis `Nigra`	Dark American Arborvitae	5 - 6` HT.
SHRUBS				
HB2	15	Hydrangea macrophylla 'Blushing Bride'	Endless Summer® Blushing Bride Hydrangea	24 - 30" SPD.

Notes:
1. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL PLANT QUANTITIES FOUND IN THE PLANTING PLANS. IF ANY DISCREPANCIES ARE FOUND, LANDSCAPE ARCHITECT SHOULD BE NOTIFIED IMMEDIATELY.
2. FINAL LAYOUT AND PLACEMENT OF ALL PLANT MATERIAL TO BE APPROVED BY THE LANDSCAPE ARCHITECT.
3. CONTRACTOR IS RESPONSIBLE TO SEED ALL DISTURBED AREAS ACCORDING TO THE SPECIFICATIONS AND LAWN DETAIL.
4. REFER TO PLANT MATERIAL INSTALLATION DETAILS AND SPECIFICATIONS .
5. IF THE LANDSCAPE CONTRACTOR PROPOSES A SUBSTITUTE PLANT SPECIES, ALL SUBSTITUTES NEED TO BE APPROVED BY THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO ORDERING.

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FF PROJECT NO: 2248

ORIGINATION DATE: 06/10/21 | SCALE: 1"=10'

DRAWN BY: MKW | CHECKED BY: MKW

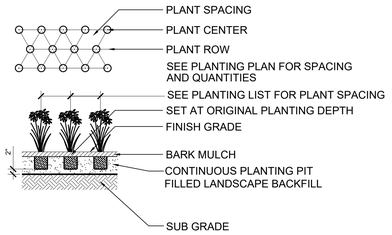
ISSUE LOG:

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75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: PLANTING PLAN

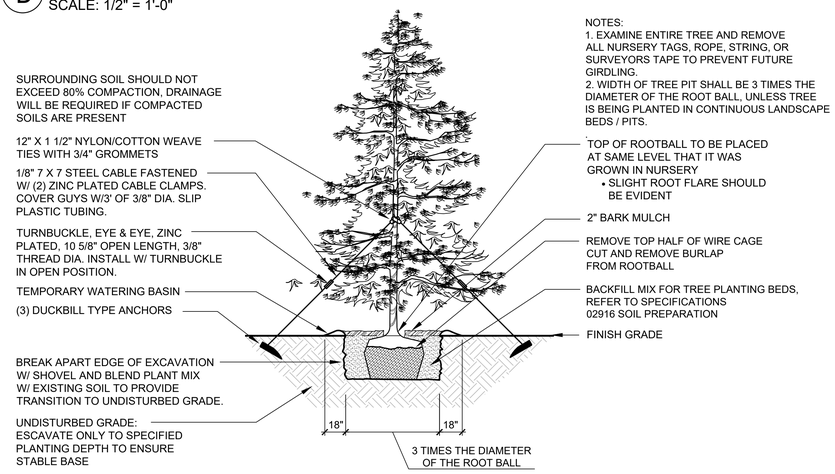
SHEET NO: **L400**

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B PERENNIAL & GRASS PLANTING

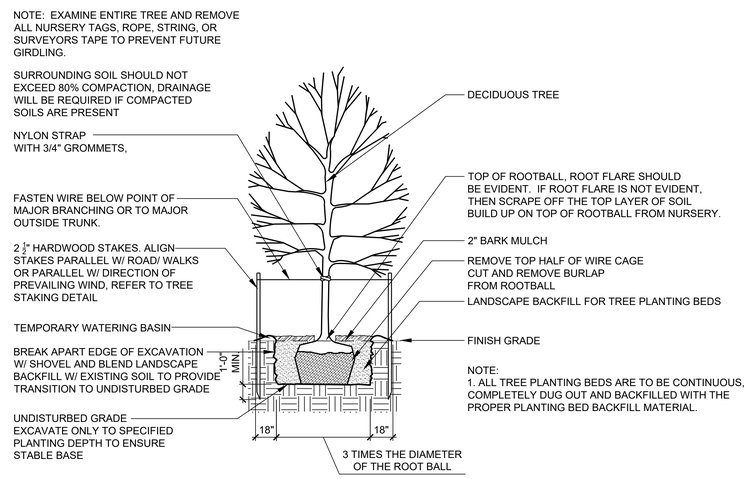
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C EVERGREEN PLANTING

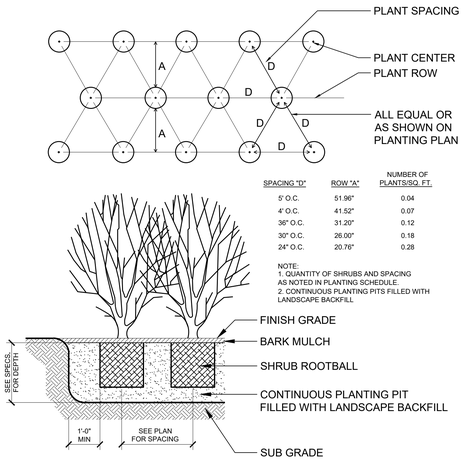
SCALE 1/4" = 1'-0"

p-evertree.dwg



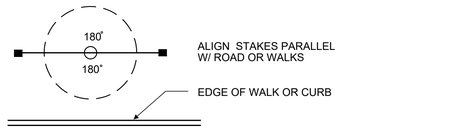
F TREE PLANTING

SCALE 1/4" = 1'-0"

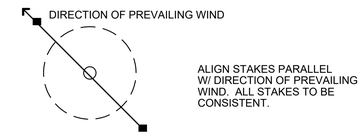


A SHRUB PLANTING

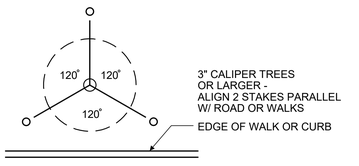
SCALE: 1/2" = 1'-0"



A. TREE STAKING ALONG ROAD OR WALKS



B. TREE STAKING IN OPEN SPACES

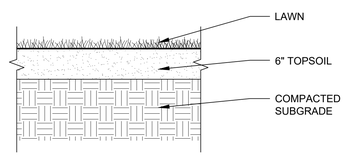


C. TREE GUYING

D TREE STAKING LAYOUT

NO SCALE

p-stake.dwg



E LAWN

SCALE 1" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	AS NOTED
DRAWN BY:	CHECKED BY:
MKW	MKW

ISSUE LOG:

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100% DD SET	10/23/2026

SHEET CONTENTS: **PLANTING DETAILS**

SHEET NO: **L500**

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A. GENERAL NOTES

1. ALL STRUCTURAL WORK SHALL CONFORM TO THE PROJECT SPECIFICATIONS, DRAWINGS, AND THE 2015 VERMONT FIRE AND BUILDING SAFETY CODE.
2. CONTRACTOR SHALL COORDINATE STRUCTURAL WORK WITH RELATED TRADES AND WITH OTHER DESIGN DISCIPLINE REQUIREMENTS PRIOR TO MAKING SUBMITTALS. CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO PERFORMING WORK.
3. REFER TO OTHER DESIGN DISCIPLINE DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION REQUIRED FOR THE SUBMITTALS AND INSTALLATION OF STRUCTURES, INCLUDING BUT NOT LIMITED TO DIMENSIONS, ELEVATIONS, SLOPES, LOCATIONS OF OTHER SYSTEMS AND EQUIPMENT, OPENINGS, WALLS, STAIRS, FINISHES, COATINGS, AND OTHER NON-STRUCTURAL ITEMS. NOTES PROVIDED ON THE DRAWINGS ARE INTENDED FOR USE IN CONJUNCTION WITH PROJECT SPECIFICATIONS.
4. DETAILS LABELED AS TYPICAL DETAILS ON THE DRAWINGS SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH TYPICAL DETAILS SHALL APPLY WHETHER OR NOT THEY ARE DEMARKED AT EACH LOCATION IN THE DRAWINGS. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS OF A SIMILAR NATURE. VERIFY APPLICABILITY BY SUBMITTALS.
5. CONTRACTOR IS RESPONSIBLE FOR COORDINATION DETAILS AND ACCURACY OF THE WORK; FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; FOR SELECTING FABRICATION PROCESSES, FOR TECHNIQUES OF ASSEMBLY IN ACCORDANCE WITH GENERAL CONDITIONS AND DIVISION 1 SPECIFICATION REQUIREMENTS; AND FOR PERFORMING ALL WORK IN A SAFE AND SECURE MANNER IN ACCORDANCE WITH GOVERNING JOB SAFETY STANDARDS.
6. CONTRACTOR SHALL VERIFY ALL CONDITIONS AT THE SITE, INCLUDING LOCATIONS OF ALL EXISTING STRUCTURES AND EXISTING UTILITIES ABOVE AND BELOW GROUND (AS ANY INFORMATION SHOWN IS APPROXIMATE AND NOT NECESSARILY COMPLETE.) CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO PERFORMING WORK.
7. LOADS APPLIED DURING CONSTRUCTION SHALL NOT EXCEED THE DESIGN LOADS NOTED ON THE DRAWINGS OR THE CAPACITY OF PARTIALLY COMPLETED CONSTRUCTIONS AS DETERMINED BY THE CONTRACTOR. THE STRUCTURAL ELEMENTS OF THE PROJECT AS SHOWN IN THE CONSTRUCTION DOCUMENTS HAVE BEEN DESIGNED FOR THE SPECIFIED VERTICAL AND LATERAL FORCES ACTING ON THE COMPLETED BUILDING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DESIGN AND PROVIDE ALL REQUIRED SHORING AND BRACING NEEDED DURING CONSTRUCTION TO MAINTAIN THE STABILITY AND SAFETY OF THE PARTIALLY-COMPLETED STRUCTURE AND FOR CONSTRUCTION LOADINGS THAT EXCEED THE SPECIFIED DESIGN LOADS.
8. SHORING, BRACING, PROTECTING, AND MAINTAINING THE INTEGRITY OF ANY EXISTING, ADJACENT, AND/OR ONGOING PARTIALLY COMPLETED STRUCTURES IS THE RESPONSIBILITY OF THE CONTRACTOR.

B. EXISTING BUILDING NOTES

1. DIMENSIONS, ELEVATIONS, MEMBER SIZES, AND DETAILS OF EXISTING STRUCTURE SHOWN IN THE STRUCTURAL DRAWINGS HAVE BEEN EXTRACTED FROM RECORD DRAWINGS AND/OR LIMITED FIELD MEASUREMENTS. AS SUCH THEY ARE NOT TO BE CONSIDERED SUITABLY ACCURATE FOR ANY CONSTRUCTION WORK SHOWN, INCLUDING FABRICATIONS, SUBMITTALS, ETC. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE EXISTING CONSTRUCTION, INCLUDING PLUMBNESS OR FLATNESS OF WALLS, FLOORS, ETC. AT THE JOB SITE PRIOR TO SUBMITTAL, FABRICATION OR CONSTRUCTION WORK. ANY DEVIATIONS FOUND IN THE FIELD FROM WHAT IS SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE ARCHITECT PRIOR TO FABRICATION OR CONSTRUCTION.
2. TEMPORARY SHORING AND BRACING OF FLOORS, WALLS, AND OTHER STRUCTURAL ELEMENTS OF THE EXISTING BUILDINGS REQUIRED TO ACHIEVE THE INSTALLATION OF NEW AND/OR THE REMOVAL OF EXISTING STRUCTURAL ELEMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL, AT THEIR DISCRETION AND WHERE SPECIFIED, EMPLOY ENGINEERING SERVICES FOR DESIGN OF TEMPORARY BRACING, SHORING AND PROTECTION. EXISTING BUILDING MOVEMENTS SHALL BE LIMITED TO PREVENT DISTRESS FROM OCCURRING.
3. REPORT EXISTING CONDITIONS UNCOVERED, REVEALED, FOUND OR DEVELOPED DURING CONSTRUCTION INDICATIVE OF STRUCTURAL INTEGRITY LOSS OR DETERIORATION, UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.
4. DO NOT CUT, DRILL OR ALTER ANY EXISTING STRUCTURAL ELEMENTS UNLESS SHOWN OR NOTED ON THE STRUCTURAL DRAWINGS WITHOUT NOTIFYING THE ARCHITECT FOR REVIEW, INCLUDING TEMPORARY MEASURES OR FOR THE INSTALLATION OF OTHER DESIGN DISCIPLINE WORK.
5. MONITORING OF CONSTRUCTION WORK SHALL INCLUDE, BUT IS NOT LIMITED TO, FIRE WATCH DURING AND AT LEAST 24 HOURS AFTER ALL STEEL WELDING OR DRILLING, WOOD DRILLING, AND HEAT TRANSFERRING CONSTRUCTION MEASURES. DO NOT ALLOW HEAT OR ENERGY FROM EQUIPMENT TO DAMAGE OR OTHERWISE ALTER EXISTING STRUCTURAL ELEMENTS TO REMAIN.
6. FOR EXISTING STEEL ELEMENTS, DO NOT ALLOW THE THROUGH THICKNESS TEMPERATURE OF THE STEEL TO EXCEED 300º FAHRENHEIT DURING WELDING PROCESSES UNLESS SPECIFICALLY NOTED OTHERWISE. USE ACTIVE, OBSERVABLE SURFACE MONITORING METHODS.

C. DEFERRED SUBMITTALS

1. IN ACCORDANCE WITH REQUIREMENTS LISTED BY THE DRAWINGS AND SPECIFICATIONS, DEFERRED SUBMITTALS AS DEFINED BY THE IBC ARE REQUIRED FOR THE CONDUCTANCE OF THIS PROJECT. THESE SUBMITTALS REQUIRE ACCEPTABLE REVIEW BY THE ARCHITECT AND/OR ENGINEER-OF-RECORD (EOR) AS WELL AS PRESENTATION OF REVIEWED "RECORD" SUBMITTALS TO THE AHJ AT THEIR DISCRETION AND FOR THEIR ACCEPTANCE.
2. DEFERRED SUBMITTALS ARE SPECIFIED TO INCLUDE CALCULATIONS AND DRAWINGS PREPARED UNDER THE AUSPICES OF AN APPROPRIATELY LICENSED (SPECIALTY) ENGINEER. SUBMITTALS INDICATE CODE (MINIMUM) OR SPECIFIED LOAD TYPE, MAGNITUDES, AND LOCATIONS; FRAMING AND CONNECTION TYPES AND CONFIGURATIONS; INCLUDING ATTACHMENT TO PRIMARY OR BASE STRUCTURE FRAMING.
3. THE PURPOSE OF THE EOR'S REVIEW OF THE SUBMITTALS CONCERNS THAT THE SUBMITTAL DRAWINGS AND CALCULATIONS ARE PROPERLY SEALED; THAT THE LOAD CRITERIA GENERALLY CONFORM TO THE SPECIFIED DESIGN BASIS AND CODE; THAT CONNECTIONS LOADS ATTACHMENTS AND CONFIGURATIONS TO THE PRIMARY OR BASE STRUCTURE ARE COMPATIBLE WITH THE STRUCTURAL DESIGN AND CODE REQUIREMENTS.
4. THE EOR RELIES ON THE (SPECIALTY) ENGINEER'S SEAL AS CERTIFICATION THAT THE DEFERRED SUBMITTAL ITEMS COMPLY WITH SPECIFIED AND CODE CRITERIA. THE EOR IS NOT RESPONSIBLE FOR THE ADEQUACY OR EFFECTS OF THE (SPECIALTY) ENGINEER'S DESIGN. DESIGN OF TEMPORARY SHORING AND BRACING AS WELL AS TESTING AND INSPECTIONS THAT REQUIRE THE SUPERVISION OF A LICENSED ENGINEER, SUCH AS FOUNDATION SUBGRADE REVIEW, ARE NOT CONSIDERED DEFERRED SUBMITTALS.
5. DEFERRED STRUCTURAL SUBMITTAL ITEMS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
   - EXTERIOR WALL ASSEMBLIES - COLD-FORMED STEEL, CURTAIN WALL SYSTEMS
   - STEEL STAIRS
   - STRUCTURAL STEEL CONNECTIONS
   - MICROPILES OR DUCTILE IRON PIPE PILES
   - CONCRETE FORMWORK AND SHORIING
   - EARTHWORK SHORING FOR BUILDING EXCAVATIONS

   IN ADDITION, STRUCTURAL REQUIREMENTS ARE SPECIFIED FOR VARIOUS MISCELLANEOUS METAL, EXTERIOR WALL, EQUIPMENT, AND MEP SYSTEM COMPONENTS BY OTHER DESIGN DISCIPLINES; WHERE THE CONNECTION TO THE PRIMARY OR BASE STRUCTURE IS REVIEWED.

TABLE 1 - CONCRETE MIXTURES

APPLICATION	COMPRESSIVE STRENGTH f'c	CONCRETE TYPE	EXPOSURE CLASS[2]	CEMENTITIOUS MATERIALS[3]	MAX W/C RATIO	PERMISSIBLE AIR CONTENT[4]
FOOTINGS	3,000 PSI @ 56 DAYS	NORMAL WEIGHT	F0, S0, P0, C1	40% FA OR GGBFS (MAX)	0.50	N/A
FOUNDATION WALLS, PILASTERS, PIERS,	4,000 PSI @ 28 DAYS	NORMAL WEIGHT	F1, S0, P0, C1	15% FA OR GGBFS (MAX)	0.45	5% +/- 1.5%
INTERIOR SLABS-ON-GRADE	3,500 PSI @ 28 DAYS	NORMAL WEIGHT	F0, S0, P0, C0	25% FA OR GGBFS (MAX)	0.50	<3%
EXTERIOR SLABS-ON-GRADE	5,000 PSI @ 56 DAYS	NORMAL WEIGHT	F3, S0, P0, C2	15% FA OR GGBFS (MAX)	0.40	5% +/- 1.5%
TOPPING PILE CAPS AND GRADE BEAMS	5,000 PSI @ 28 DAYS	NORMAL WEIGHT	F0, S0, P0, C0	15% FA OR GGBFS (MAX)	0.50	<3%
ELEVATED SLABS & BEAMS	4,500 PSI @ 28 DAYS	NORMAL WEIGHT	F0, S0, P0, C0	15% FA OR GGBFS (MAX)	0.50	<3%

NOTES:
1. SLUMP: 3"-5" BEFORE ADDITION OF WATER REDUCER, 6"-8" AFTER ADDITION OF WATER REDUCER.
2. EXPOSURE CLASS REFERENCES ACI 318-14 TABLE 19.3.1.1. CONCRETE SHALL BE PROPORTIONED TO COMPLY WITH REQUIREMENTS PROVIDED IN ACI 318-14 TABLES 19.3.2.1 AND 19.3.3.1 WITH RESPECT TO EXPOSURE CLASS.
3. FA = FLY ASH; GGBFS = GROUND GRANULATED BLAST-FURNACE SLAG
4. DO NOT POWER TROWEL SLABS WITH ENTRAINED AIR.

D. FOUNDATION RELATED EARTHWORK

1. SEE GEOTECHNICAL ENGINEERING REPORT TITLED "PROPOSED STATE HOUSE ADDITIONS" BY JOHN TURNER CONSULTING DATED 8/5/25 FOR CONSTRUCTION MEASURES, RECOMMENDATIONS, AND DESIGN; AND ADDITIONAL DOCUMENTS PROVIDED BY THE OWNER AND PROJECT CORRESPONDENCE:
   A. "GEOTECHNICAL MEASURES IN EXISTING ALLEYWAY" MEETING SUMMARY MEMO BY EV DATED 2/20/26
   B. STATEHOUSE ANNEX IMPROVEMENTS DRAWINGS ST-1 - ST-3 BY DATED 1/29/87
   C. [PILE DESIGN OPTIONS RECOMMENDATIONS BY JOHN TURNER CONSULTING - **PENDING**]
2. THE GEOTECHNICAL REPORTING CONTAINS SPECIFIC REQUIREMENTS PERTAINING TO GROUND IMPROVEMENTS, GRUBBING, SITE, SUBFLOOR AND BEARING SURFACE PREPARATION AND PROTECTION; STRUCTURAL FILL AND COMPACTION REQUIREMENTS; GROUND WATER MANAGEMENT; ETC. THAT ARE NOT NECESSARILY SHOWN BY THE DRAWINGS AND SPECIFICATIONS. ALSO, IBC CHAPTER 18 "SOILS AND FOUNDATION" REQUIREMENTS APPLY, UNLESS SPECIFICALLY NOTED OTHERWISE BY THE GEOTECHNICAL REPORTING, DRAWINGS OR SPECIFICATIONS. REPORT CONFLICTS BETWEEN THE REPORTING AND THE DRAWINGS AND SPECIFICATIONS TO THE ARCHITECT PRIOR TO COMMENCING ANY AFFECTED WORK.
3. A LICENSED GEOTECHNICAL ENGINEER SHALL INSPECT AND REPORT ON ALL NATIVE SUB-GRADES FOR SLABS-ON-GRADE AND FOUNDATION PREPARED SOIL SURFACES PRIOR TO THE PLACEMENT OF ANY BACKFILL, FILL, AND FOUNDATION STRUCTURAL ELEMENTS. FOUNDATIONS AND FOOTING SHALL BEAR ON COMPETENT NATIVE SOILS OR COMPACTED STRUCTURAL FILLS IN ACCORDANCE WITH THE GEOTECHNICAL REPORTING.
4. FOOTINGS AND SLABS CAST DIRECTLY AGAINST THE EARTH SHALL BE SIDE-FORMED AS REQUIRED TO KEEP EARTH OUT OF THE CONCRETE. COMPACT DISTURBED LOAD BEARING SOIL IN DIRECT CONTACT WITH FOUNDATIONS TO ORIGINAL BEARING CAPACITY. AS WET WEATHER OR GROUND CONDITIONS WARRANT, PLACE A MINIMUM OF 6 INCHES OF CRUSHED STONE WRAPPED IN GEOTEXTILE FABRIC FOR SUBGRADE PROTECTION BENEATH FOUNDATIONS, DO NOT ALLOW FOR STANDING WATER ON EARTH. IF OVER-EXCAVATION OCCURS, REPLACE MATERIAL WITH BACKFILL MEASURES SPECIFIED FOR USE UNDER FOUNDATIONS, AFTER ACCEPTANCE BY GEOTECHNICAL ENGINEER.
5. UNLESS NOTED OTHERWISE, PLACE AND COMPACT BACKFILL IN EQUAL CONTINUOUS LAYERS NOT EXCEEDING A MAXIMUM OF 8" OF COMPACTED DEPTH FOR HAND-HELD COMPACTION EQUIPMENT AND A MAXIMUM OF 12" INCHES COMPACTED DEPTH FOR VIBRATORY ROLLERS. MAINTAIN OPTIMUM MOISTURE CONTENT OF BACKFILL MATERIALS TO ATTAIN COMPACTION DENSITY.
6. AT EARTH RETAINING AND FOUNDATION WALLS, BACKFILL LIFTS TO NOT EXCEED 12 INCH DIFFERENCE IN ELEVATION UNTIL FINAL ELEVATIONS ARE REACHED ON BOTH SIDES OF THE WALL. AT BASEMENT WALLS, DO NOT BACKFILL UNTIL GROUND FLOOR AND CONNECTED ELEVATED FRAMED LEVELS SLABS HAVE BEEN COMPLETED AND THE CONCRETE AT WALLS AND FLOORS HAS ACHIEVED FULL DESIGN STRENGTH.
7. THE CONSTRUCTION CONSIDERATIONS IN THE GEOTECHNICAL REPORTING AND PROJECT SPECIFICATIONS SHALL APPLY TO THIS PROJECT, INCLUDING BUT NOT LIMITED TO PROOFROLLING SUBGRADES AT THE EXCAVATION AND/OR BEARING ELEVATIONS; REMOVING AND REPLACING LOOSE OR SOFT POCKETS, FILL SLOPE CONSTRUCTIONS, ETC.
8. BACKFILL REQUIREMENTS:
   A. FILL UNDER FOUNDATIONS AND WITHIN ZONE OF INFLUENCE OF BUILDING FOUNDATIONS:
      MATERIAL: "STRUCTURAL FILL"
      COMPACTION: 95% MODIFIED PROCTOR
   B. FILL DIRECTLY BELOW INTERIOR AND EXTERIOR SLAB-ON-GRADE ASSEMBLIES:
      MATERIAL: "FINE CRUSHED GRAVEL" OR "3/4" CRUSHED STONE"
      COMPACTION: 95% MODIFIED PROCTOR
   C. BACKFILL BEHIND RETAINING WALLS AND FOUNDATION WALLS, WITHIN AND OUTSIDE BUILDING ENVELOPE:
      MATERIAL: "STRUCTURAL FILL"
      COMPACTION: 95% MODIFIED PROCTOR
   D. FILL OUTSIDE ZONE OF INFLUENCE OF BUILDING FOUNDATIONS AND NOT UNDER ENTRY SLABS:
      MATERIAL: "COMMON FILL"
      COMPACTION: 90% MODIFIED PROCTOR
9. BACKFILL MATERIALS:
   A. "STRUCTURAL FILL":

SIEVE DESIGNATION	% BY WEIGHT PASSING SIEVES
5 INCH	100
3/4 INCH	60-85
No. 4	40-70
No. 200	0-8

   B. "FINE CRUSHED GRAVEL": (VAOT TABLE 704.05B)

SIEVE DESIGNATION	% BY WEIGHT PASSING SIEVES
2 INCH	100
1 1/2 INCH	90-100
No. 4	30-60
No. 100	0-12
No. 200	0-8

   C. "3/4" CRUSHED STONE":

SIEVE DESIGNATION	% WEIGHT BY PASSING SIEVES
1 INCH	100
3/4 INCH	90-100
3/8 INCH	0-55
No. 4	0-10
No. 8	0-5

   D. "COMMON FILL":

SIEVE DESIGNATION	% BY WEIGHT PASSING SIEVES
6 INCH	100
3/4 INCH	60-100
No. 4	20-85
No. 200	0-25

10. GEOTEXTILE FABRIC: NON-WOVEN WITH 12-INCH LAPPED SEAMS MEETING:
    - GRAB STRENGTH OF 90 POUNDS MINIMUM MEETING ASTM D4632
    - PUNCTURE STRENGTH OF 140 POUNDS MINIMUM MEETING ASTM D6241
    - TRAPEZOID TEAR OF 25 POUNDS MINIMUM MEETING ASTM D4533
    - APPARENT OPENING SIZE OF NO. 70 (US SIEVE) MEETING ASTM D4751
11. INSULATION AT EXTERIOR SLABS AND WALKS (NOT PAVEMENTS): GRAPHITE POLYSTYRENE, STRENGTH OF 40 PSI (UNO) AND RATED FOR UNDERSLAB/UNDERGROUND USE. STAGGER AND DO NOT TAPE BOARD JOINTS.

E. CONCRETE FORMWORK

1. SEE NOTES ON PRIMARY CODES AND SPECIFICATIONS.
2. ALL FORMWORK SHALL BE DESIGNED, ERECTED, SUPPORTED, BRACED AND MAINTAINED ACCORDING TO ACI 347. RECOMMENDED STANDARD PRACTICE FOR CONCRETE FORMWORK.
3. RESPONSIBILITY: THE DESIGN, CONSTRUCTION AND SAFETY OF ALL FORMWORK SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. ALL FORMS, SHORES, BACKSHORES, FALSEWORK, BRACING, AND OTHER TEMPORARY SUPPORTS SHALL BE ENGINEERED TO SUPPORT ALL LOADS IMPOSED INCLUDING THE WET WEIGHT OF CONCRETE, CONSTRUCTION EQUIPMENT, LIVE LOADS, LATERAL LOADS DUE TO WIND AND WET CONCRETE IMBALANCE. SEE SPECIFICATIONS FOR DETAILED REQUIREMENTS. SEE DRAWINGS FOR CAMBER REQUIREMENTS
4. DESIGN: THE DESIGN OF ALL CONCRETE FORMWORK AND RESHORING SHALL BE PERFORMED BY A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER IN THE STATE OF VERMONT. SEE SPECIFICATIONS AND GENERAL NOTES ON "SUBMITTALS".
5. TOLERANCES: UNLESS SPECIFIED OTHERWISE, ALL TOLERANCES FOR CONCRETE FORMWORK SHALL CONFORM TO ACI STANDARD 117, STANDARD TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS. THE CONTRACTOR SHALL ENGAGE A LICENSED SURVEYOR TO VERIFY THAT WORK IS WITHIN SPECIFIED TOLERANCES UNLESS WRITTEN AUTHORIZATION IS OBTAINED FROM THE ARCHITECT TO PROVIDE TOLERANCE CONTROL USING THE CONTRACTOR'S OWN FORCES PRIOR TO BEGINNING WORK.
6. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED WHERE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS.
7. PLUMBING SLEEVE SPACING SHALL BE THE LARGER OF THREE (3) DIAMETERS CENTER TO CENTER OF THE LARGER SLEEVE, OR 6" CLEAR BETWEEN THE SLEEVES. SUBMIT SLEEVE LOCATIONS AND SIZES TO ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
8. PENETRATIONS SHALL NOT BE PERMITTED IN ANY STRUCTURAL MEMBERS OTHER THAN THOSE SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS WITHOUT THE WRITTEN REVIEW OF THE ENGINEER OF RECORD. THE CONTRACTOR SHALL SUBMIT DRAWINGS TO THE ENGINEER OF RECORD FOR REVIEW INDICATING ANY CONCENTRATIONS OF PIPES, OPENINGS OR PENETRATIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS PRIOR TO CONCRETE POURS.
9. . CONCRETE SLAB, BEAM AND COLUMN EXPOSED TO VIEW: PROVIDE CLASS A, SF-3.0 SURFACES. PROVIDE MOCKUPS EACH TYPE OF EXPOSED SURFACE (SEE SPECIFICATION). SEE ARCH FOR COATINGS REQUIREMENTS

F. CAST-IN-PLACE CONCRETE

1. CODES AND STANDARDS: COMPLY WITH THE PROVISIONS OF THE LATEST EDITIONS OF:
   A. ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
   B. ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE"
   C. ACI 304 "GUIDE FOR MIXING, TRANSPORTING AND PLACING CONCRETE"
   D. ACI 305 "HOT WEATHER CONCRETING"
   E. ACI 306 "STANDARD SPECIFICATION FOR COLD WEATHER CONCRETING"
   F. ACI 308 "STANDARD PRACTICE FOR CURING CONCRETE".
2. CONCRETE TESTING: THE CONTRACTOR SHALL PREPARE A SET OF 4 CYLINDERS/TEST SET TO BE TESTED AT AN INDEPENDENT LABORATORY. THE CYLINDERS SHALL BE TAKEN FROM ONE CONCRETE TRUCK AND LABELED WITH DATE, TRUCK NUMBER, AND LOCATION OF CONCRETE PLACEMENT. EACH SAMPLE SHALL ALSO BE TESTED FOR SLUMP, AIR CONTENT, AND TEMPERATURE. THE CYLINDERS SHALL BE TESTED AS FOLLOWS: 1 AT 7 DAYS; 2 AT 28 DAYS; AND A THIRD HELD FOR A 56 DAY BREAK IF REQUIRED. TEST CYLINDERS SHALL BE TAKEN AT LEAST ONCE PER PLACEMENT OR AT THE FOLLOWING INCREMENTS:
   A. WALLS AND FOOTINGS: 50 CUBIC YARDS
   B. ISOLATED FOOTINGS: 25 CUBIC YARDS
   C. SLABS: 50 CUBIC YARDS
      FIELD TESTING SHALL BE PERFORMED BY A GRADE I ACI (MINIMUM) FIELD TESTING TECHNICIAN.
3. SUBMIT MIX DESIGN AND EITHER TRIAL MIX DESIGNS OR HISTORIC FIELD DATA FOR APPROVAL IN ACCORDANCE WITH ACI 318, CHAPTER 5, INCLUDE TECHNICAL DATA SHEETS, GRADATIONS, AND MATERIAL VERIFICATIONS ON ALL COMPONENTS. SUBMIT MIX DESIGNS, PRIOR TO PLACEMENT OF CONCRETE, TRANSIT MIX SHALL CONFORM TO ASTM C94.
4. CONCRETE MIXTURES: AS DELINEATED IN TABLE 1. SHRINKAGE LIMIT: CONCRETE USED IN ELEVATED SLABS AND BEAMS SHALL HAVE A SHRINKAGE LIMIT OF 0.04% AT 28 DAYS MEASURED IN ACCORDANCE WITH ASTM C157. SUBMIT LABORATORY RESULTS PRIOR TO CONSTRUCTION.
5. MAXIMUM AGGREGATE SIZE IN ACCORDANCE WITH ACI 301; CLEARLY NOTE LOCATION WHERE AGGREGATES GREATER THAT 3/4" MAXIMUM SIZE ARE PROPOSED FOR USE.
6. NO CHLORIDE OR OTHER UNAUTHORIZED ADMIXTURES SHALL BE USED. MAINTAIN MAXIMUM WATER SOLUBLE CHLORIDE ION (CL-) IN CONCRETE, BY WEIGHT OF CEMENT AT LESS THAN 1.00 FOR NON-EXPOSED CONCRETES AND 0.30 FOR EXTERIOR EXPOSED CONCRETES.
7. WHEN AMBIENT TEMPERATURE IS BELOW 40º FAHRENHEIT OR MORE THAN 90º FAHRENHEIT PLACE AND PROTECT CONCRETE IN ACCORDANCE WITH ACI STANDARDS LISTED ABOVE.
8. CONCRETE PLACEMENT MAY REQUIRE ADJUSTMENT OF REINFORCEMENT, EMBEDDED ITEMS OR ANCHOR BOLTS. REVIEW DRAWINGS AND IDENTIFY THESE LOCATIONS TO ARCHITECT PRIOR TO SUBMITTALS. PROVIDE ADDITIONAL SUPERVISION AT ALL STEEL TO CONCRETE CONNECTION LOCATIONS AND MODIFY PLACEMENT MEASURES TO ACCOUNT FOR CONGESTIONS.
9. COMPLY WITH ACI CODES AND PLACE CONCRETE IN A CONTINUOUS OPERATION WITHIN PLANNED JOINTS OR SECTIONS. DO NOT PERMIT COLD JOINTS TO OCCUR.
10. CURING: COVER OR WET CURE ALL ELEMENTS. BEGIN INITIAL CURING AS SOON AS FREE WATER HAS DISAPPEARED FROM EXPOSED SURFACES. WHERE POSSIBLE, KEEP CONTINUOUSLY WET FOR 72 HOURS. CONTINUE CURING BY USE OF MOISTURE RETAINING COVER. USE OF MEMBRANE-FORMING CURING COMPOUNDS IS PROHIBITED.
11. FINISHING:
    A. INTERIOR SLABS TO RECEIVE TILE WITH FULL SETTING BED: WOOD FLOAT FINISH
    B. INTERIOR SLABS TO RECEIVE CARPET, RESILIENT OR SEAMLESS FLOORING, OR THIN SET CERAMIC TILE: STEEL TROWEL FINISH
    C. EXTERIOR SLABS: BROOM FINISH PERPENDICULAR TO PEDESTRIAN TRAFFIC.
12. CONTROL & CONSTRUCTION JOINTS:
    A. PROVIDE CONTROL AND CONSTRUCTION JOINTS BY DETAIL AND SPECIFICATION REQUIREMENTS.
    B. SUBMIT PROPOSED CONTROL AND CONSTRUCTION JOINTS ON REINFORCING SUBMITTAL FOR REVIEW. COORDINATE LAYOUT WITH FLOORING, EQUIPMENT AND OTHER CONTRACTOR REQUIREMENTS.
    C. SLAB CONTROL JOINTS:
       a. SAW-CUT CONTROL JOINTS AS SOON AS CONCRETE HAS HARDENED ENOUGH TO WALK ON SURFACE WITHOUT DAMAGING CONCRETE AND NO MORE THAN 4 HOURS AFTER FINAL TROWEL.
       b. JOINT SPACING SHALL, UNLESS NOTED OTHERWISE, NOT EXCEED THE SMALLER OF: 36 TIMES THE SLAB THICKNESS OR 18 FEET. SLAB PANEL LENGTH TO WIDTH RATIO NOT TO EXCEED 1.5.
       c. JOINTS TO BE LOCATED TO CONFORM TO BAY SPACING WHEREVER POSSIBLE (AT COLUMN CENTERLINES, HALF BAYS, THIRD BAYS).
    D. SLAB CONSTRUCTION JOINTS:
       a. SLABS SHALL BE PLACED IN ALTERNATE STRIPS, EACH STRIP NOT TO EXCEED 40 FEET WIDE BY 160 FEET LONG.
    E. WALL CONTROL JOINTS: SPACING NOT TO EXCEED 20 FEET AND AT EACH INTEGRAL PILASTER.
    F. WALL CONSTRUCTION JOINTS: SPACING NOT TO EXCEED 80 FEET.

G. CONCRETE REINFORCEMENT

1. SHOP DRAWINGS SHALL BE PROVIDED PRIOR TO START OF CONCRETE PLACING AND BE IN ACCORDANCE WITH:
   A. ACI 301
   B. ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT"
   C. ACI SP-66 "ACI DETAILING MANUAL"
   D. CRSI MSP "MANUAL OF STANDARD PRACTICE"
      SHOW ALL SLABS IN PLAN AND ALL WALLS IN ELEVATION WITH OPENINGS AND PENETRATIONS SHOWN BASED ON MEP COORDINATION SUBMITTALS AND ARCHITECTURAL REQUIREMENTS. SUBMIT PROPOSED CONTROL AND CONSTRUCTION JOINTS FOR REVIEW ON REINFORCING SUBMITTALS.
2. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60, STEEL BARS PER ASTM A305, UNLESS NOTED OTHERWISE.
3. FIELD BENDING OR REINFORCEMENT SHALL CONFORM TO ACI 301, INCLUDING PRE-HEAT REQUIREMENTS.
4. WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185 WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 70,000 PSI. LAP ONE CROSS WIRE SPACING PLUS 2". SUPPORT MESH ON CHAIRS PER CRSI WITH #4 AT 4'-0"oc, EACH WAY.
5. PROVIDE MINIMUM CONCRETE COVER TO REINFORCEMENT AS FOLLOWS, UNLESS OTHERWISE NOTED:
   A. BOTTOM OF FOOTINGS, GRADE BEAMS, AND SLABS-ON-GRADE: 3"
   B. SIDES OF FOOTINGS AND GRADE BEAMS: 2"
   C. FOUNDATION WALLS, FROST WALLS, RETAINING WALLS, PIT WALLS: 2"
   D. EXTERIOR WALLS (EXPOSED TO WEATHER): 2"
   E. FACES OF WALLS OTHER THAN THOSE NOTED ABOVE: 3/4"
   F. FOUNDATION PIERS: 2" TO TIES
   G. ALL FACES OF BEAMS AND COLUMNS: 1-1/2" TO TIES
   H. TOPPING SLAB: 3/4"
   I. SLAB-ON-DECK: 3/4" FROM DECK, 3/4" FROM TOP SURFACE
6. ALL LAPS SHALL BE FULL TENSION LAPS (CLASS B SPLICE) UNLESS SPECIFICALLY NOTED OTHERWISE. DOWELS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCEMENT, UNLESS OTHERWISE NOTED.
7. DEFORMED BAR ANCHORS (DBA'S): NELSON DEFORMED BAR ANCHORS, D2L (OR ACCEPTED EQUAL) AS FOLLOWS: ASTM A 496; FY = 70KSI (MIN); FU = 80KSI (MIN); WELDED ACCORDING TO AWS D1.1, CHAPTER 7 WITH A STUD WELDING GUN.
8. CHAIRS AND SPACERS SHALL BE PLACED TO ADEQUATELY SUPPORT REINFORCING DURING PLACEMENT. FOREIGN MATERIALS SUCH AS WOOD, CLAY BRICK OR OTHER UNSUITABLE SUPPORTS SHALL NOT BE USED TO SUPPORT REINFORCING. SET WIRE TIES SO ENDS ARE DIRECTED INTO CONCRETE WHERE CONCRETE WILL BE EXPOSED. DO NOT USE CONCRETE SUPPORTS OR PUDDLING FOR SLABS UNLESS SUBMITTED AND ACCEPTABLY REVIEWED.

BASIS OF DESIGN

1.	Building Code:	2025 Vermont Fire & Building Safety Code (IBC 2021, ASCE 7-16)
2.	Dead Loads:	
	a. Roof Dead Load:	20 psf
	b. Floor Dead Load:	20 psf
3.	Live Loads:	
	a. Roof Live Load:	20 psf Snow Load Governs
	b. Floor Live Load (live load reduction not used):	100 psf or 2,000 # concentrated
4.	Roof Snow Load:	
	a. Ground Snow Load, P_G:	50 psf
	b. Flat Roof Snow Load, P_f:	46 psf
	c. Snow Exposure Factor, C_e:	1.2 [Lower Roofs]
	d. Snow Load Importance Factor, I:	1.1
	e. Thermal Factor, C_t:	1.0
	f. Drift Load on Lower Roof	200 - 250 psf Maximum
1.	Wind Design Data:	
	a. Basic Wind Speed (3-second gust), V:	115 mph
	b. Wind Exposure:	B
	c. Internal Pressure Coefficients:	+/- 0.18
	d. Components and Cladding Wind Pressure:	per ASCE 7 [Diagrams Pending]
2.	Earthquake Design Data:	
	a. Seismic Importance Factor, I:	1.25
	b. Risk Category:	III
	c. Mapped Spectral Response Acceleration, S_S:	0.244
	d. Mapped Spectral Response Acceleration S_1:	0.074
	e. Site Class:	C
	f. Spectral Response Coefficient, S_{DS}:	0.211
	g. Spectral Response Coefficient, S_{D1}:	0.074
	h. Seismic Design Category:	B
	i. Basic Seismic-Force-Resisting Systems:	Ordinary Reinforced Concrete Moment Frame / Steel Systems Not Specifically Designated for Seismic Resistance
	j. Design Base Shears:	[Pending]
	k. Seismic Response Coefficient, C_S:	0.088
	l. Response Modification Factor, R:	3

H. STRUCTURAL STEEL

1. UNLESS OTHERWISE NOTED, STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING:
   A. WIDE FLANGE SECTIONS: ASTM A572 GRADE 50 OR ASTM A992 (FY = 50 KSI)
   B. ANGLES, CHANNELS, PLATE AND OTHER HOT-ROLLED SHAPES: ASTM A36 (FY = 36 KSI)
   C. TUBES: ASTM A500 GRADE C. RECTANGULAR: 50 KSI; ROUND: 46 KSI.
   D. BASEPLATES, CONNECTION PLATES, STIFFENER PLATES: ASTM A572 GRADE 50 OR ASTM A992 (FY = 50 KSI)
   E. THREADED RODS: ASTM A572 GRADE 50
   F. ANCHOR BOLTS: ASTM F1554 GRADE 55, UNLESS NOTED OTHERWISE.

2. BOLTS, NUTS AND WASHERS: ASTM A325 TYPE 1 BOLTS (3/4" MINIMUM DIAMETER), ASTM A563 DH HEAVY HEX NUTS WITH ASTM F436 HARDENED WASHERS. PROVIDE BOLT ASSEMBLIES GALVANIZED TO ASTM A153 AT GALVANIZED STRUCTURAL MEMBERS.

3. SUBMITTALS FOR REVIEW
   A. SHOP DRAWINGS: INDICATE PROFILES, SIZES, SPACING, AND LOCATIONS OF STRUCTURAL MEMBERS, DECKING, OPENINGS, ATTACHMENTS, AND FASTENERS. SHOW ALL CONNECTION DETAILS. PROVIDE DESIGN OF CONNECTIONS NOT DETAILED ON DRAWINGS. INDICATE WELDED CONNECTIONS WITH AWS A2.0 WELDING SYMBOLS. INDICATE NET WELD LENGTHS.
   B. EACH SHOP DRAWING SHALL BE DATED AND IDENTIFIED WITH A UNIQUE DRAWING NUMBER AND REVISION NUMBER. RESUBMITTED SHOP DRAWINGS SHALL BE GIVEN A NEW REVISION NUMBER, AND ALL CHANGES/ADDITIONS/DELETIONS FROM THE PREVIOUS SUBMISSION SHALL BE CLEARLY IDENTIFIED.
   C. ERECTION DRAWINGS SHALL INCLUDE DETAILS OF ALL FIELD WELDING AND ANY OTHER SPECIAL FIELD INSTRUCTIONS.

4. SUBMITTALS FOR INFORMATION
   A. MANUFACTURER'S MILL CERTIFICATE: CERTIFY THAT PRODUCTS MEET OR EXCEED SPECIFIED REQUIREMENTS.
   B. MILL TEST REPORTS: SUBMIT INDICATING STRUCTURAL STRENGTH, DESTRUCTIVE AND NON-DESTRUCTIVE TEST ANALYSIS.
   C. WELDERS CERTIFICATES: CERTIFY WELDERS EMPLOYED ON THE WORK, VERIFYING AWS QUALIFICATION WITHIN THE PREVIOUS 12 MONTHS.

5. DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STEEL CONSTRUCTION," 14TH EDITION, BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AND THE STRUCTURAL WELDING CODE (AWS D1.1) LATEST EDITION, BY THE AMERICAN WELDING SOCIETY.

6. DESIGN OF STEEL CONNECTIONS: CONTRACTOR IS RESPONSIBLE FOR DESIGN OF ALL STEEL CONNECTIONS OR PORTIONS OF CONNECTIONS NOT FULLY DETAILED IN THE CONTRACT DOCUMENTS, FOR THE SPECIFIED CONNECTION FORCES. IN NO CASE SHALL LOADS BE LESS THAN 12 KIPS (ASD).

7. STRUCTURAL STEEL CONNECTIONS SHALL BE AS FOLLOWS:
   A. DESIGN CALCULATIONS, SIGNED AND SEALED BY CONTRACTOR'S PROFESSIONAL ENGINEER (REGISTERED IN THE STATE OF VERMONT) SHALL BE SUBMITTED FOR ALL CONNECTIONS NOT FULLY DETAILED IN THE STRUCTURAL DRAWINGS.
   B. CALCULATIONS FOR STANDARD, REPETITIVE BEAM CONNECTIONS ARE TO BE SUBMITTED IN THE FORM OF SUMMARIZED CAPACITY TABLES FOR EACH TYPE OF CONNECTION USED (DOUBLE ANGLE, SHEAR PLATE, ETC.). THE TABLES ARE TO BE ACCOMPANIED BY A DETAIL CLEARLY SHOWING THE CONNECTION GEOMETRY, INCLUDING THE NUMBER, SIZE, GRADE AND TYPE (BEARING OR SLIP-CRITICAL) OF BOLTS; SIZE OF BOLT HOLES; SIZE, GRADE, AND GEOMETRY OF CONNECTION ANGLES OR PLATES; SIZE AND LENGTH OF WELDS; AND MINIMUM WEB THICKNESS FOR FULL CAPACITY. COMPUTER PRINTOUTS OF DETAILED CONNECTION CHECKS FOR EACH INDIVIDUAL PIECE (AS GENERATED BY SOME DETAILING SOFTWARE) ARE NOT ACCEPTABLE FOR THE STANDARD, REPETITIVE BEAM CONNECTIONS.
   C. CALCULATIONS FOR NON-STANDARD CONNECTIONS SHALL INCLUDE A DETAIL SHOWING THE CONNECTION GEOMETRY AND DESIGN FORCES, AND FULL CALCULATIONS DEMONSTRATING THE ADEQUACY OF THE CONNECTION.
   D. CONTRACTOR TO SUBMIT CONNECTION DETAILS AND CALCULATIONS IN ADVANCE OF PREPARING PIECE DRAWINGS SO AS TO STREAMLINE THE SHOP DRAWING PREPARATION AND REVIEW PROCESS.
   E. ALL CONNECTIONS UNLESS INDICATED OTHERWISE SHALL BE MADE WITH 3/4 INCH DIAMETER A325 BOLTS.
      - AT MOMENT CONNECTIONS, BOLTS SHALL BE DESIGNED AS TYPE "SC" SLIP CRITICAL CONNECTIONS.
      - ALL OTHER BOLTS MAY BE BEARING BOLTS (THREADS INCLUDED) TIGHTENED TO THE SNUG-TIGHT CONDITION, UNLESS NOTED OTHERWISE.
   F. THE MINIMUM NUMBER OF BOLTS IN ANY CONNECTION SHALL BE TWO 3/4 INCH DIAMETER A325 BOLTS, UNLESS INDICTED OTHERWISE.
   G. IN CONNECTIONS OF BEAMS AND GIRDERS, THE MINIMUM NUMBER OF BOLTS SHALL BE REQUIRED TO DEVELOP THE BEAM SHEAR "V" NOTED ON THE CONTRACT DRAWINGS, THE PLAN NOTES SHALL ALSO BE APPLIED. IF THE BEAM SHEAR IS NOT NOTED, THE CONNECTIONS SHALL DEVELOP THE BEAM SHEAR (V=2W/3) WHERE W = THE TOTAL ALLOWABLE BEAM UNIFORM LOAD BASED ON SIMPLE SPAN MOMENTS AND BRACED COMPRESSION FLANGES. (SEE AISC MANUAL OF STEEL CONSTRUCTION, BEAMS); LOADS SHOWN ARE THE SERVICE (UNFACTORED) DESIGN FORCES INDICATED ON THE DRAWINGS. ANY 1/3 ALLOWABLE STRESS INCREASE MAY NOT BE TAKEN WITH THE SPECIFIED DESIGN FORCES.
   H. CONNECTIONS OF BEAM AND GIRDERS SHALL DEVELOP THE BEAM SHEAR DESCRIBED ABOVE IN ADDITION TO AXIAL FORCES LISTED ON THE STRUCTURAL DRAWINGS. (COMPRESSION OR TENSION) DO NOT USE SINGLE PLATE CONNECTIONS FOR FRAMING WITH AXIAL LOADS.
   I. MOMENT CONNECTIONS SHALL BE DESIGNED TO DEVELOP THE MOMENT "M" NOTED ON THE CONTRACT DRAWINGS.
   J. DESIGN OF STEEL CONNECTIONS FOR SHEAR SHALL INCLUDE THE EFFECTS OF ECCENTRICITY.
   K. CONTRACTOR SHALL PROVIDE STIFFENERS, WEB DOUBLER PLATES, AND OTHER REINFORCEMENT AS NECESSARY TO RESIST LOCAL EFFECTS DUE TO THE SPECIFIED CONNECTION LOADS.
   L. SINGLE-ANGLE CONNECTIONS MAY NOT BE USED FOR BEAM CONNECTIONS.
   M. THE MINIMUM THICKNESS OF GUSSET AND FIN PLATES SHALL BE 3/8".

8. ALL STRUCTURAL SHOP AND FIELD WELDING SHALL BE MADE WITH ELECTRODES DESIGNED BY E70XX LOW HYDROGEN, IN ACCORDANCE WITH AWS D1.1, PERFORMED BY CERTIFIED WELDERS.

9. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) - SEE SPECIFICATION 051213 FOR ALL EXPOSED COLUMNS AND BEAMS
   A. THERE SHALL BE A MANDATORY PRE-DETAILING MEETING WITH ARCHITECT, STRUCTURAL ENGINEER AND FABRICATOR TO DISCUSS PROJECT REQUIREMENTS.
   B. AESS CATEGORY 4 WITH MOCKUP
10. GROUT: NON-SHRINK TYPE, PRE-MIXED COMPOUND CONSISTING OF NON-METALLIC AGGREGATE CEMENT, WATER REDUCING AND PLASTICIZING ADDITIVES, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 7,000 PSI AT 28 DAYS..

11. SHOP AND TOUCH-UP PRIMER (DESIGN BASIS): SEE DIVISION 9. COORDINATE WITH ARCHITECTURAL COATINGS AND FINISHES.

12. TOUCH-UP PRIMER FOR GALVANIZED SURFACES (DESIGN BASIS): SEE DIVISION 9. COORDINATE WITH ARCHITECTURAL COATINGS AND FINISHES.

13. FINISH
   A. COORDINATE ALL COATINGS WITH DIVISION 9 SPECIFICATION REQUIREMENTS
   B. WHERE INDICATED, STRUCTURAL STEEL MEMBERS ARE TO BE GALVANIZED IN ACCORDANCE WITH ASTM A123. PROVIDE MINIMUM 1.25 OZ/SQ FT GALVANIZED COATING. ALL MEMBERS EXPOSED TO THE EXTERIOR OR EXTENDING THROUGH AND BEYOND BUILDING ELEMENT SHALL BE GALVANIZED

14. ERECTION
   A. ALLOW FOR ERECTION LOADS, AND FOR SUFFICIENT TEMPORARY BRACING TO MAINTAIN STRUCTURE SAFE, PLUMB, AND IN TRUE ALIGNMENT UNTIL COMPLETION OF ERECTION AND INSTALLATION OF PERMANENT BRACING.
   B. FIELD WELD COMPONENTS INDICATED ON DRAWINGS AND SHOP DRAWINGS.
   C. DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT APPROVAL OF ARCHITECT/ENGINEER.
   D. AFTER ERECTION, PRIME WELDS, ABRASIONS, AND SURFACES NOT SHOP PRIMED, EXCEPT SURFACES TO BE IN CONTACT WITH CONCRETE.
   E. GROUT UNDER BASE PLATES WITH PRE-MIXED NON-SHRINK GROUT WITH MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 7,000 PSI.

J. FOUNDATION PILES

1. **[PENDING GEOTECHNICAL REPORTING]** PILES SHALL BE DRILLED MICROPILES OF A 7-INCH MINIMUM DIAMETER, OR DUCTILE IRON PIPE, WITH AN ALLOWABLE AXIAL LOAD CAPACITY OF 25-TONS. MICROPILES SHALL HAVE A STEEL REINFORCING BAR EXTENDING TO THE TERMINATION LENGTH AND TREMIE GROUTED UP TO THE CUT-OFF ELEVATION. THE FINAL LENGTHS OF BOND AND PENETRATION INTO THE BEDROCK ARE TO BE DETERMINED BY THE SPECIALTY CONTRACTOR. A LOAD TEST UNDER THE CERTIFICATION OF A VERMONT PROFESSIONAL ENGINEER IS REQUIRED TO CONFIRM SUBMITTED DESIGN CALCULATIONS.

K. POST-INSTALLED ANCHORS INTO CONCRETE AND MASONRY

1. WHERE A MANUFACTURER'S ANCHOR IS SPECIFICALLY CALLED OUT ON THE DRAWINGS, IT SHALL BE CONSIDERED THE DESIGN BASIS FOR THE REQUIRED ANCHOR. ALTERNATES MEETING OR EXCEEDING ANCHOR SYSTEM DEMANDS, INCLUDING, BUT NOT LIMITED TO CAPACITY LOADING, EDGE DISTANCE, SUBSTRATE THICKNESS FOR CONNECTION ELEMENTS AND BASE MATERIAL SHALL BE SUBMITTED FOR PROPOSED USE PENDING ACCEPTABLE REVIEW. SUBMIT ICC-ES CODE REPORTS.

2. ADHESIVE ANCHORS, WHERE NOT SPECIFICALLY DETAILED, SHALL BE:
   A. FOR CONCRETE AND CONCRETE MASONRY: HILTI HIT HY-200
   B. FOR EXISTING BRICK MASONRY: HILTI HIT-HY 270

   INSTALL IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS. USE 3/4 INCH DIAMETER AT MINIMUM EMBEDMENT UNLESS OTHERWISE INDICATED BY DETAIL. SEE NOTE 1.

3. EXPANSION ANCHORS, WHERE NOT SPECIFICALLY DETAILED, SHALL BE:
   A. FOR CONCRETE: HILTI KWIK BOLT TZ

   INSTALL IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS. USE 3/4 INCH DIAMETER AT MINIMUM EMBEDMENT UNLESS OTHERWISE INDICATED BY DETAIL. SEE NOTE 1.

4. SCREW TYPE ANCHORS: WHERE NOT SPECIFICALLY DETAILED, SHALL, FOR CONCRETE AND MASONRY: SIMPSON TITEN-HD INSTALL IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS. USE 3/4 INCH DIAMETER AT MINIMUM EMBEDMENT UNLESS OTHERWISE INDICATED BY DETAIL. SEE NOTE 1.

L. COLD-FORMED METAL FRAMING

1. DESIGN, MANUFACTURE, HANDLING AND ERECTION OF LIGHTWEIGHT STEEL FRAMING SHALL BE IN ACCORDANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE (AISI) COLD FORMED STEEL DESIGN MANUAL - "SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION.

2. WELDING SHALL BE IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) STRUCTURAL WELDING CODE (D1.1), SPECIFICATION FOR WELDING SHEET STEEL IN STRUCTURES (D1.3).

3. MEMBERS SIZED ON DRAWINGS FOLLOW THE SSMA FOUR PART IDENTIFICATION CODE THAT IDENTIFIES WEB DEPTH, STYLE, AND MIL THICKNESS. STYLE "S" INDICATES STUD OR JOIST SECTION AND STYLE "T" INDICATES TRACK SECTIONS.

4. COLD FORMED STEEL FRAMING MEMBERS SHALL BE FORMED FROM STEEL CONFORMING TO ASTM A653, WITH A G60 GALVANIZED COATING. MEMBERS 54 MIL OR HEAVIER SHALL HAVE A YIELD POINT OF AT LEAST 50 KSI. ALL OTHER MEMBERS SHALL HAVE A YIELD POINT OF AT LEAST 33 KSI. ALL MATERIAL SHALL BE GALVANIZED WITH A MINIMUM G60 COATING.

5. SHOP DRAWINGS: SUBMIT SHOP DRAWINGS PRIOR TO FABRICATION FOR REVIEW BY THE GENERAL CONTRACTOR & ENGINEER OF RECORD. SHOP DRAWINGS SHALL SHOW ALL MATERIALS, DETAILS, CONNECTIONS, LINTELS, POSTS, BRIDGING, AND OTHER ACCESSORIES REQUIRED FOR PROPER INSTALLATION. INDICATE COMPONENT DETAILS, FASTENING, MEMBER DESIGNATIONS & SPACINGS, AND METHOD FOR SECURING STUDS TO TRACKS.

6. WHERE SIZES ARE NOT SPECIFIED ON THE DRAWINGS, DESIGN OF COLD FORMED FRAMING SYSTEMS AND CONNECTIONS SHALL BE BY THE FABRICATOR. SUBMIT DESIGN CALCULATIONS BEARING THE STAMP OF A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE OF VERMONT FOR REVIEW PRIOR TO COMMENCING THE WORK. MEMBER SIZES AND GAUGES INDICATED ON THE DRAWINGS SHALL BE CONSIDERED MINIMUMS. MEMBER SPACING SHALL BE CONSIDERED MAXIMUMS. DESIGN LOADINGS SHALL BE AS INDICATED IN THE CONTRACT DOCUMENTS OR AS PER THE REFERENCE BUILDING CODE, WHICHEVER IS MORE STRINGENT.

7. SCREWS: SELF-DRILLING, SELF-TAPPING SCREWS: ASTM A123, HOT DIP GALVANIZED TO 1.25 OZ/SQ FT.

M. STRUCTURAL THERMAL BREAKS

1. SUBMITTALS:
   A. PRODUCT DATA: SUBMIT MANUFACTURER'S PRODUCT DATA AND INSTALLATION INSTRUCTIONS.
   B. SCHEDULE: SUBMIT A LIST OF LOCATIONS WHERE STRUCTURAL THERMAL BREAKS ARE TO BE USED, AND THE SPECIFIC PRODUCT AND THICKNESS TO BE USED AT EACH LOCATION.
   C. SHOP DRAWINGS: SUBMIT SHOP DRAWINGS SHOWING DETAILS OF CONSTRUCTION, AND RELATIONSHIP OF STRUCTURAL THERMAL BREAK MATERIAL WITH ADJACENT CONSTRUCTION INCLUDING FASTENING AND/OR ANCHORAGE CONNECTION DETAILS, ARMATHERM THERMAL BREAK MATERIAL SIZE AND THICKNESS.
   D. THERMAL DESIGN: WALL ASSEMBLY OR INTERFACE DETAIL SHALL MEET THE ASHRAE 90.1 REQUIREMENTS FOR CONTINUOUS INSULATION AND SHALL NOT HAVE STRUCTURAL CONNECTIONS (BEAMS, SUPPORT FRAMING, SUB GIRTS, CLIPS) WHICH CREATE THERMAL BRIDGING. EFFECTIVE U VALUES OF WALL, ROOF AND FOUNDATION ASSEMBLIES SHALL MEET OR EXCEED THE DESIGN REQUIREMENTS PER CODE. EFFECTIVE U VALUE CALCULATION OR MODELING SHALL BE PERFORMED IN ACCORDANCE WITH ASHRAE GUIDELINES.

2. REINFORCED THERMOSET THERMAL BREAKS
   A. STRUCTURAL THERMAL BREAK MATERIAL: ARMATHERM FRR REINFORCED THERMOSET RESIN WITH THE FOLLOWING ATTRIBUTES:
      a. COMPRESSIVE STRENGTH - ASTM D638 - 40,000 PSI.
      b. COMPRESSIVE MODULUS - ASTM D695 - 673,400 PSI
      c. SHEAR STRENGTH - ASTM D732 - 16,000 PSI
      d. THERMAL CONDUCTIVITY - ASTM C518 - 1.05 BTU IN/HR SF DEGREE F
      e. COEFFICIENT OF THERMAL EXPANSION - ASTM E831 - 2.2x10^-6 IN/IN/DEGREE F.
      f. THERMAL RESISTANCE (R-VALUE) - ASTM C518 - 0.95 HR SF DEGREE F/BTU
      g. SURFACE BURNING CHARACTERISTICS - ASTM E84
         - FLAME SPREAD: 25 (CLASS A)
         - SMOKE DEVELOPED: 50 (CLASS A)
      h. ACCESSORIES: ARMATHERM FRR BUSHINGS AND WASHERS AS APPLICABLE TO LOCATION. ARMATHERM WASHERS SHALL BE MINIMUM 0.25 INCH THICK. ARMATHERM BUSHING AND WASHER TO PROVIDE THERMAL BREAK BETWEEN STEEL WASHER/BOLT AND INTERNAL STRUCTURAL STEEL.
      i. THICKNESS: AS NOTED ON DRAWINGS

3. INSTALL THERMAL BREAKS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPROVED SUBMITTALS.

N. MISCELLANEOUS SPECIFICATIONS

SUBMIT ALL PRODUCTS AND SYSTEMS LISTED IN THIS SECTION IN ACCORDANCE WITH THE REQUIREMENTS OF DIVISION 1, WITH MANUFACTURER'S RECOMMENDATIONS APPLICABLE TO PROJECT USE. SEE DIVISION 1 SECTIONS FOR ALTERNATES.

1. SLAB-ON-GRADE CONTROL JOINTS: SAW CUT USING EARLY ENTRY SAW IN ACCORDANCE WITH SOFF-CUT (OR ACCEPTED EQUAL) SYSTEM SPECIFICATION.

2. EXTERIOR SLABS ON STRUCTURAL DRAWINGS (UNLESS NOTED OR SPECIFIED OTHERWISE):
   A. EXPANSION JOINT FILLER: 1/2" WIDTH (UNO), CERAMAR, BY W R MEADOWS
   B. JOINT SEALANT: GARDOX, BY W R MEADOWS
   C. SEALER (ONLY AT SLABS NOT RECEIVING COVERING MATERIAL, FINISH, ETC): LIQUI-HARD, BY W R MEADOWS
   D. MOISTURE RETAINING COVER CURE COVERED SLABS

3. INTERIOR EXPOSED SLABS: SEE ARCH DRAWINGS AND SPECIFICATIONS.
   FOR SLABS NOT COVERED BY THESE PROVIDE THE FOLLOWING:
   A. EXPANSION JOINT FILLER: 3/8" WIDTH (UNO), CERAMAR, BY W R MEADOWS
   B. JOINT SEALANT: POURTHANE, BY W R MEADOWS
   C. SEALER (ONLY AT SLABS NOT RECEIVING COVERING MATERIAL, FINISH, ETC): ASHFORD FORMULA, BY CURECRETE
   D. MOISTURE RETAINING COVER CURE COVERED SLABS

4. INTERIOR SLABS RECEIVING COVERING MATERIAL, FINISH, ETC (UNLESS NOTED OR SPECIFIED OTHERWISE):
   A. EXPANSION JOINT FILLER: 3/8" WIDTH (UNO), CERAMAR, BY W R MEADOWS
   B. JOINT SEALANT: SIKAFLEX 1A (UNLESS OTHER REQUIRED FOR FLOOR SYSTEM - SEE SPEC)
   C. SEALER: NONE
   D. MOISTURE RETAINING COVER CURE COVERED SLABS

5. EXPANSION JOINT ASSEMBLIES (SEE ARCH & SPECIFICATIONS): 3" (MINIMUM) JOINT WIDTHS (UNO) WITH 50% LONGITUDINAL, TRANSVERSE AND OUT-OF PLANE BUILDING MOVEMENTS OF 50% OF JOINT WIDTH. SURVEY ALL EXISTING BUILDINGS ALONG JOINT SURFACES FOR PLUMBNESS, STRAIGHTNESS, AND SQUARENESS WITH INFORMATION SHOWN ON JOINT SUBMITTAL. ALLOW FOR 1-INCH TOLERANCE.

SPECIAL INSPECTIONS

A. THE OWNER'S TESTING LABORATORY SHALL PROVIDE SPECIAL INSPECTION SERVICES IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE FOR THE FOLLOWING ITEMS:

   1. STEEL CONSTRUCTION:
      a. ALL FIELD WELDING
      b. HIGH-STRENGTH BOLTING
      c. INSPECTION OF STRUCTURAL STEEL, BOLTING, WELDING MATERIAL
      d. WELDING OF STRUCTURAL STEEL

   2. CONCRETE CONSTRUCTION:
      a. BOLTS INSTALLED IN CONCRETE
      b. CONCRETE SHEAR WALLS
      c. CONCRETE WORK
      d. CONTINUOUS INSPECTION OF REINFORCING STEEL PLACING
      e. EPOXY BOLTS
      f. FORMWORK
      g. REINFORCING STEEL PLACEMENT
      h. WELDING OF REINFORCING

   3. MASONRY CONSTRUCTION:
      a. HIGH-LIFT GROUTING
      b. MASONRY WORK

   4. SOILS:
      a. PREPARED EARTH FILL

   5. DEEP FOUNDATIONS:
      a. PIER FOUNDATIONS
      b. PILE FOUNDATIONS

   6. SPRAYED FIRE-RESISTANT MATERIALS

   7. MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS

   8. WIND REQUIREMENTS:
      a. MAIN WINDFORCE-RESISTING SYSTEMS
      b. ROOF CLADDING
      c. WINDFORCE-RESISTING SYSTEM CONNECTIONS TO FOUNDATIONS
      d. WIND-RESISTING COMPONENTS
   9. SEISMIC RESISTANCE:
      a. ANCHORAGE OF HEATING, VENTILATING AND AIR-CONDITIONING DUCTWORK CONTAINING HAZARDOUS MATERIALS
      b. ANCHORAGE OF ELECTRICAL EQUIPMENT USED FOR EMERGENCY OR STANDBY POWER SYSTEMS
      c. ANCHORAGE OF SUSPENDED CEILINGS
      d. BOUNDARY ELEMENTS
      e. COLLECTORS
      f. CONNECTION OF WOOD COMPONENTS TO SEISMIC-RESISTING SYSTEM
      g. CONTROLLED ACTIVITIES
      h. DRAG STRUTS
      i. EXTERIOR WALL PANELS AND THEIR ANCHORAGE
      j. ROOF AND FLOOR DIAPHRAGMS
      k. ROOF FRAMING CONNECTIONS
      l. SEISMIC-FORCE-RESISTING SYSTEM
      m. SEISMIC SYSTEMS
      n. SHEATHING FASTENERS
      o. STEEL STORAGE RACKS AND THEIR ANCHORAGE

B. STATEMENT OF SPECIAL INSPECTIONS

   1. SPECIAL INSPECTION IS REQUIRED FOR THE ITEMS LISTED ABOVE. REFER TO SPECIFICATION SECTION 014529 FOR TYPE AND EXTENT OF EACH SPECIAL INSPECTION AND EACH TEST. THE SPECIFICATION ALSO INDICATES WHETHER CONTINUOUS OR PERIODIC INSPECTION IS REQUIRED FOR THE ITEMS LISTED ABOVE ADDITIONAL INFORMATION.

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STATE HOUSE MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE:	SCALE:
PROGRESS	1/8" = 1'-0"
DRAWN BY: JTM	CHECKED BY: RMJ

ISSUE LOG:

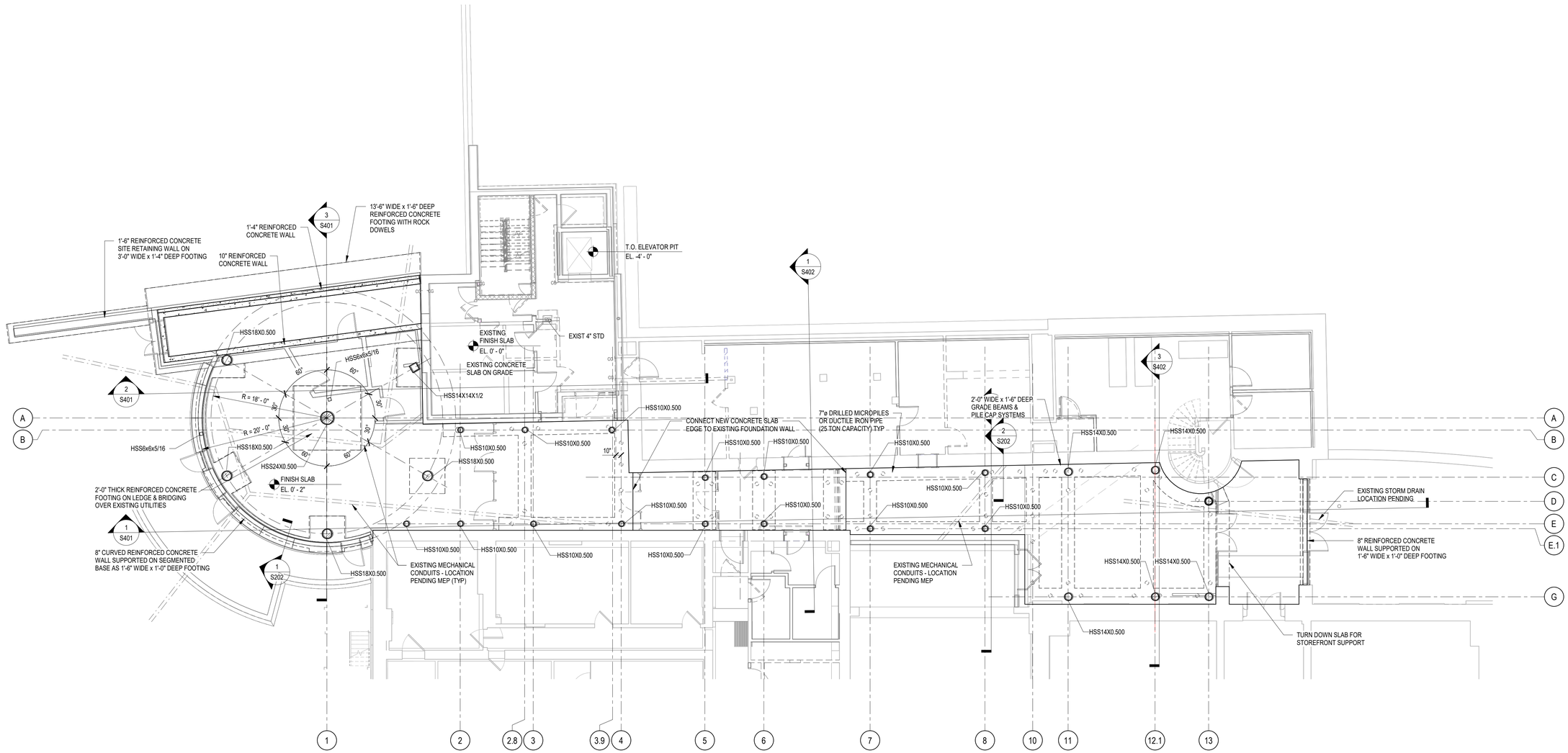
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100% DD	10/23/2026

SHEET CONTENTS: **GENERAL NOTES**

SHEET NO: **S002**

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

NOTES:

1. CONCRETE: GRADE BEAMS AND PILE CAPS AS 5,000 PSI; FOUNDATION WALLS AS 4,500 PSI; SLAB-ON-GRADE AND FOOTINGS AS 4,000 PSI.
2. CONCRETE REINFORCING: 60 KSI.
3. GEOTECHNICAL REPORT PENDING; FOUNDATION TYPES ASSUMED AND INFORMATION BASED ON LIMITED SITE KNOWLEDGE AND SIMILAR PROJECTS IN THE REGION. GRADE BEAMS AND FOOTINGS TO SPAN OVER EXISTING UTILITIES.
4. SLAB: 5" THICK SLAB-ON-GRADE WITH VAPOR RETARDER, BEARING ON 1'-0" MINIMUM THICKNESS OF GRANULAR FILL. AT THE ALLEYWAY, THE SLAB WILL BE SEGMENTED IN 4'-0" SQUARE PATTERING TO FACILITATE FUTURE REMOVAL.
5. CONNECT NEW FOOTINGS (NOT PILE CAPS/GRADE BEAMS) TO EXISTING FOUNDATIONS WHERE THEY ABUT.

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MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
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JTM	RMJ

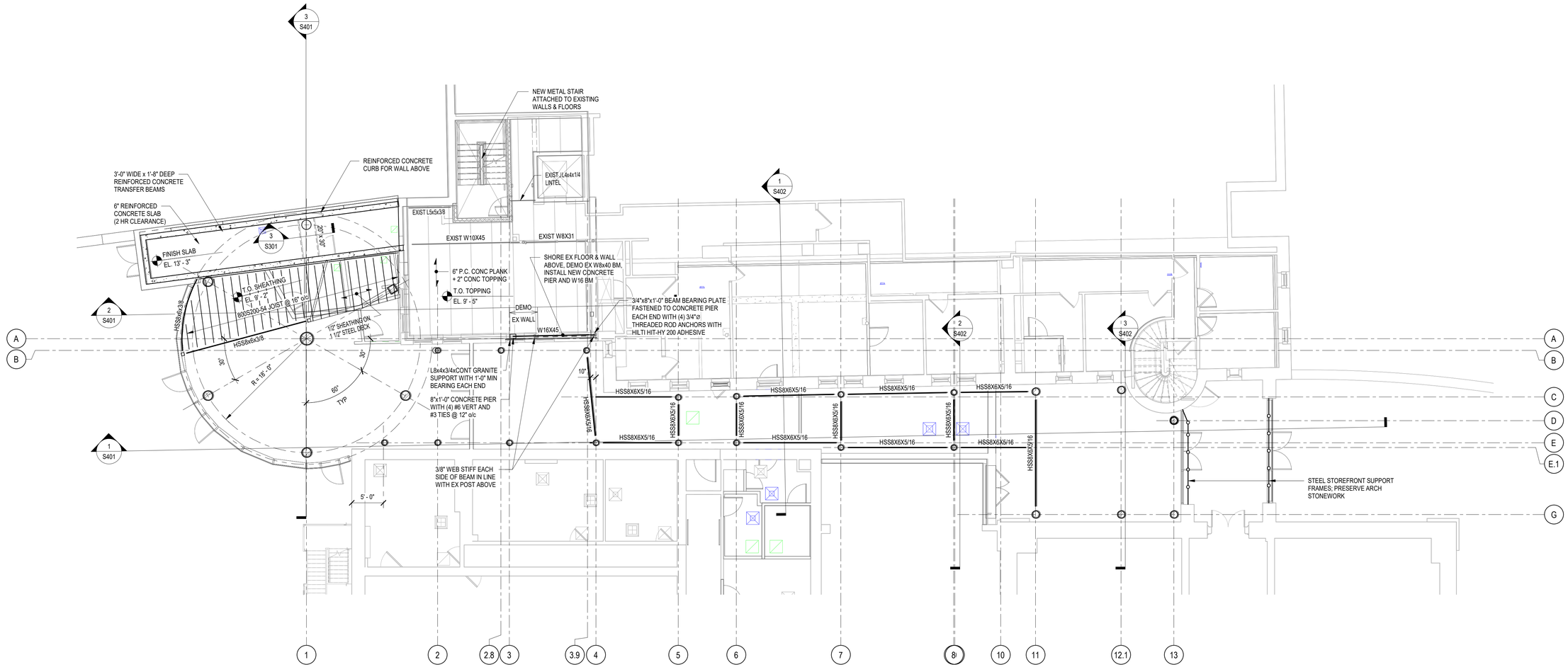
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100% DD	10/23/2026

SHEET CONTENTS: FIRST FLOOR FOUNDATION PLAN

SHEET NO: S100

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1 MEZZANINE LEVEL FRAMING PLAN
1/8" = 1'-0"

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MONTPELIER, VT

FFF PROJECT NO: **2248**

ORGINATION DATE:	SCALE:
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DRAWN BY:	CHECKED BY:
JTM	RMJ

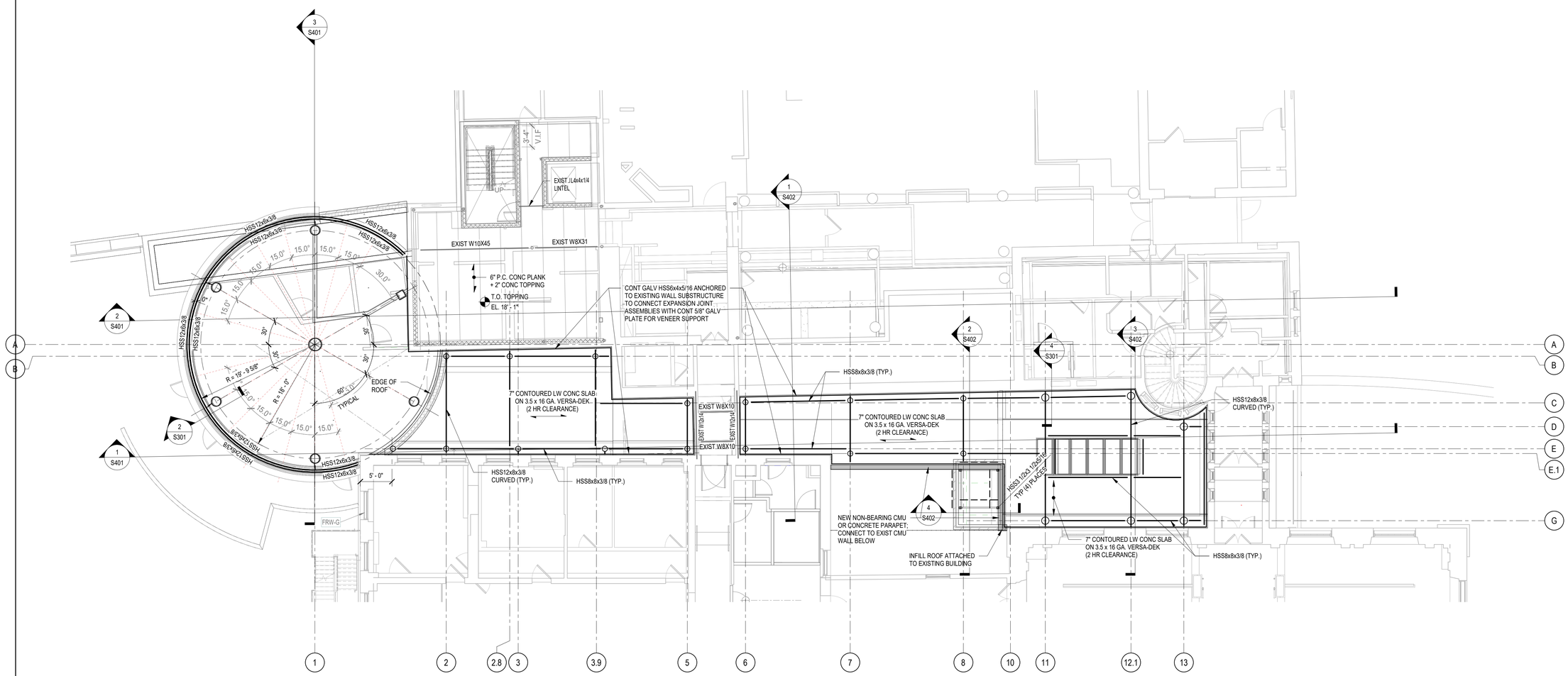
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SHEET CONTENTS: **MEZZANINE LEVEL FRAMING PLAN**

SHEET NO: **S101**

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1 LEVEL 2.2 FRAMING PLAN
1/8" = 1'-0"

NOTES:

1. CONCRETE: FORMED SLAB AND BEAMS AS 5,000 PSI; TOPPING SLABS AS 4,000 PSI.
2. CONCRETE REINFORCING: FY = 60 KSI
3. CONCRETE FORMWORK: FORMED SLABS AND BEAMS; AND COLUMNS EXPOSED CLASS A & SF-3.0 SURFACE WITH MOCKUP. TEXTURE PENDING. SLAB THICKNESS MAY VARY FOR DRAINAGE. FORMWORK CAMBER PENDING.
4. CONCRETE SLAB: FIELD ADJUST SLAB EDGE TO EXISTING CONDITIONS OF ADJACENT BUILDINGS; SLAB REINFORCING WITH MINIMUM LAP.
5. CONCRETE BEAMS SOFFIT/DROPS MAY BE "UPSET" ABOVE SLAB AS AN OPTION.
6. CONCRETE SLAB AT ENTRY:
   A. CLT AND GLU-LAM AS FORMWORK FOR UNSHORED CONSTRUCTION.
   B. CLT AND GLU-LAM COMPOSITE WITH CURED CONCRETE SLABS AS ROOF WITH LIVE AND SNOW LOADS AND AS FUTURE FLOOR.
   C. SLAB AND TURN-DOWN ON GLU-LAM DESIGNED AS 2-HOUR FIRE LOAD CASE.
7. CONCRETE REINFORCING PRELIMINARY ALLOWANCES:
   A. CURVED EDGE TOPPING SLAB AT ENTRY 5.0 PSF.
   B. FORMED BEAM & 11" MINIMUM SLAB: 5.5 PSF.
   C. FORMED BEAM & 8" MINIMUM SLAB: 4.5 PSF.
8. BUILDING SEPARATION JOINT ASSEMBLIES: ASSUME 3" WIDTH WITH 50% LONGITUDINAL AND TRANSVERSE MOVEMENTS; BUILDING MOVEMENTS AND EXISTING BUILDING PLUMBNESS AND SQUARENESS TOLERANCES CONSIDERED AS 1-INCH.
9. LATERAL STABILITY SYSTEMS:
   A. ALLEY ROOF: CANTILEVERED COLUMNS AS SPECIAL REINFORCED CONCRETE MOMENT FRAME.
   B. ENTRANCE ROOF & FUTURE FLOOR: INTERMEDIATE OR SPECIAL REINFORCED CONCRETE MOMENT FRAME.

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STATE HOUSE MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE:	SCALE:
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DRAWN BY: JTM	CHECKED BY: RMJ

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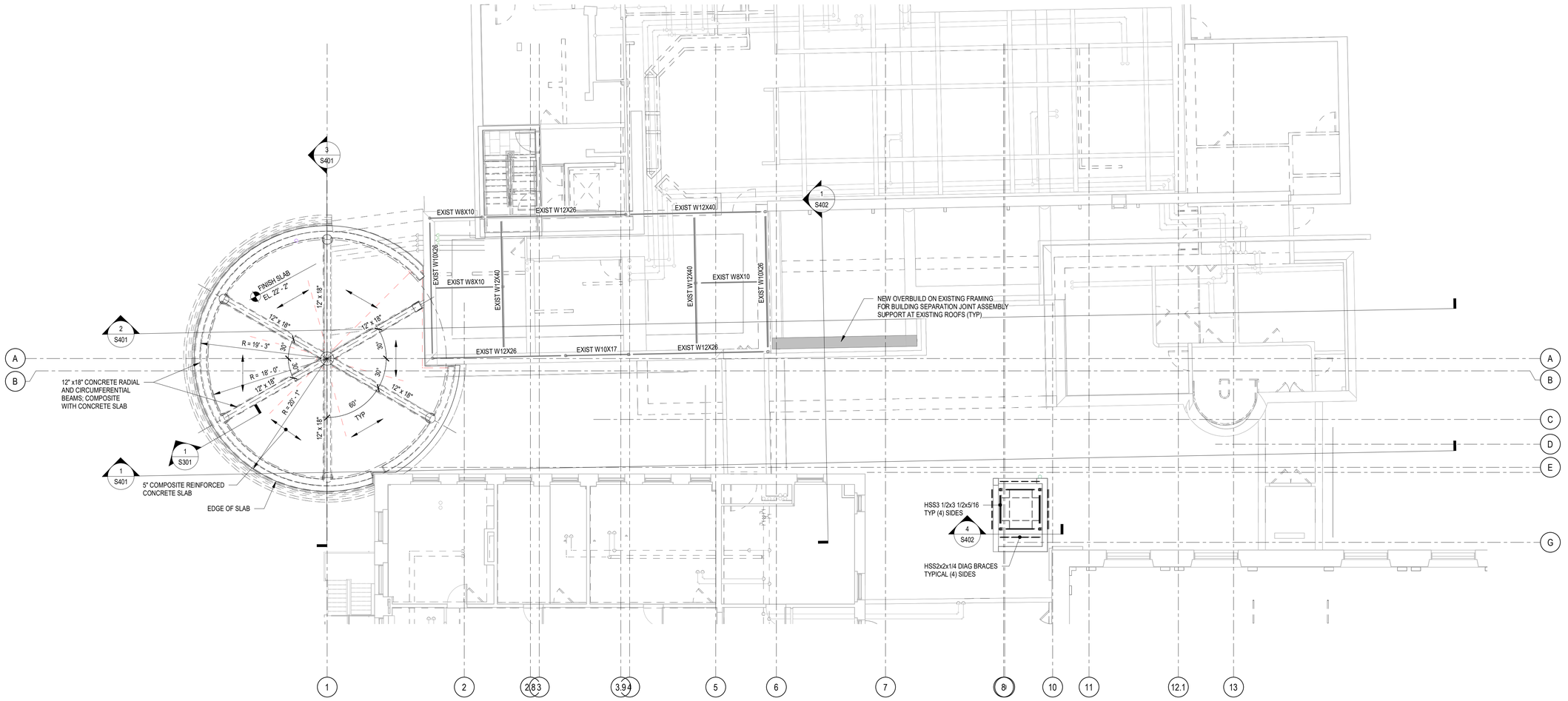
25% DD	12/08/2025
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100% DD	10/23/2026

SHEET CONTENTS: **LEVEL 2.2 FRAMING PLAN**

SHEET NO: **S102**

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1 Third Floor Mechanical Room
1/8" = 1'-0"

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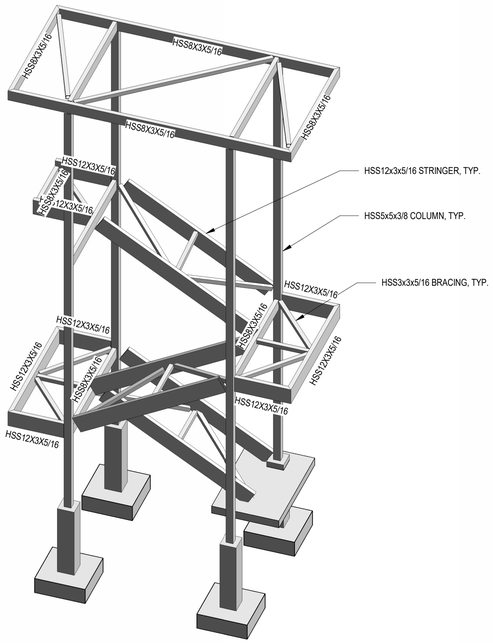
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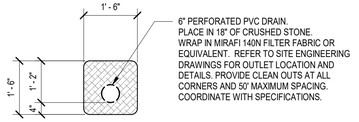
THIRD FLOOR MECHANICAL ROOM FRAMING PLAN

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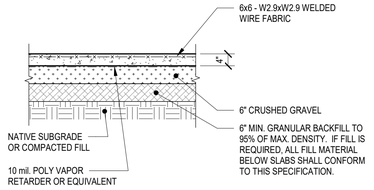
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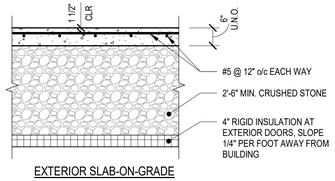

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HSS12



1 TYPICAL FOOTING DRAIN
1/2" = 1'-0"

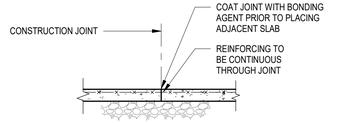


INTERIOR SLAB-ON-GRADE

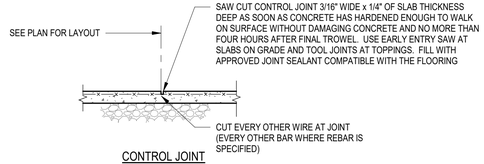


EXTERIOR SLAB-ON-GRADE

2 TYPICAL SLAB-ON-GRADE SECTIONS
1/2" = 1'-0"

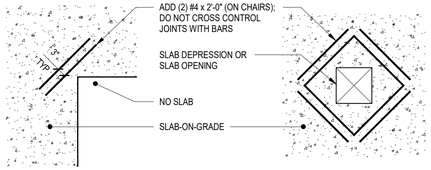


CONSTRUCTION JOINT

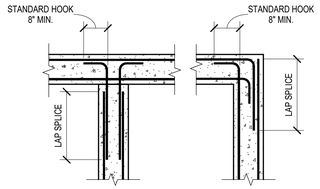


CONTROL JOINT

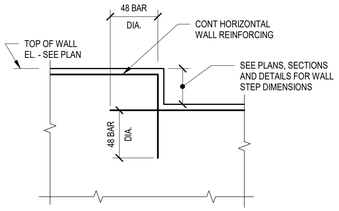
3 TYPICAL SLAB-ON-GRADE JOINTS
1/2" = 1'-0"



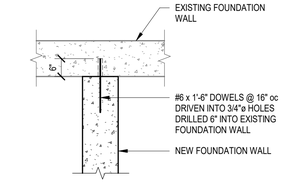
4 TYPICAL RE-ENTRANT CORNERS AT SLAB-ON-GRADE
1/2" = 1'-0"



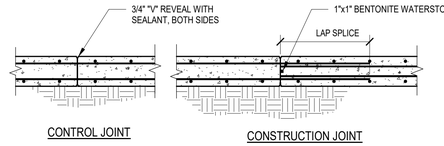
5 TYPICAL WALL CORNER REINFORCING
1/2" = 1'-0"



6 TYPICAL CONCRETE WALL STEP
1/2" = 1'-0"

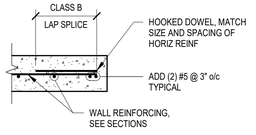


7 TYPICAL JOINT DETAIL NEW/EXIST WALL
1/2" = 1'-0"

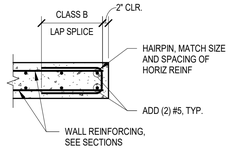


NOTES:
1. MAXIMUM SPACING BETWEEN CONSTRUCTION JOINTS, OR FROM JOINT TO CORNER SHALL BE 120 FEET.
2. MAXIMUM SPACING BETWEEN CONTROL JOINTS SHALL BE 20 FEET.
3. NO JOINT SHALL BE WITHIN 10 FEET OF CORNER.
4. SUBMIT LOCATIONS ON WALL ELEVATIONS OF CONCRETE REINFORCING SHOP DRAWINGS.

8 TYPICAL CONCRETE WALL JOINTS
1/2" = 1'-0"

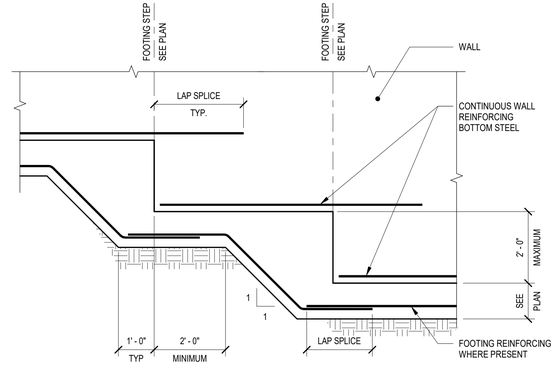


PART PLAN-SINGLE LAYER OF REINFORCING

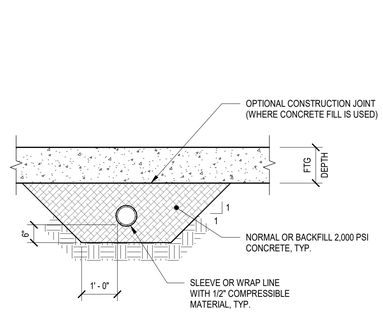


PART PLAN-DOUBLE LAYER OF REINFORCING

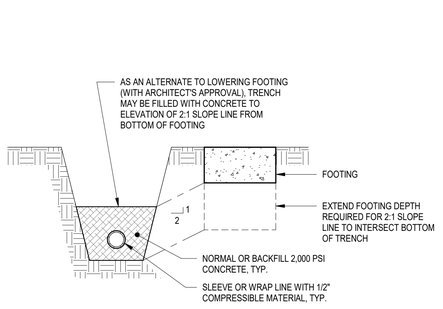
9 TYPICAL CONCRETE WALL END
1/2" = 1'-0"



10 TYPICAL FOOTING STEP
1/2" = 1'-0"

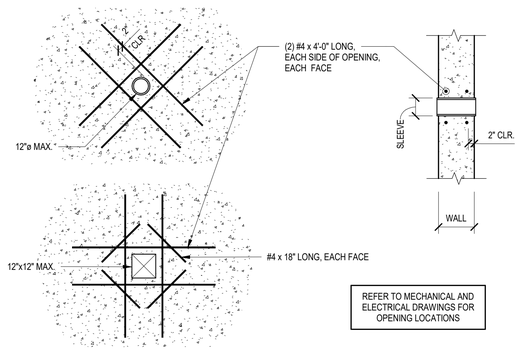


PERPENDICULAR TO FOOTING

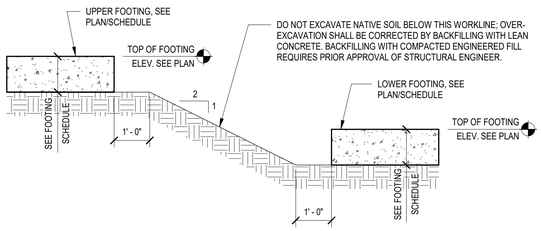


PARALLEL WITH FOOTING

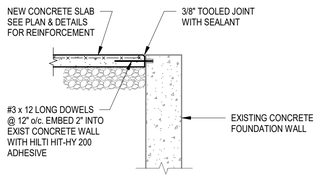
TYPICAL MECHANICAL LINES ADJACENT TO FOOTINGS
1/2" = 1'-0"



12 TYPICAL CONCRETE WALL OPENINGS
1/2" = 1'-0"



13 TYPICAL EXCAVATION AT ADJACENT FOOTING
1/2" = 1'-0"



14 TYPICAL JOINT DETAIL NEW SLAB/EXIST WALL
1/2" = 1'-0"

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STATE HOUSE MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE: **PROGRESS** | SCALE: **1/2" = 1'-0"**

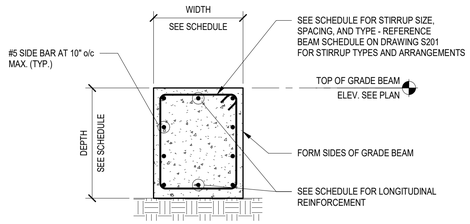
DRAWN BY: **JTM** | CHECKED BY: **RMJ**

ISSUE LOG:
- **75% DD SET/OWNER REV.** 05/29/2026
- **100% DD** 10/23/2026

SHEET CONTENTS: **TYPICAL FOUNDATION DETAILS**

SHEET NO: **S200**

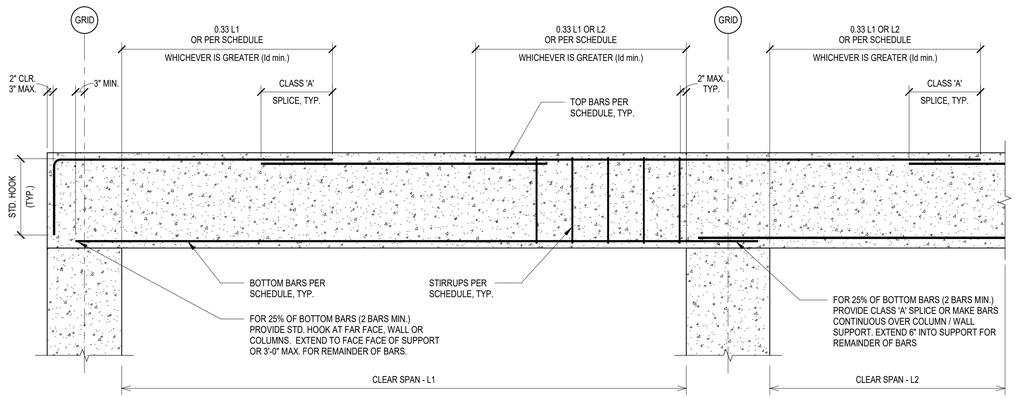
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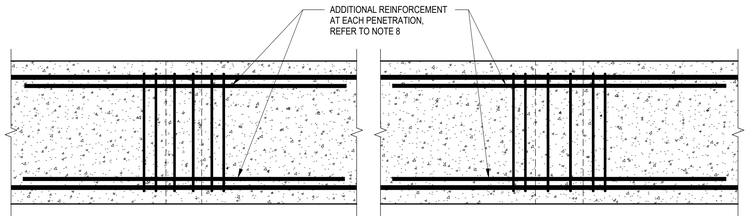
GRADE BEAM SCHEDULE

PLAN MARK	WIDTH	DEPTH	TOP REINFORCING	BOTTOM REINFORCING	STIRRUPS
GB1					
GB2					
GB3					
GB4					
GB5					
GB6					

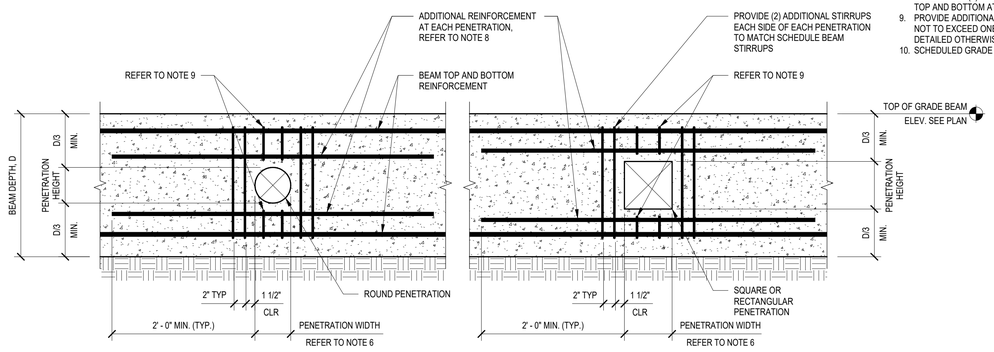
1 TYPICAL GRADE BEAM AND SCHEDULE
1/2" = 1'-0"



3 REINFORCED CONCRETE BEAM SCHEDULE AND TYPICAL ELEVATION
1/2" = 1'-0"



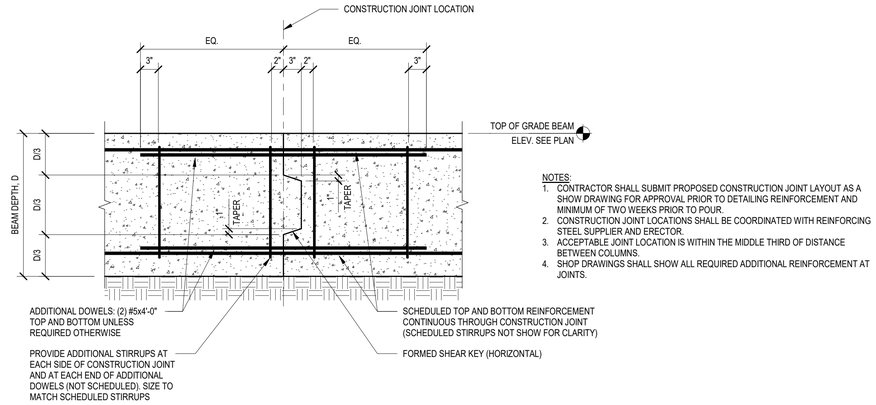
PLAN



ELEVATION

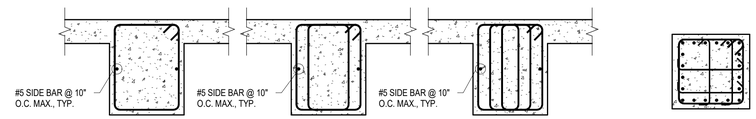
6 TYPICAL HORIZONTAL PENETRATION THROUGH GRADE BEAM
1" = 1'-0"

NOTES:
1. GENERAL CONTRACTOR SHALL COORDINATE LOCATION, SIZE AND ELEVATION AND INCLUDE IN THEIR CONTRACT PRICE ALL REQUIRED HORIZONTAL PENETRATIONS THROUGH CONCRETE GRADE BEAMS WHETHER SHOWN ON DRAWINGS OR NOT.
2. WHERE PENETRATIONS ARE REQUIRED BUT ARE NOT SPECIFICALLY DETAILS ON THE STRUCTURAL DRAWINGS, CONTRACTOR SHALL SUBMIT DRAWINGS SHOWING DIMENSIONS AND LOCATIONS OF ALL REQUIRED PENETRATIONS FOR REVIEW.
3. "D" DENOTES THE DEPTH OF GRADE BEAM.
4. CLEAR SPACING BETWEEN PENETRATIONS SHALL BE 24" MINIMUM UNLESS NOTED OTHERWISE BY THE STRUCTURAL BY THE STRUCTURAL ENGINEER.
5. PENETRATIONS SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF THE DISTANCE BETWEEN COLUMN LINES.
6. PENETRATION WIDTH MUST NOT EXCEED PENETRATION HEIGHT, UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS.
7. FOR LOCATIONS AND/OR SIZES OF PENETRATIONS NOT CONFORMING TO THE ABOVE CRITERIA AND NOT OTHERWISE DETAILED ON THE STRUCTURAL DRAWINGS, CONTRACTOR SHALL COORDINATE REQUIRED ADDITIONAL REINFORCEMENT WITH THE STRUCTURAL ENGINEER.
8. PROVIDE THE FOLLOWING REINFORCEMENT AT EACH SLEEVE, UNLESS NOTED OTHERWISE: (2) #5 TOP AND BOTTOM AT BEAM WITH 2-LEG STIRRUPS OR (4) #5 TOP AND BOTTOM AT BEAMS WITH 4-LEG STIRRUPS.
9. PROVIDE ADDITIONAL STIRRUPS ABOVE AND BELOW PENETRATIONS AT SPACING NOT TO EXCEED ONE THIRD OF THE SCHEDULED STIRRUP SPACING, UNLESS DETAILED OTHERWISE ON THE STRUCTURAL DRAWINGS.
10. SCHEDULED GRADE BEAM STIRRUPS NOT SHOWN FOR CLARITY.



NOTES:
1. CONTRACTOR SHALL SUBMIT PROPOSED CONSTRUCTION JOINT LAYOUT AS A SHOW DRAWING FOR APPROVAL PRIOR TO DETAILING REINFORCEMENT AND MINIMUM OF TWO WEEKS PRIOR TO POUR.
2. CONSTRUCTION JOINT LOCATIONS SHALL BE COORDINATED WITH REINFORCING STEEL SUPPLIER AND ERECTOR.
3. ACCEPTABLE JOINT LOCATION IS WITHIN THE MIDDLE THIRD OF DISTANCE BETWEEN COLUMNS.
4. SHOP DRAWINGS SHALL SHOW ALL REQUIRED ADDITIONAL REINFORCEMENT AT JOINTS.

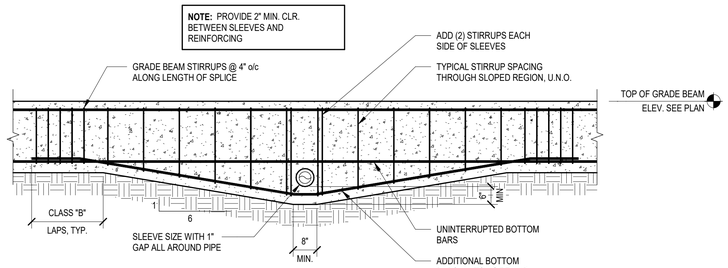
2 TYPICAL GRADE BEAM CONSTRUCTION JOINT
1" = 1'-0"



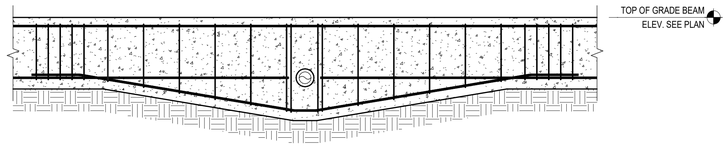
TYPE 1 TYPE 2 TYPE 3

TYPICAL COLUMN TIE ARRANGEMENT

4 TIE TYPES
1/2" = 1'-0"



SLEEVES OCCUR BELOW BOTTOM REINFORCING



NOTES:
1. REFER TO DETAIL ABOVE FOR INFORMATION NOT SHOWN.
2. SEE TYPICAL DETAIL FOR SLEEVES IN MIDDLE THIRD OF GRADE BEAM.

SLEEVES INTERRUPT BOTTOM REINFORCING

5 TYPICAL PENETRATION THROUGH BOTTOM THIRD OF GRADE BEAM
1/2" = 1'-0"

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STATE HOUSE MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE: **PROGRESS** | SCALE: **As indicated**

DRAWN BY: **JTM** | CHECKED BY: **RMJ**

ISSUE LOG:

75% DD SET/OWNER REV.	**05/29/2026**
100% DD	**10/23/2026**

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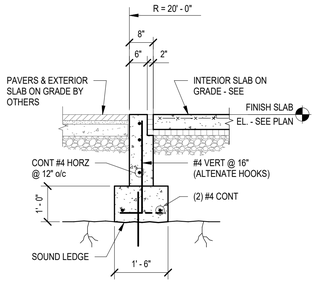
TYPICAL FOUNDATIONS DETAILS

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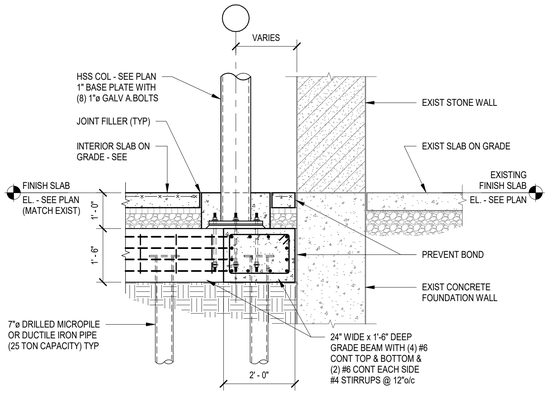
S201

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1 SECTION
1/2" = 1'-0"



2 SECTION
1/2" = 1'-0"

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MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE:	SCALE:
PROGRESS	**1/2" = 1'-0"**
DRAWN BY:	CHECKED BY:
JTM	**RMJ**

ISSUE LOG:

75% DD SET/OWNER REV.	**05/29/2026**
100% DD	**10/23/2026**

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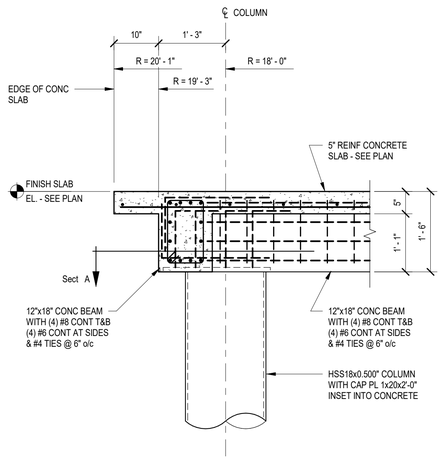
FOUNDATION DETAILS

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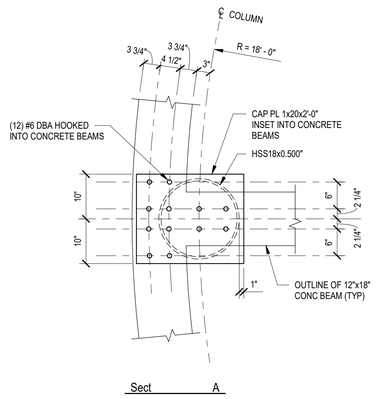
S202

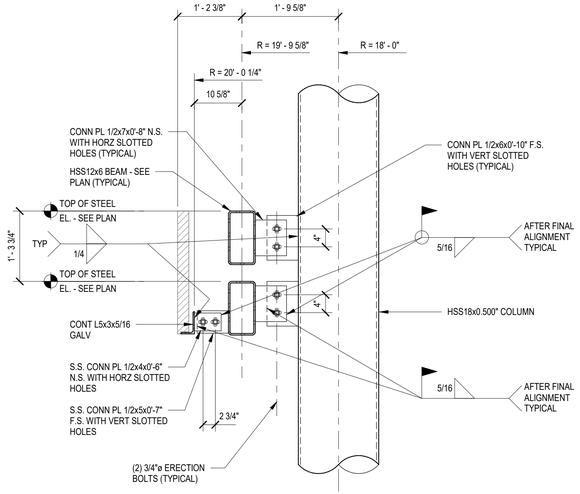
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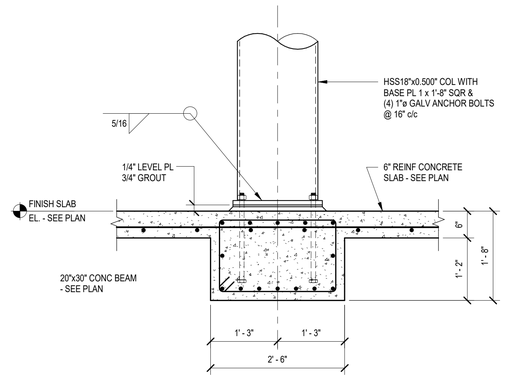


1 SECTION
3/4" = 1'-0"

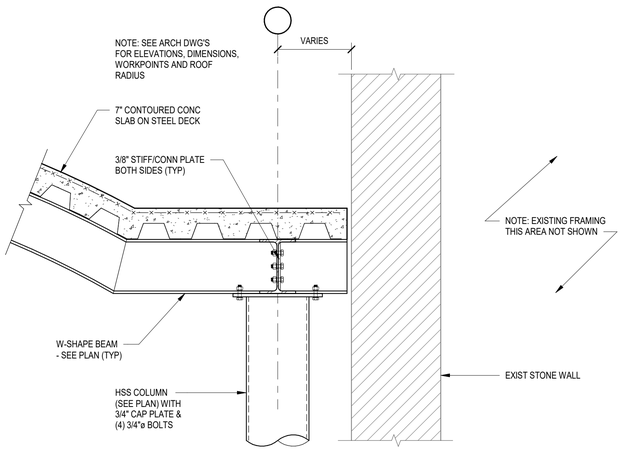




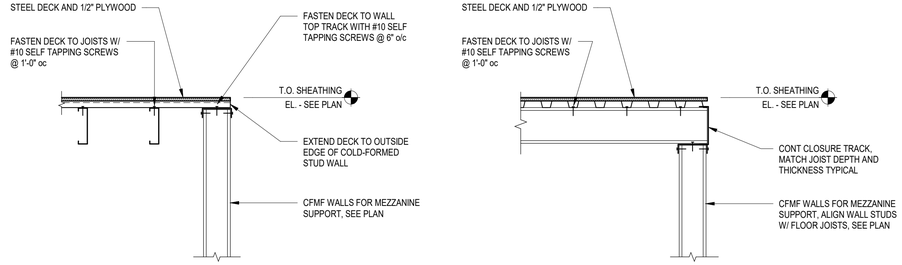
2 SECTION
3/4" = 1'-0"



3 SECTION
3/4" = 1'-0"



4 SECTION
3/4" = 1'-0"



TYPICAL CFMF JOISTS AT MEZZANINE PERIMETER WALLS
5 3/4" = 1'-0"

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SCALE: **3/4" = 1'-0"**
DRAWN BY: **JTM**
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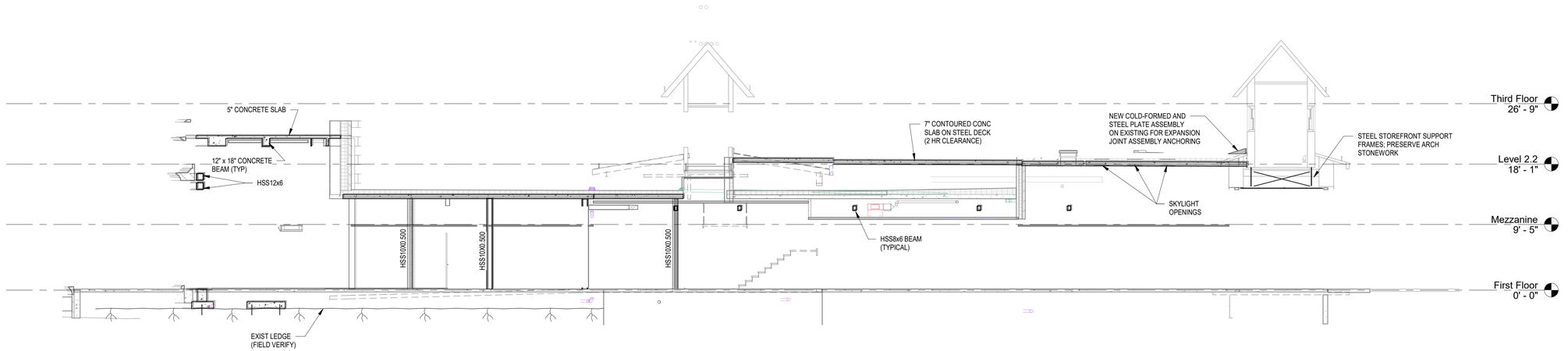
ISSUE LOG:
75% DD SET/OWNER REV. 05/29/2026
100% DD 10/23/2026

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FRAMING DETAILS

SHEET NO:
S301

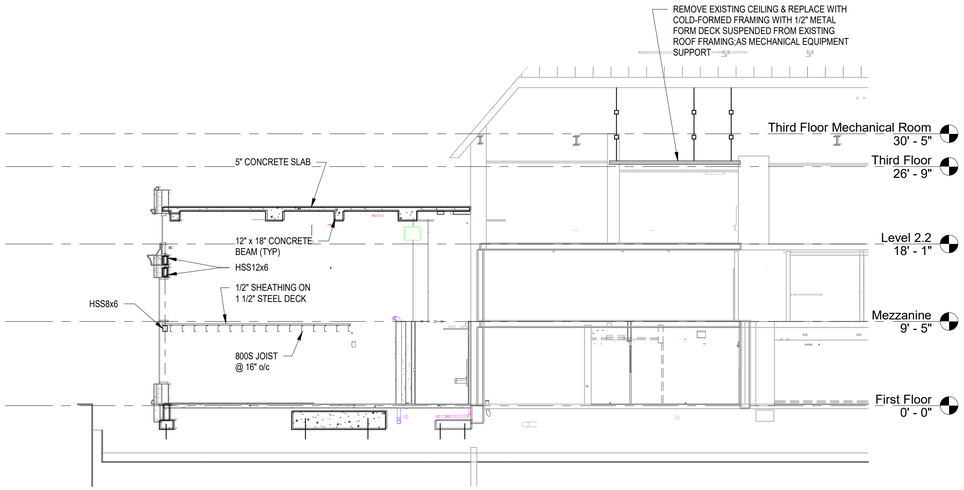
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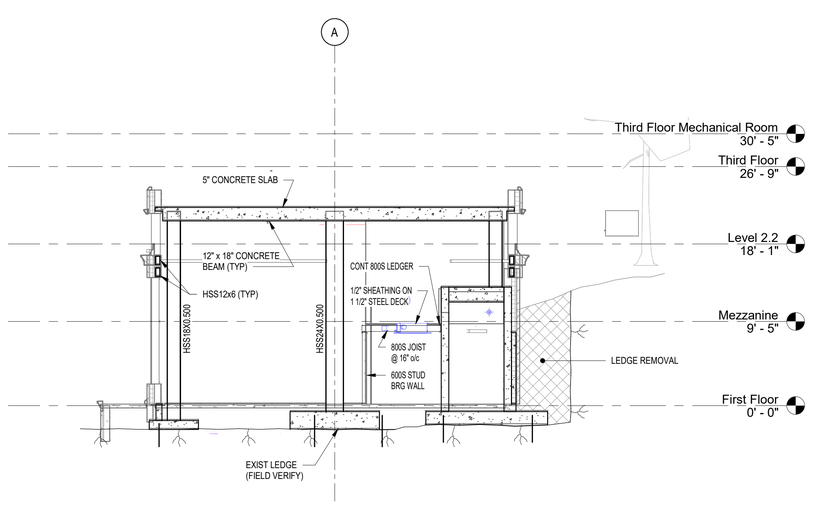
1 BUILDING SECTION
1/8" = 1'-0"

NOTES:
1. SEE PLANS FOR ADDITIONAL INFORMATION.



2 BUILDING SECTION
1/8" = 1'-0"

NOTES:
1. SEE PLANS FOR ADDITIONAL INFORMATION.



3 BUILDING SECTION
1/8" = 1'-0"

NOTES:
1. SEE PLANS FOR ADDITIONAL INFORMATION.

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MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE:	SCALE:
PROGRESS	1/8" = 1'-0"
DRAWN BY:	CHECKED BY:
JTM	RMJ

ISSUE LOG:

25% DD	12/08/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD	10/23/2026

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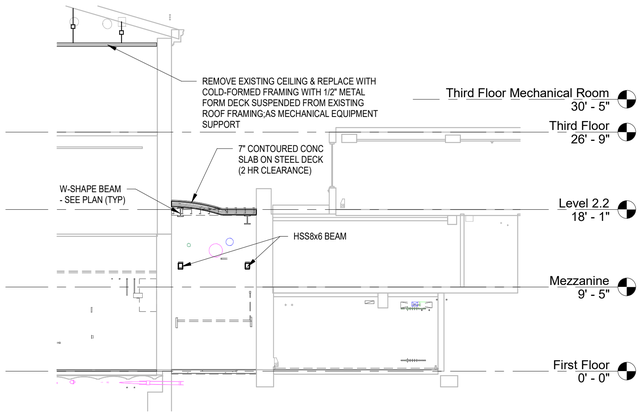
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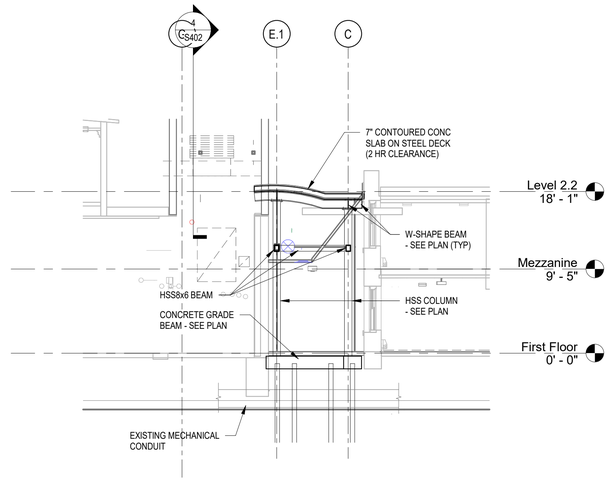
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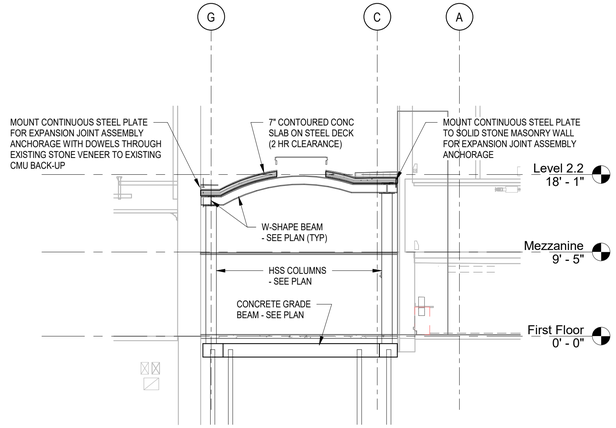
1 BUILDING SECTION
1/8" = 1'-0"

NOTES:
1. SEE PLANS FOR ADDITIONAL INFORMATION.



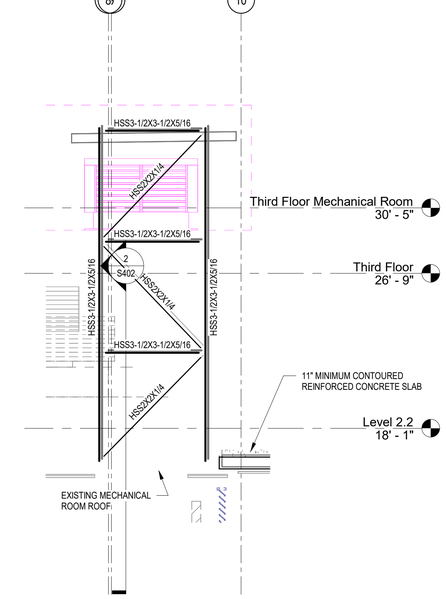
2 BUILDING SECTION
1/8" = 1'-0"

NOTES:
1. SEE PLANS FOR ADDITIONAL INFORMATION.



3 BUILDING SECTION
1/8" = 1'-0"

NOTES:
1. SEE PLANS FOR ADDITIONAL INFORMATION.



4 MECHANICAL ROOM CHIMNEY ELEVATION
1/4" = 1'-0"

NOTES:
1. SEE PLANS FOR ADDITIONAL INFORMATION.
2. ELEVATION IS TYPICAL FOR (4) SIDES OF CHIMNEY.

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MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE:	SCALE:
PROGRESS	As indicated
DRAWN BY:	CHECKED BY:
JTM	RMJ

ISSUE LOG:

25% DD	12/08/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD	10/23/2026

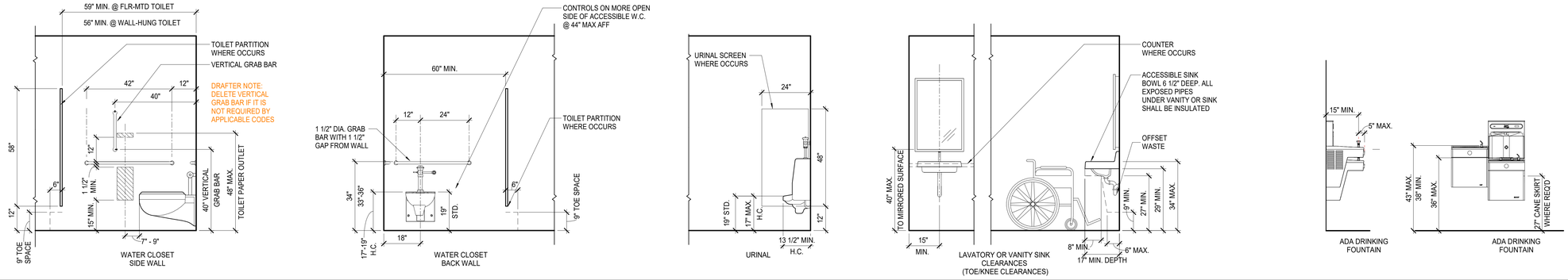
SHEET CONTENTS: **BUILDING SECTIONS**

SHEET NO: **S402**

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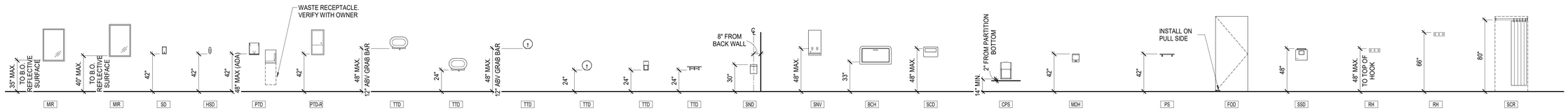
GENERAL NOTES

1. ALL MOUNTING HEIGHTS LISTED ARE MEASURED TO FINISHED FLOOR.
2. ALL HORIZONTAL CLEARANCES TO ADJACENT WALLS ARE AS MEASURED TO FINISHED WALL.
3. COORDINATE WITH ARCHITECT THE LOCATION OF ALL CONTROL DEVICES.
4. WHEN MULTIPLE DEVICES ARE IN CLOSE PROXIMITY, PROVIDE LAYOUT FOR ARCHITECT APPROVAL.
5. CANE DETECTOR BARRIER IS REQUIRED BELOW ACCESSORIES THAT PROJECT >4" FROM WALL.



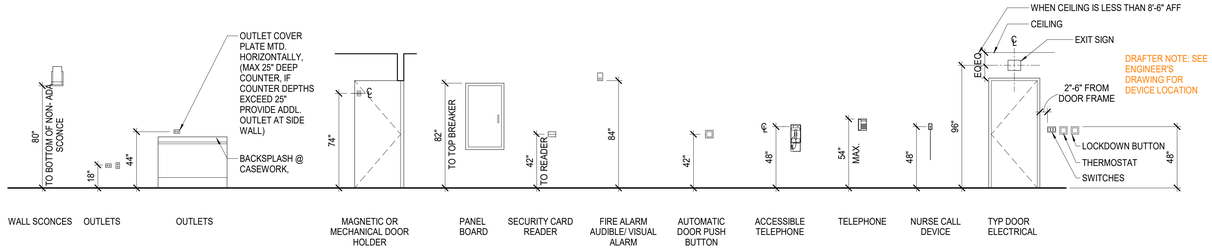
1 A001 ADA MOUNTING REQUIREMENTS - PLUMBING FIXTURES AND ACCESSORIES

SCALE: 1/2" = 1'-0"



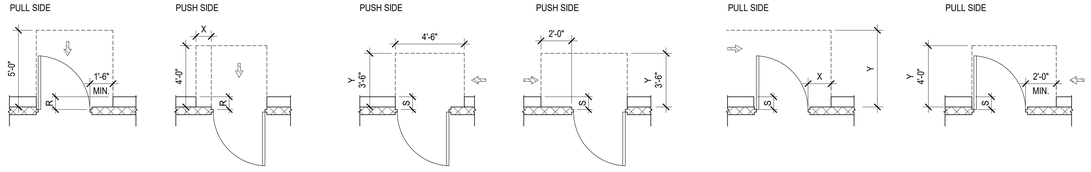
2 A001 TYPICAL MOUNTING HEIGHTS - TOILET ACCESSORIES

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



2 A001 TYPICAL MOUNTING HEIGHTS - ELECTRICAL AND DATA

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



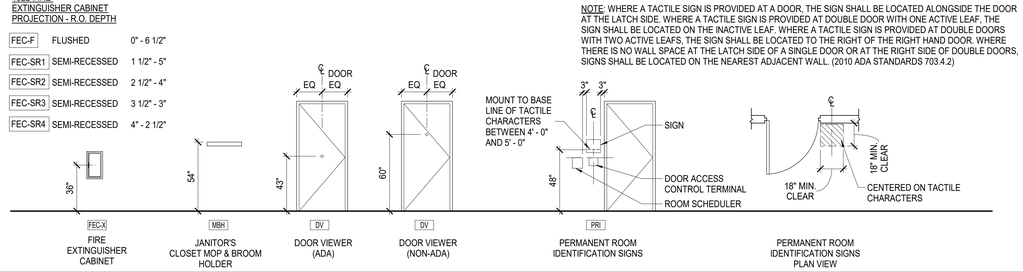
NOTE FOR ALL CLEARANCES:
R = MAXIMUM 8 INCHES OR PROVIDE CLEAR AREA IN WALL RECESS AND FORWARD APPROACH
IF S EXCEEDS 8 INCHES, SIDE APPROACH NOT APPLICABLE, PROVIDE FORWARD APPROACH

4 A001 ADA DOOR CLEARANCES - ADAAG 2010

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

10LB FIRE EXTINGUISHER CABINET PROJECTION - R.O. DEPTH

FEC-F	FLUSHED	0" - 6 1/2"
FEC-SR1	SEMI-RECESSED	1 1/2" - 5"
FEC-SR2	SEMI-RECESSED	2 1/2" - 4"
FEC-SR3	SEMI-RECESSED	3 1/2" - 3"
FEC-SR4	SEMI-RECESSED	4" - 2 1/2"



NOTE: WHERE A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOOR WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. (2010 ADA STANDARDS 703.4.2)

3 A001 TYPICAL MOUNTING HEIGHTS - OTHER ACCESSORIES

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

10/23/2026 3:39:37 PM

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE:	SCALE:
06/10/21	As Indicated
DRAWN BY:	CHECKED BY:
FFF	FFF

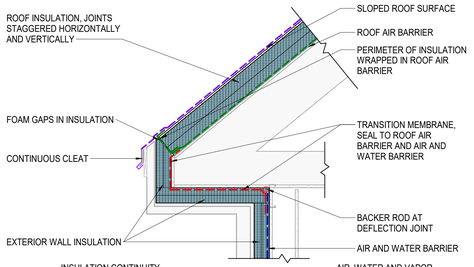
ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

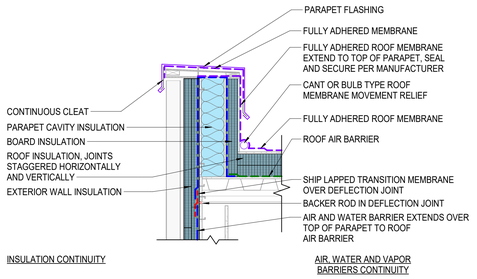
SHEET CONTENTS:
MOUNTING AND CLEARANCE STANDARDS

SHEET NO:
A001

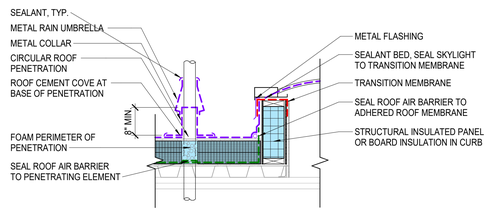
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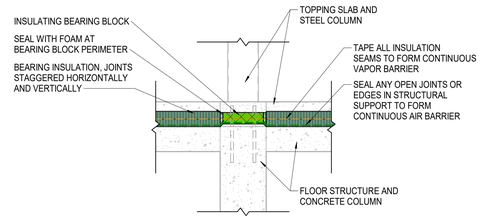
1 A002 EAVE CONDITION
SCALE: 3/4" = 1'-0"



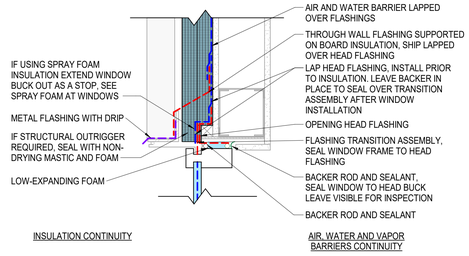
2 A002 PARAPET CONDITION
SCALE: 3/4" = 1'-0"



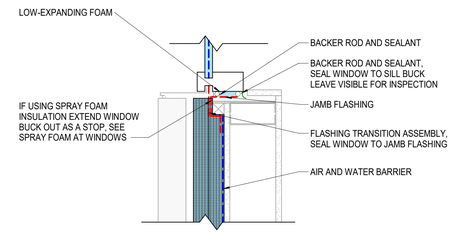
3 A002 ROOF PENETRATION AND SKYLIGHT CONDITIONS
SCALE: 3/4" = 1'-0"



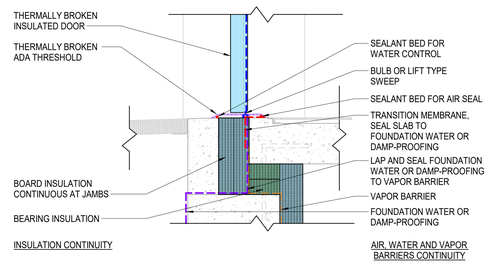
4 A002 FLOOR AT HEATED SPACE ABOVE UNHEATED / OUTDOOR SPACE
SCALE: 3/4" = 1'-0"



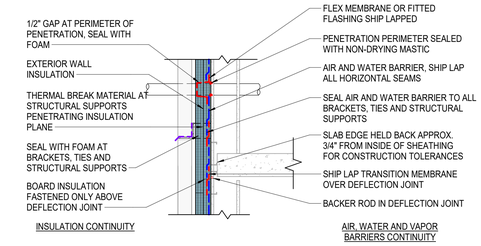
5 A002 WINDOW HEAD CONDITION
SCALE: 1 1/2" = 1'-0"



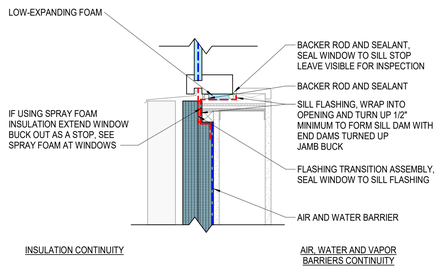
6 A002 WINDOW JAMB CONDITION
SCALE: 1 1/2" = 1'-0"



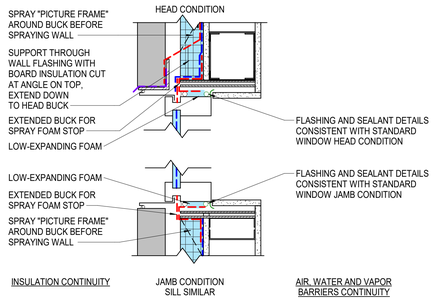
7 A002 EXTERIOR DOOR SILL
SCALE: 1 1/2" = 1'-0"



8 A002 MID-WALL CONDITION
SCALE: 3/4" = 1'-0"

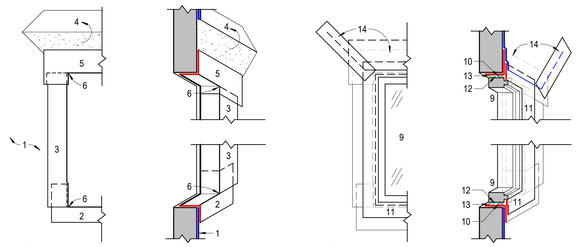


9 A002 WINDOW SILL CONDITION
SCALE: 1 1/2" = 1'-0"

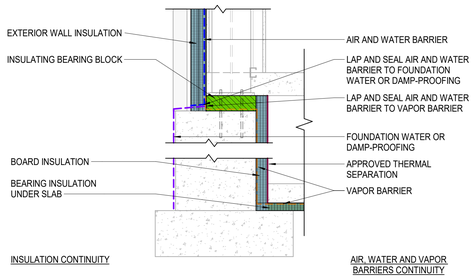


10 A002 SPRAY FOAM AT WINDOWS
SCALE: 1 1/2" = 1'-0"

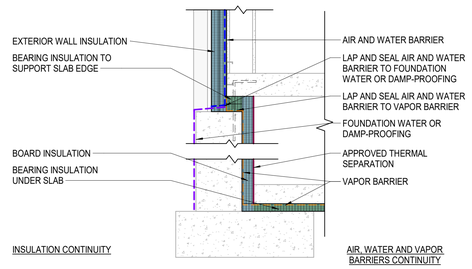
FLASHING SEQUENCE
1. APPLY AIR AND WATER BARRIER (NOT SPRAY FOAM) OR BUILDING WRAP.
2. SILL FLASHING WITH SILL DAM OR 5% SLOPE TO EXTERIOR AND EXTENDED MINIMUM 6" UP JAMBS.
3. JAMB FLASHING.
4. IF BUILDING WRAP IS USED, RELEASE ABOVE HEAD OF OPENING. LIFT OUT OF WAY TO MAINTAIN SHIPLAP OVER HEAD FLASHING.
5. HEAD FLASHING EXTENDED MINIMUM 2" DOWN JAMBS.
6. SEAL ALL PINHOLES AT CORNERS WITH FLASHING.
7. IF BUILDING WRAP IS NOT USED, INSTALL HEAD FLASHING TO LAP TRANSITION ASSEMBLY IN STEP 14. LEAVE BACKER PAPER ON BOTTOM OF FLASHING AND TAPE OUT OF WAY OF INSULATION INSTALLER. INSULATION SYSTEM MAY BE INSTALLED AFTER THIS STEP.
8. ATTACH TRANSITION MEMBRANE TO WINDOW OR CURTAIN WALL (REFERRED TO BELOW AS WINDOW UNIT) PRIOR TO WINDOW UNIT INSTALLATION.
9. INSTALL WINDOW UNIT.
10. SEAL PERIMETER OF WINDOW UNIT WITH BACKER ROD AND SEALANT ON EXTERIOR. DO NOT SEAL ANY WEEPS IN WINDOW FRAME.
11. SEAL TRANSITION MEMBRANE AROUND FULL PERIMETER OF WINDOW UNIT.
12. FILL VOIDS AT PERIMETER OF WINDOW UNIT WITH LOW-EXPANSIVE FOAM FROM INTERIOR.
13. SEAL INTERIOR PERIMETER OF WINDOW UNIT TO ADJACENT CONSTRUCTION WITH BACKER ROD AND SEALANT. LEAVE VISIBLE FOR INSPECTION.
14. IF BUILDING WRAP IS USED, FOLD AND ADHERE AIR AND WATER BARRIER DOWN OVER HEAD FLASHING, COVER CUTS WITH 4" TAPE 2" BEYOND ENDS. ELSE ADHERE HEAD FLASHING FROM STEP 7 OVER TRANSITION MEMBRANE.



11 A002 FLASHING SEQUENCE DIAGRAM
SCALE: 3/4" = 1'-0"



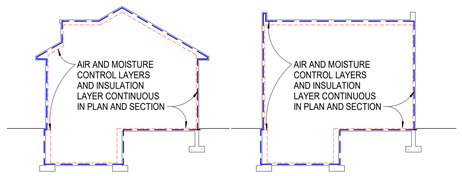
12 A002 BASEMENT COLUMN CONDITION
SCALE: 3/4" = 1'-0"



13 A002 BASEMENT WALL CONDITION
SCALE: 3/4" = 1'-0"

AIR, WATER AND VAPOR BARRIER, AND INSULATION GENERAL STANDARDS

1. DIAGRAMS ON THIS SHEET ARE NOT CONSTRUCTION DETAILS, BUT SHOW DIAGRAMMATIC INTENT FOR ALL PROJECT CONDITIONS
2. DIAGRAMS INDICATE GENERAL INTENT FOR CONTINUITY OF ENCLOSURE SYSTEMS AND ARE DIAGRAMATIC ONLY.
3. DIAGRAMS INDICATE AIR AND WATER TIGHT ENVELOPE CONSTRUCTION, INCLUDING SHIP LAPPED FLASHING.
4. DIAGRAMS INDICATE CONTINUITY OF INSULATION TO MINIMIZE THERMAL BREAKS.
5. BUILDING STRUCTURE CONTAINED WITHIN INSULATED ENVELOPE EXCEPT WHERE SPECIFICALLY INDICATED.



14 A002 ENCLOSURE SECTION DIAGRAM
SCALE: 1/16" = 1'-0"

10/20/2026 3:07:39 PM

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	As indicated
DRAWN BY:	CHECKED BY:
FFF	FFF

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: ENCLOSURE INTEGRITY STANDARDS

SHEET NO: A002

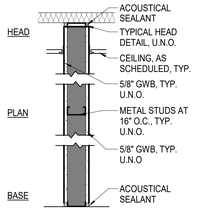
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1 STUD SIZE: 1 5/8"
WALL THICKNESS: 2 7/8"

2 STUD SIZE: 2 1/2"
WALL THICKNESS: 3 3/4"

3 STUD SIZE: 3 5/8"
WALL THICKNESS: 4 7/8"

4 STUD SIZE: 6"
WALL THICKNESS: 7 1/4"



STC RATING: 39.

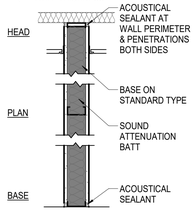
WALL TYPE 1-4 "STANDARD"
SCALE: 1" = 1'-0"

1A STUD SIZE: 1 5/8"
WALL THICKNESS: 2 7/8"

2A STUD SIZE: 2 1/2"
WALL THICKNESS: 3 3/4"

3A STUD SIZE: 3 5/8"
WALL THICKNESS: 4 7/8"

4A STUD SIZE: 6"
WALL THICKNESS: 7 1/4"



STC RATING: 45.

ALL COMPONENTS OF WALL TYPE "STANDARD" MODIFIED AS SHOWN ABOVE

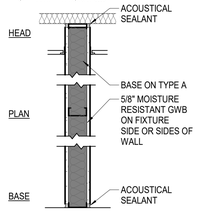
WALL TYPE 1A-4A "ACOUSTIC"
SCALE: 1" = 1'-0"

1M STUD SIZE: 1 5/8"
WALL THICKNESS: 2 7/8"

2M STUD SIZE: 2 1/2"
WALL THICKNESS: 3 3/4"

3M STUD SIZE: 3 5/8"
WALL THICKNESS: 4 7/8"

4M STUD SIZE: 6"
WALL THICKNESS: 7 1/4"



ALL COMPONENTS OF WALL TYPE "ACOUSTIC" MODIFIED AS SHOWN ABOVE

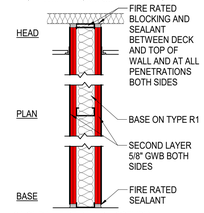
WALL TYPE 1M-4M "MOIST AREA"
SCALE: 1" = 1'-0"

1R2 STUD SIZE: 1 5/8"
WALL THICKNESS: 4 1/8"

2R2 STUD SIZE: 2 1/2"
WALL THICKNESS: 5"

3R2 STUD SIZE: 3 5/8"
WALL THICKNESS: 6 1/8"

4R2 STUD SIZE: 6"
WALL THICKNESS: 8 1/2"

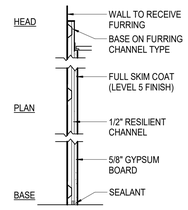


2 HOUR UL FIRE RATED ASSEMBLY
DESIGN NUMBER UL U419, V438 OR V450.

ALL COMPONENTS OF WALL TYPE "1 HOUR" MODIFIED AS SHOWN ABOVE

WALL TYPE 1R2-4R2 "2 HOUR"
SCALE: 1" = 1'-0"

6AC HAT CHANNEL SIZE: 7/8"
ASSEMBLY THICKNESS: 2"

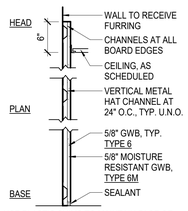


ALL COMPONENTS OF WALL TYPE "FURRING" MODIFIED AS SHOWN ABOVE

WALL TYPE 6AC "FURRED ACOUSTIC"
SCALE: 1" = 1'-0"

6 HAT CHANNEL SIZE: 7/8"
ASSEMBLY THICKNESS: 1 1/2"

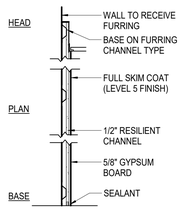
6M HAT CHANNEL SIZE: 7/8"
ASSEMBLY THICKNESS: 1 1/2"



USE PLASTIC SHIMS TO MAINTAIN FACE OF WALL SQUARE, PLUMB, AND FLAT

WALL TYPE 6-6M "FURRING"
SCALE: 1" = 1'-0"

6T HAT CHANNEL SIZE: 7/8"
ASSEMBLY THICKNESS: 2"



ALL COMPONENTS OF WALL TYPE "FURRING" MODIFIED AS SHOWN ABOVE

WALL TYPE 6T "FURRED WET"
SCALE: 1" = 1'-0"

1T STUD SIZE: 1 5/8"
WALL THICKNESS: 3 1/8"

2T STUD SIZE: 2 1/2"
WALL THICKNESS: 4"

3T STUD SIZE: 3 5/8"
WALL THICKNESS: 5 1/8"

4T STUD SIZE: 6"
WALL THICKNESS: 7 1/2"

WALL THICKNESS LISTED FOR TILE ON SINGLE SIDE OF WALL AT 3/8" THICKNESS

ALL COMPONENTS OF WALL TYPE "ACOUSTIC" MODIFIED AS SHOWN ABOVE

WALL TYPE 1T-4T "WET AREA"
SCALE: 1" = 1'-0"

18R1 BLOCK SIZE: 5 5/8"

19R1 BLOCK SIZE: 7 5/8"

20R1 BLOCK SIZE: 9 5/8"

1 HOUR UL FIRE RATED ASSEMBLY
DESIGN NUMBER UL U906

ALL COMPONENTS OF WALL TYPE "MASONRY" MODIFIED AS SHOWN ABOVE

WALL TYPE 18R1-20R1 "M. 1HR"
SCALE: 1" = 1'-0"

1AR STUD SIZE: 1 5/8"
WALL THICKNESS: 3"

2AR STUD SIZE: 2 1/2"
WALL THICKNESS: 3 7/8"

3AR STUD SIZE: 3 5/8"
WALL THICKNESS: 5"

4AR STUD SIZE: 6"
WALL THICKNESS: 7 3/8"

STC RATING: 45.

ALL COMPONENTS OF WALL TYPE "STANDARD" MODIFIED AS SHOWN ABOVE

WALL TYPE 1AR-4AR "AC - ABUSE RES."
SCALE: 1" = 1'-0"

SIGNIFICANCE OF WALL TYPE LABEL LETTERS

SEE REQUIREMENTS IN WALL TYPE STANDARD DETAILS.

IN GENERAL, THE LETTERS FOLLOWING THE NUMBER OF EACH INTERIOR WALL TYPE SIGNIFY THE FOLLOWING:

A - ACOUSTICALLY RATED WALL W/ BATTS AND SEALANT AT ALL PENETRATIONS
AC - ACOUSTICALLY RATED WALL W/ RESILIENT CHANNEL ADDED
R1 - 1 HOUR FIRE RATED WALL ASSEMBLY
R2 - 2 HOUR FIRE RATED WALL ASSEMBLY
M - MOISTURE RESISTANT WALLBOARD ON MOIST/FIXTURE SIDE(S) OF WALL
T - CEMENTITIOUS BACKER BOARD ON WET/FIXTURE SIDE(S) OF WALL FOR TILE FINISH
t - CEMENTITIOUS BACKER BOARD/ GYPSUM BOARD ON WET/FIXTURE SIDE(S) OF WALL FOR PARTIAL HEIGHT TILE FINISH
c - EXTEND WALL BOARD TO 6" ABOVE FINISH CEILING ONLY
x - OMIT WALL BOARD ON UNEXPOSED SIDE OF PARTITION
X - STUD ONLY, OMIT GYPSUM BOARD BOTH SIDES AT SHOWER STALLS ONLY
H - PARTIAL HEIGHT WALL WITH HARDWOOD CAP

NOTES AND DETAILS ON SHEET A003 APPLY TO ALL WALL TYPES SHOWN, UNLESS NOTED OTHERWISE.

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	1" = 1'-0"
DRAWN BY: FFF	CHECKED BY: FFF

ISSUE LOG:

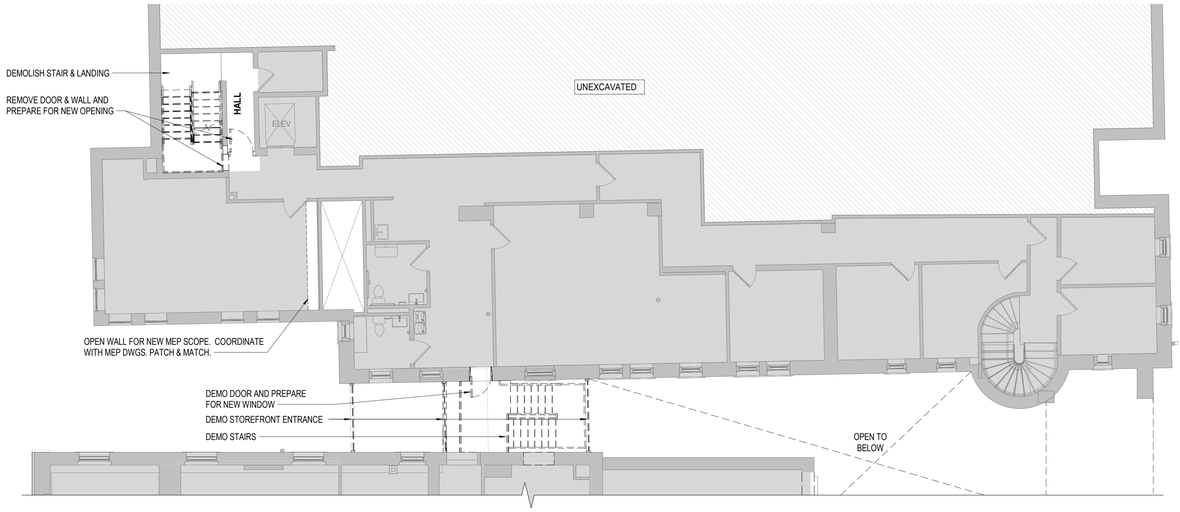
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75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: WALL TYPES

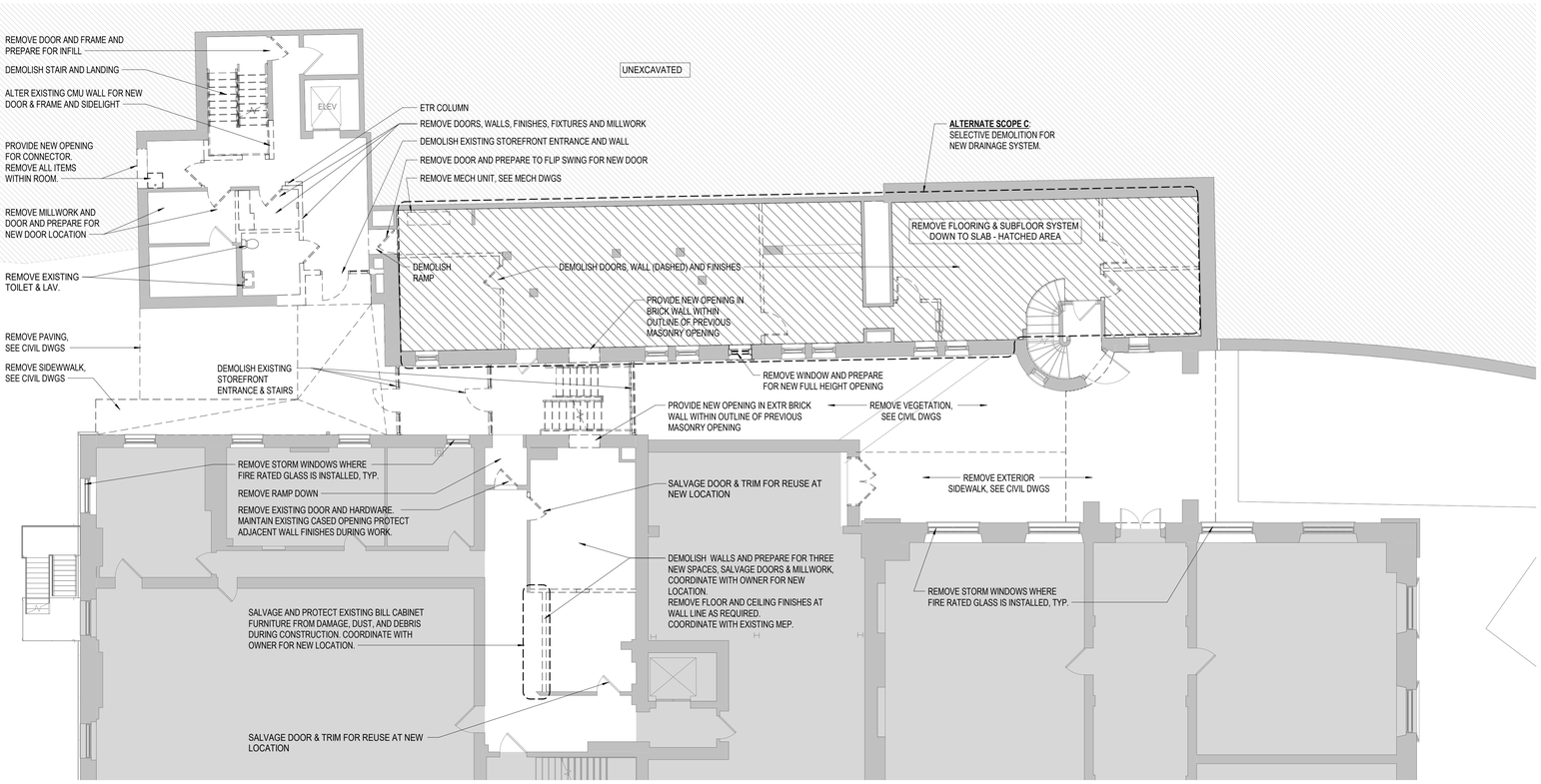
SHEET NO: A004

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10/22/2026 4:00:09 PM



2 DEMOLITION MEZZANINE PLAN
AD100 SCALE: 1/8" = 1'-0"



1 DEMOLITION LEVEL 1 PLAN
AD100 SCALE: 1/8" = 1'-0"

10/23/2026 4:00:01 PM

DEMOLITION GENERAL NOTES

1. ALL KEY NOTES INDICATE PROMINANT FEATURES OF THE DEMOLITION PLAN. DEMOLITION PLANS ARE NOT LIMITED TO KEY NOTES. DEMOLITION ENTAILS REMOVAL OF ELEMENTS ABOVE AND BEYOND THOSE ITEMS INDICATED IN KEY NOTES. DEMOLITION CONTRACTOR IS REQUIRED TO VISIT SITE TO UNDERSTAND COMPLETE SCOPE OF DEMOLITION WORK.
2. CONTRACTOR TO COORDINATE ALL NEW OPENINGS FOR WINDOWS AND DOORS. ALL NEW MECHANICAL OPENINGS TO BE COORDINATED W/ MEP REQUIREMENTS.
3. ESTIMATOR TO CARRY ALLOWANCE FOR ABATEMENT AND DISPOSAL OF ANY KNOWN OR DISCOVERED LEAD, MERCURY, ASBESTOS AND/OR OTHER HAZARDOUS MATERIAL - CONTAINING ITEMS FOUND IN EXISTING CONSTRUCTION.
4. SEE MEP FOR DEMOLITION OF EXISTING MECHANICAL / PLUMBING AND ELECTRICAL PIPING, VENTS, LIGHTING OR OTHER COMPONENTS.
5. SEE CIVIL FOR REMOVAL OF EXISTING SIDEWALKS OR OTHER COMPONENTS
6. REFER TO SPECIFICATION FOR GENERAL REQUIREMENTS FOR DEMOLITION AND RELATED WORK. *SPECIFICATIONS WILL BE PROVIDED AT THE END OF DD.*
7. CONTRACTOR TO DO ALL DEMOLITION WORK REQUIRED TO ACCOMPLISH NEW CONSTRUCTION AND WORK.
8. ***REMOVE*** MEANS THAT ITEMS SHALL BE DETACHED FROM EXISTING CONSTRUCTION AND LEGALLY DISPOSED OF OFF-SITE, UNLESS INDICATED TO BE REMOVED AND SALVAGED OR REMOVED AND REINSTALLED.
9. ***EXISTING TO REMAIN*** INDICATES EXISTING ITEMS OF CONSTRUCTION THAT ARE NOT TO BE REMOVED.
10. ***REMOVE AND SALVAGE*** MEANS THAT ITEMS SHALL BE DETACHED FROM EXISTING CONSTRUCTION AND CLEANED AND MOVED TO STORAGE PLACE AS DESIGNATED BY THE OWNER.

DEMOLITION PLAN LEGEND

ALSO SEE SYMBOL LEGEND ON COVERSHEET/G000

- EXISTING WALL/ COLUMN TO REMAIN
- EXISTING WALL/ COLUMN TO BE REMOVED AND REINSTALLED OR SALVAGED
- EXISTING DOOR/ FRAME TO BE REMOVED AND REINSTALLED OR SALVAGED
- EXISTING PLUMBING FIXTURES TO BE REMOVED AND REINSTALLED OR SALVAGED
- 02 — DEMO TAG - SEE KEYNOTE LEGEND; KEY NUMBER

FLOOR PLAN LEGEND

ALSO SEE WALL TYPES SHEET A004

- EXISTING WALL/ COLUMN TO REMAIN
- NEW METAL STUD / GYPSUM WALLBOARD WALL
- NEW MASONRY WALL
- NEW STEEL/ CONCRETE COLUMN - SEE STRUCTURAL
- FEC-X — FIRE EXTINGUISHER CABINET: FEC-1: SEMI-RECESSED CABINET W/ FE-1; FEC-2: SURFACE MOUNT CABINET W/ FE-1
- FE-X — FIRE EXTINGUISHER ON WALL BRACKET: FE-1: MULTI-PURPOSE DRY CHEM. EXTINGUISHER (TYPE A-B-C); FE-2: KITCHEN/ GREASE EXTINGUISHER (TYPE K)
- GCE — GWB COLUMN ENCLOSURE
- MCE — METAL COLUMN ENCLOSURE
- PCE — PORCELAIN TILE COLUMN ENCLOSURE
- ROOM TAG - SEE A900 FOR FINISHES; Room name — ROOM NAME; 101 — ROOM NUMBER
- 1i — WALL TAG - SEE SHEETS A004; WALL TYPE; WHERE A WALLTYPE LEADER PASSES THROUGH 2 OR MORE WALLS, ALL OF THOSE WALLS SHALL BE OF THE TYPE INDICATED
- 101 — DOOR TAG - SEE SHEET A800; DOOR NUMBER
- A — WINDOW TAG SEE SHEET A700
- CW — CURTAINWALL TYPE SEE SHEET A700

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE
0 4' 8' 16'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	As indicated
DRAWN BY: FFF	CHECKED BY: CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

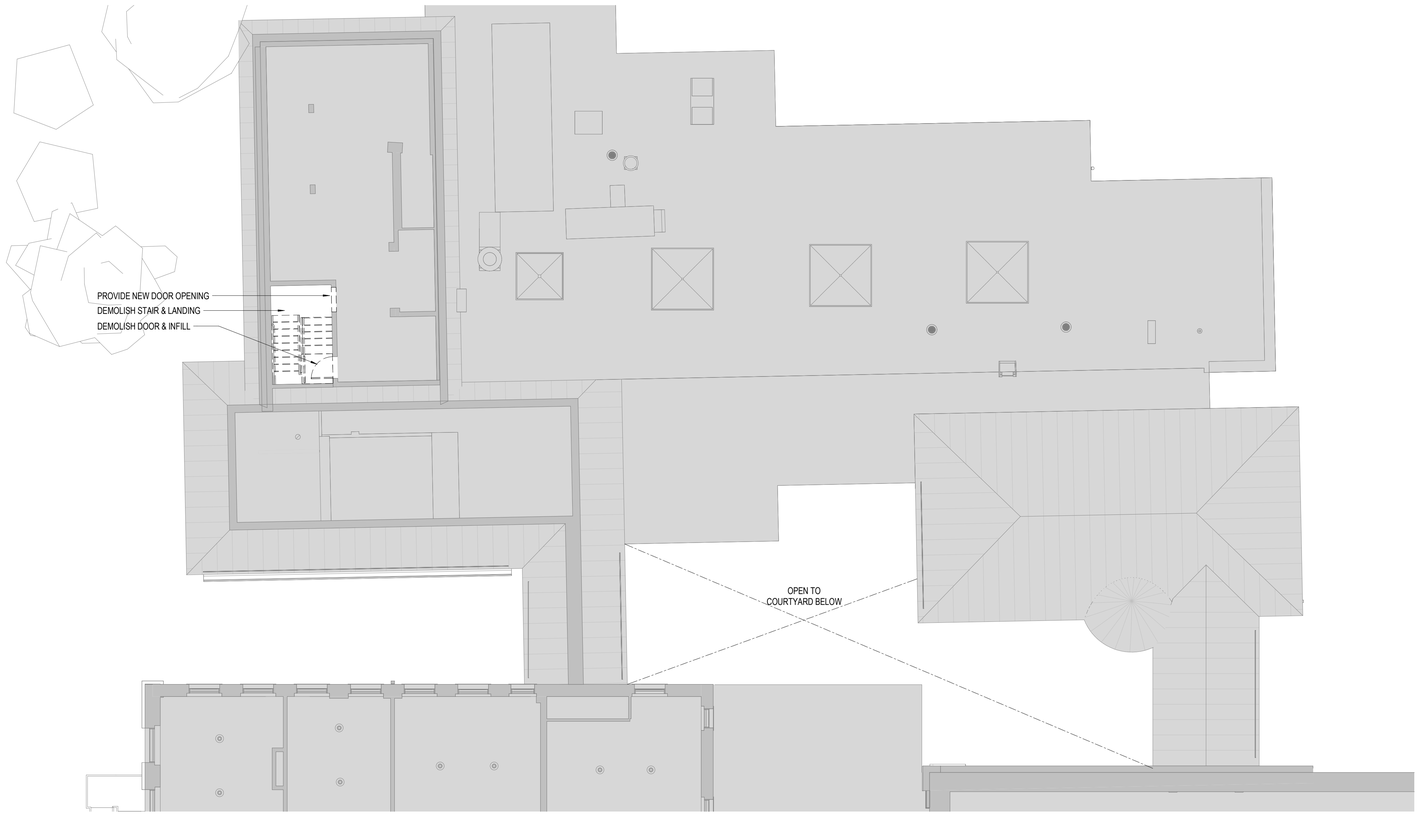
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DEMO PLAN - L1 & MEZZ

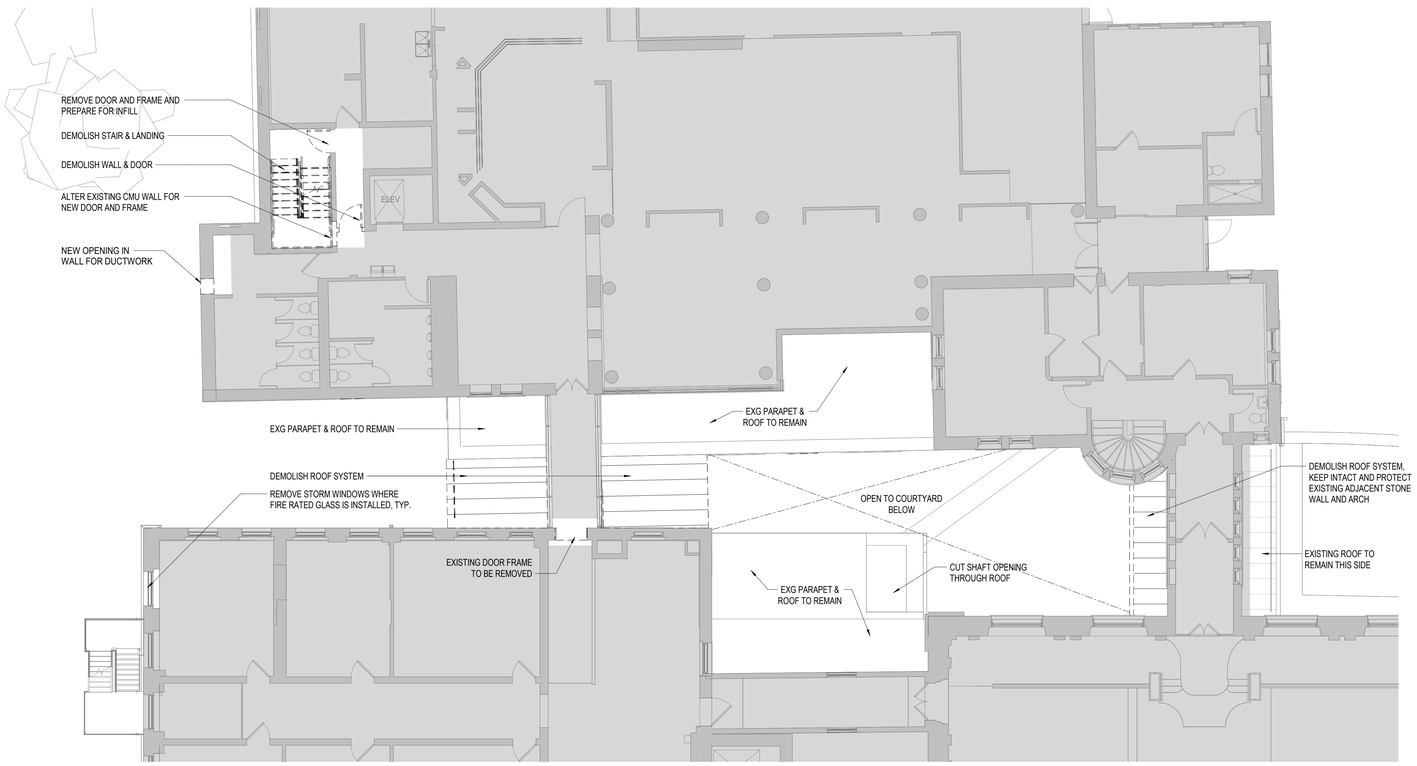
SHEET NO:

AD100

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2 AD101 DEMOLITION LEVEL 3 NORTH PLAN
SCALE: 1/8" = 1'-0"



1 AD101 DEMOLITION LEVEL 2 NORTH PLAN
SCALE: 1/8" = 1'-0"

DEMOLITION GENERAL NOTES

1. ALL KEY NOTES INDICATE PROMINANT FEATURES OF THE DEMOLITION PLAN. DEMOLITION PLANS ARE NOT LIMITED TO KEY NOTES. DEMOLITION ENTAILS REMOVAL OF ELEMENTS ABOVE AND BEYOND THOSE ITEMS INDICATED IN KEY NOTES. DEMOLITION CONTRACTOR IS REQUIRED TO VISIT SITE TO UNDERSTAND COMPLETE SCOPE OF DEMOLITION WORK.
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4. SEE MEP FOR DEMOLITION OF EXISTING MECHANICAL / PLUMBING AND ELECTRICAL PIPING, VENTS, LIGHTING OR OTHER COMPONENTS.
5. SEE CIVIL FOR REMOVAL OF EXISTING SIDEWALKS OR OTHER COMPONENTS
6. REFER TO SPECIFICATION FOR GENERAL REQUIREMENTS FOR DEMOLITION AND RELATED WORK. *SPECIFICATIONS WILL BE PROVIDED AT THE END OF DD.*
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8. ***REMOVE*** MEANS THAT ITEMS SHALL BE DETACHED FROM EXISTING CONSTRUCTION AND LEGALLY DISPOSED OF OFF-SITE, UNLESS INDICATED TO BE REMOVED AND SALVAGED OR REMOVED AND REINSTALLED.
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DEMOLITION PLAN LEGEND

ALSO SEE SYMBOL LEGEND ON COVERSHEET/G000

- EXISTING WALL/ COLUMN TO REMAIN
- EXISTING WALL/ COLUMN TO BE REMOVED AND REINSTALLED OR SALVAGED
- EXISTING DOOR/ FRAME TO BE REMOVED AND REINSTALLED OR SALVAGED
- EXISTING PLUMBING FIXTURES TO BE REMOVED AND REINSTALLED OR SALVAGED
- 02 — DEMO TAG - SEE KEYNOTE LEGEND; KEY NUMBER

FLOOR PLAN LEGEND

ALSO SEE WALL TYPES SHEET A004

- EXISTING WALL/ COLUMN TO REMAIN
- NEW METAL STUD / GYPSUM WALLBOARD WALL
- NEW MASONRY WALL
- NEW STEEL/ CONCRETE COLUMN - SEE STRUCTURAL
- FEC-X — FIRE EXTINGUISHER CABINET: FEC-1: SEMI-RECESSED CABINET W/ FE-1; FEC-2: SURFACE MOUNT CABINET W/ FE-1
- FE-X — FIRE EXTINGUISHER ON WALL BRACKET: FE-1: MULTI-PURPOSE DRY CHEM. EXTINGUISHER (TYPE A-B-C); FE-2: KITCHEN/ GREASE EXTINGUISHER (TYPE K)
- GCE — GWB COLUMN ENCLOSURE
- MCE — METAL COLUMN ENCLOSURE
- PCE — PORCELAIN TILE COLUMN ENCLOSURE
- ROOM TAG - SEE A900 FOR FINISHES; Room name — ROOM NAME; 101 — ROOM NUMBER
- 1i — WALL TAG - SEE SHEETS A004; WALL TYPE; WHERE A WALLTYPE LEADER PASSES THROUGH 2 OR MORE WALLS, ALL OF THOSE WALLS SHALL BE OF THE TYPE INDICATED
- 101 — DOOR TAG - SEE SHEET A800; DOOR NUMBER
- A — WINDOW TAG SEE SHEET A700
- CW — CURTAINWALL TYPE SEE SHEET A700

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE
0 4' 8' 16'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
01/26/26	As indicated
DRAWN BY: FFF	CHECKED BY: CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

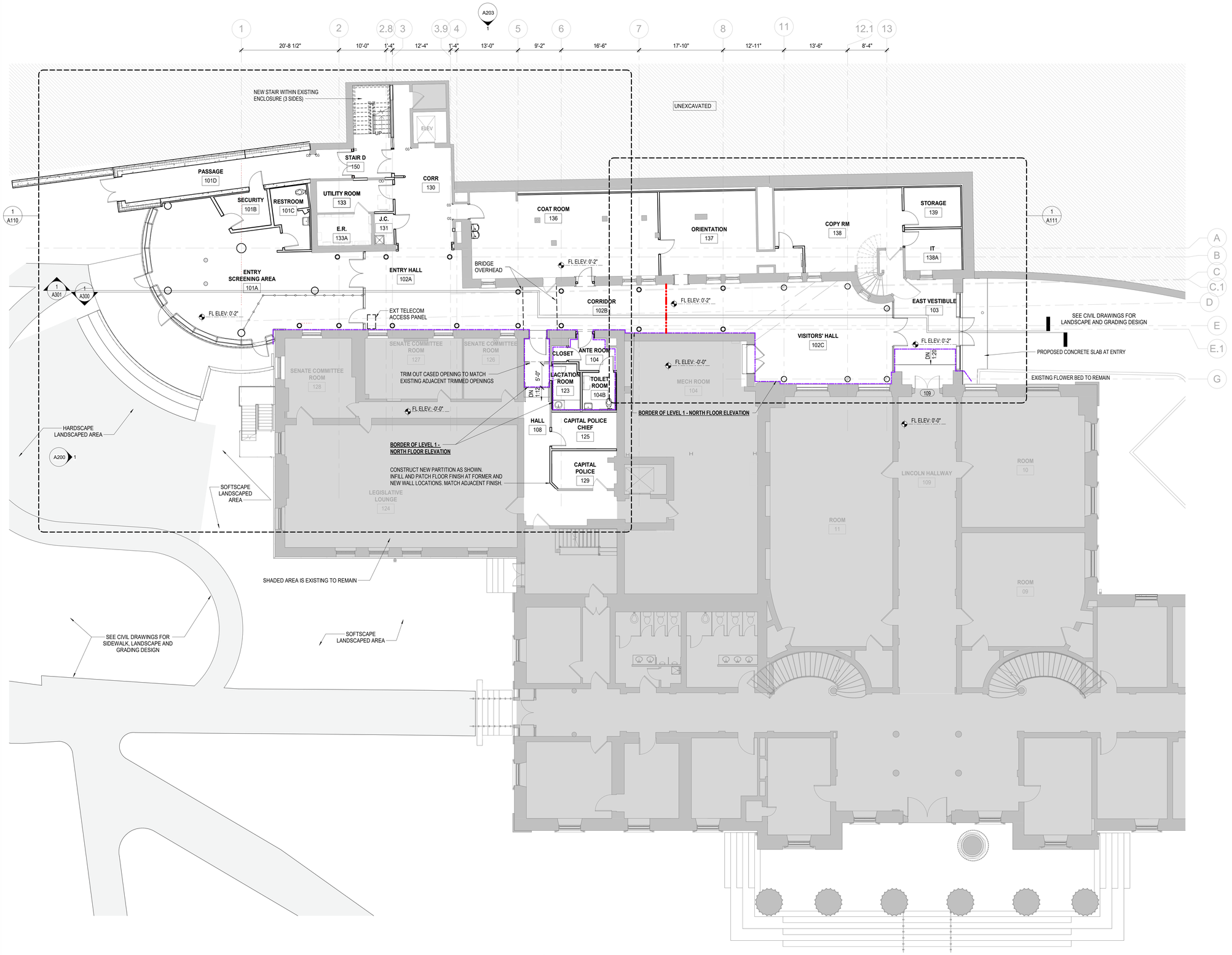
SHEET CONTENTS:

DEMO PLAN - L2 & L3

SHEET NO: **AD101**

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10/23/2026 4:00:03 PM



FLOOR PLAN GENERAL NOTES

ALSO SEE SYMBOL LEGEND ON COVER SHEET.

1. **DIMENSIONS:** ALL INTERIOR DIMENSIONS ARE TO FACE OF GWB OR TILE FINISH UNLESS OTHERWISE NOTED. EXTERIOR DIMENSIONS ARE TO NOMINAL CORNER OF MASONRY UNLESS NOTED OTHERWISE
2. PLANS ARE TO BE VIEWED IN CONJUNCTION WITH CIVIL, LANDSCAPE, STRUCTURAL, MEP/FP AND ALL OTHER TRADES, AS APPROPRIATE. DISCREPANCIES ARE TO BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR RESOLUTION BEFORE COMMENCING WORK.
3. ALL NON-ARCHITECTURAL INFORMATION SHOWN HERE IS FOR REFERENCE ONLY.
4. REFER TO CIVIL PLANS FOR LIMIT OF WORK.
5. REFER TO G200 LIFE SAFETY PLANS FOR LOCATIONS OF SMOKE AND FIRE RESISTANT RATED CONSTRUCTION.
6. THE DISTANCE FROM THE HINGE SIDE OF THE DOOR TO THE FACE OF ADJACENT PERPENDICULAR WALL SHALL BE 6 INCHES (INCLUDING FRAME) UNLESS NOTED OTHERWISE.
7. ALL VERTICAL AND HORIZONTAL PENETRATIONS THROUGH RATED ASSEMBLIES ARE TO BE BE SEALED WITH UL-LISTED FIRESAFING AND/OR SEALANT ASSEMBLIES TO MAINTAIN RATING.
8. KEEP STANDPIPES AND ASSOCIATED ASSEMBLIES CLEAR OF THE REQUIRED PATH OF EGRESS.

FLOOR PLAN LEGEND

ALSO SEE WALL TYPES SHEET A004

- EXISTING WALL/ COLUMN TO REMAIN
- NEW METAL STUD / GYPSUM WALLBOARD WALL
- NEW MASONRY WALL
- NEW STEEL/ CONCRETE COLUMN - SEE STRUCTURAL
- FEC-X — FIRE EXTINGUISHER CABINET: FEC-1: SEMI-RECESSED CABINET W/ FE-1 FEC-2: SURFACE MOUNT CABINET W/ FE-1
- FE-X — FIRE EXTINGUISHER ON WALL BRACKET: FE-1: MULTI-PURPOSE DRY CHEM. EXTINGUISHER (TYPE A,B,C) FE-2: KITCHEN/ GREASE EXTINGUISHER (TYPE K)
- GCE — GWB COLUMN ENCLOSURE
- MCE — METAL COLUMN ENCLOSURE
- PCE — PORCELAIN TILE COLUMN ENCLOSURE

Room name — ROOM TAG - SEE A900 FOR FINISHES
101 — ROOM NAME / ROOM NUMBER
ti — WALL TAG - SEE SHEETS A003, A004 WALL TYPE WHERE A WALLTYPE LEADER PASSES THROUGH 2 OR MORE WALLS, ALL OF THOSE WALLS SHALL BE OF THE TYPE INDICATED
101 — DOOR TAG - SEE SHEET A800 DOOR NUMBER
A — WINDOW TAG SEE SHEET A810
CW — CURTAINWALL TYPE SEE SHEET A700

FLOOR PLAN NOTES

1. PROVIDE TEMPORARY 2-HOUR FIRE-RESISTANCE-RATED SHAFT WALL PROTECTION AT EXISTING HISTORIC WINDOWS AND OTHER OPENINGS AT 2HR WALL DURING CONSTRUCTION. MAINTAIN REQUIRED RATING UNTIL PERMANENT RATED GLAZING ASSEMBLIES ARE INSTALLED. REMOVE TEMPORARY PROTECTION UPON COMPLETION.

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	1/8" = 1'-0"
DRAWN BY: FFF	CHECKED BY: CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: OVERALL PLAN - LEVEL 1

SHEET NO: A100

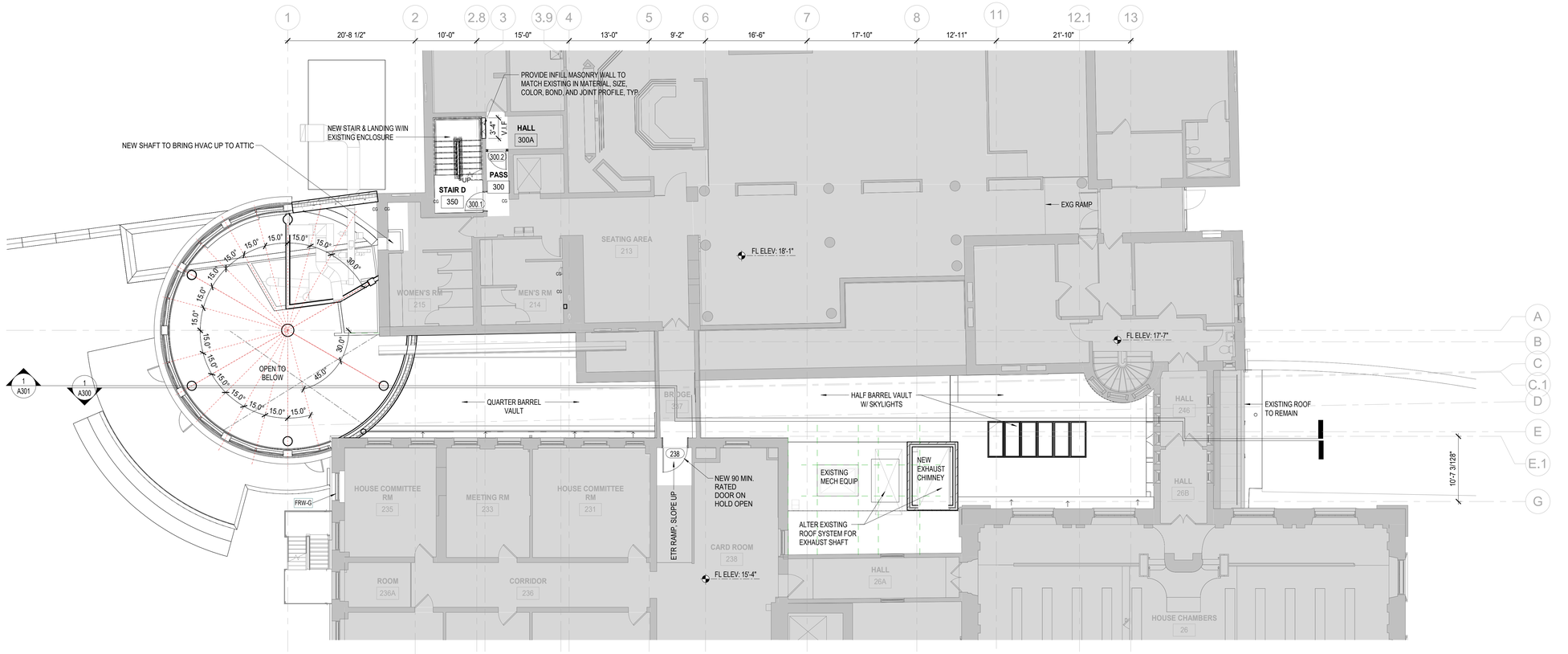
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SCALE: 1/8" = 1'-0"

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE 0 4' 8' 16'

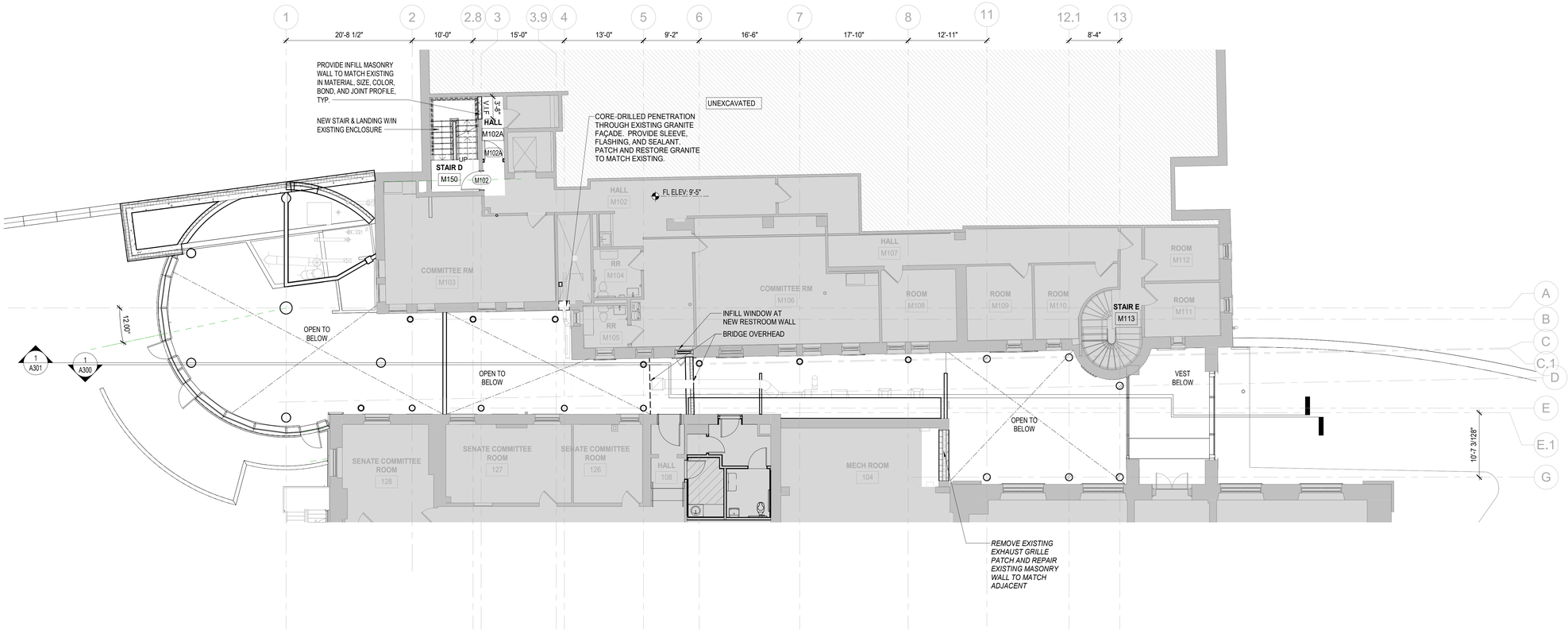
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10/23/2026 4:49:03 PM



2 A101 LEVEL 2 NORTH PLAN

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



1 A101 MEZZANINE PLAN

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

10/23/2025 4:00:05 PM

FLOOR PLAN GENERAL NOTES

ALSO SEE SYMBOL LEGEND ON COVER SHEET.

1. **DIMENSIONS:** ALL INTERIOR DIMENSIONS ARE TO FACE OF GWB OR TILE FINISH UNLESS OTHERWISE NOTED. EXTERIOR DIMENSIONS ARE TO NOMINAL CORNER OF MASONRY UNLESS NOTED OTHERWISE
2. PLANS ARE TO BE VIEWED IN CONJUNCTION WITH CIVIL, LANDSCAPE, STRUCTURAL, MEP/FP AND ALL OTHER TRADES, AS APPROPRIATE. DISCREPANCIES ARE TO BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR RESOLUTION BEFORE COMMENCING WORK.
3. ALL NON-ARCHITECTURAL INFORMATION SHOWN HERE IS FOR REFERENCE ONLY.
4. REFER TO CIVIL PLANS FOR LIMIT OF WORK.
5. REFER TO G200 LIFE SAFETY PLANS FOR LOCATIONS OF SMOKE AND FIRE RESISTANT RATED CONSTRUCTION.
6. THE DISTANCE FROM THE HINGE SIDE OF THE DOOR TO THE FACE OF ADJACENT PERPENDICULAR WALL SHALL BE 6 INCHES (INCLUDING FRAME) UNLESS NOTED OTHERWISE.
7. ALL VERTICAL AND HORIZONTAL PENETRATIONS THROUGH RATED ASSEMBLIES ARE TO BE BE SEALED WITH UL-LISTED FIRESAFING AND/OR SEALANT ASSEMBLIES TO MAINTAIN RATING.
8. KEEP STANDPIPES AND ASSOCIATED ASSEMBLIES CLEAR OF THE REQUIRED PATH OF EGRESS.

FLOOR PLAN LEGEND

ALSO SEE WALL TYPES SHEET A004

- EXISTING WALL/ COLUMN TO REMAIN
- NEW METAL STUD / GYPSUM WALLBOARD WALL
- NEW MASONRY WALL
- NEW STEEL/ CONCRETE COLUMN - SEE STRUCTURAL
- FEC-X — FIRE EXTINGUISHER CABINET: FEC-1: SEMI-RECESSED CABINET W/ FE-1; FEC-2: SURFACE MOUNT CABINET W/ FE-1
- FE-X — FIRE EXTINGUISHER ON WALL BRACKET: FE-1: MULTI-PURPOSE DRY CHEM. EXTINGUISHER (TYPE A,B,C) FE-2: KITCHEN/ GREASE EXTINGUISHER (TYPE K)
- GCE — GWB COLUMN ENCLOSURE
- MCE — METAL COLUMN ENCLOSURE
- PCE — PORCELAIN TILE COLUMN ENCLOSURE

Room name — ROOM TAG - SEE A900 FOR FINISHES; ROOM NAME
101 — ROOM NUMBER
ti — WALL TAG - SEE SHEETS A003, A004; WALL TYPE; WHERE A WALLTYPE LEADER PASSES THROUGH 2 OR MORE WALLS, ALL OF THOSE WALLS SHALL BE OF THE TYPE INDICATED
101 — DOOR TAG - SEE SHEET A800; DOOR NUMBER
A — WINDOW TAG; SEE SHEET A810
CW — CURTAINWALL TYPE; SEE SHEET A700

FLOOR PLAN NOTES

1. PROVIDE TEMPORARY 2-HOUR FIRE-RESISTANCE-RATED SHAFT WALL PROTECTION AT EXISTING HISTORIC WINDOWS AND OTHER OPENINGS AT 2HR WALL DURING CONSTRUCTION. MAINTAIN REQUIRED RATING UNTIL PERMANENT RATED GLAZING ASSEMBLIES ARE INSTALLED. REMOVE TEMPORARY PROTECTION UPON COMPLETION.

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE
0 4' 8' 16'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
01/26/26	1/8" = 1'-0"
DRAWN BY: FFF	CHECKED BY: CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: OVERALL PLAN - MEZZ & L2

SHEET NO: A101

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2 A102 LEVEL 3 NORTH - PLAN

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

FLOOR PLAN GENERAL NOTES

ALSO SEE SYMBOL LEGEND ON COVER SHEET.

1. **DIMENSIONS:** ALL INTERIOR DIMENSIONS ARE TO FACE OF GWB OR TILE FINISH UNLESS OTHERWISE NOTED. EXTERIOR DIMENSIONS ARE TO NOMINAL CORNER OF MASONRY UNLESS NOTED OTHERWISE
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FLOOR PLAN LEGEND

ALSO SEE WALL TYPES SHEET A004

- EXISTING WALL/ COLUMN TO REMAIN
- NEW METAL STUD / GYPSUM WALLBOARD WALL
- NEW MASONRY WALL
- NEW STEEL/ CONCRETE COLUMN - SEE STRUCTURAL
- FEC-X — FIRE EXTINGUISHER CABINET: FEC-1: SEMI-RECESSED CABINET W/ FE-1; FEC-2: SURFACE MOUNT CABINET W/ FE-1
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Room name — ROOM TAG - SEE A900 FOR FINISHES; ROOM NAME

101 — ROOM NUMBER

fi — WALL TAG - SEE SHEETS A003, A004; WALL TYPE; WHERE A WALLTYPE LEADER PASSES THROUGH 2 OR MORE WALLS, ALL OF THOSE WALLS SHALL BE OF THE TYPE INDICATED

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A — WINDOW TAG; SEE SHEET A810

CW — CURTAINWALL TYPE; SEE SHEET A700

FLOOR PLAN NOTES

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N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE
0 4' 8' 16'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 01/26/26

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

DRAWN BY: FFF

CHECKED BY: CP/SB

ISSUE LOG:

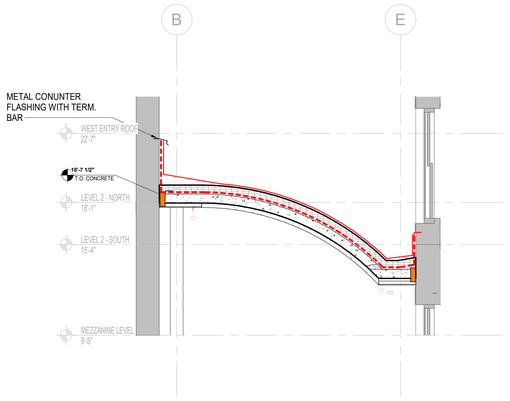
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100% DD SET	10/23/2026

SHEET CONTENTS: OVERALL PLAN - LEVEL 3

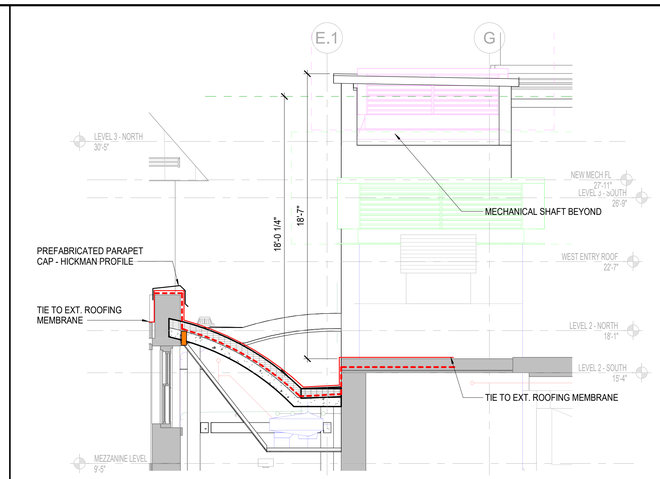
SHEET NO: A102

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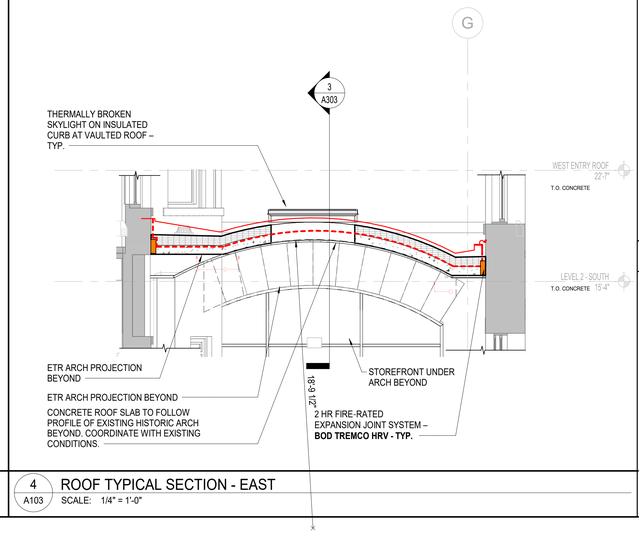
10/23/2026 4:00:06 PM



3 A103 ROOF TYPICAL SECTION - WEST
SCALE: 1/4" = 1'-0"



5 A103 ROOF TYPICAL SECTION - CENTER
SCALE: 1/4" = 1'-0"



4 A103 ROOF TYPICAL SECTION - EAST
SCALE: 1/4" = 1'-0"

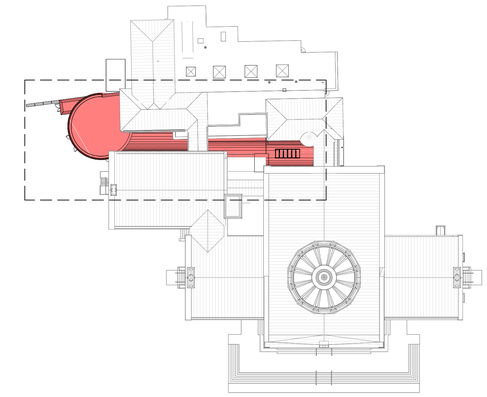
FLOOR PLAN GENERAL NOTES

ALSO SEE SYMBOL LEGEND ON COVER SHEET.

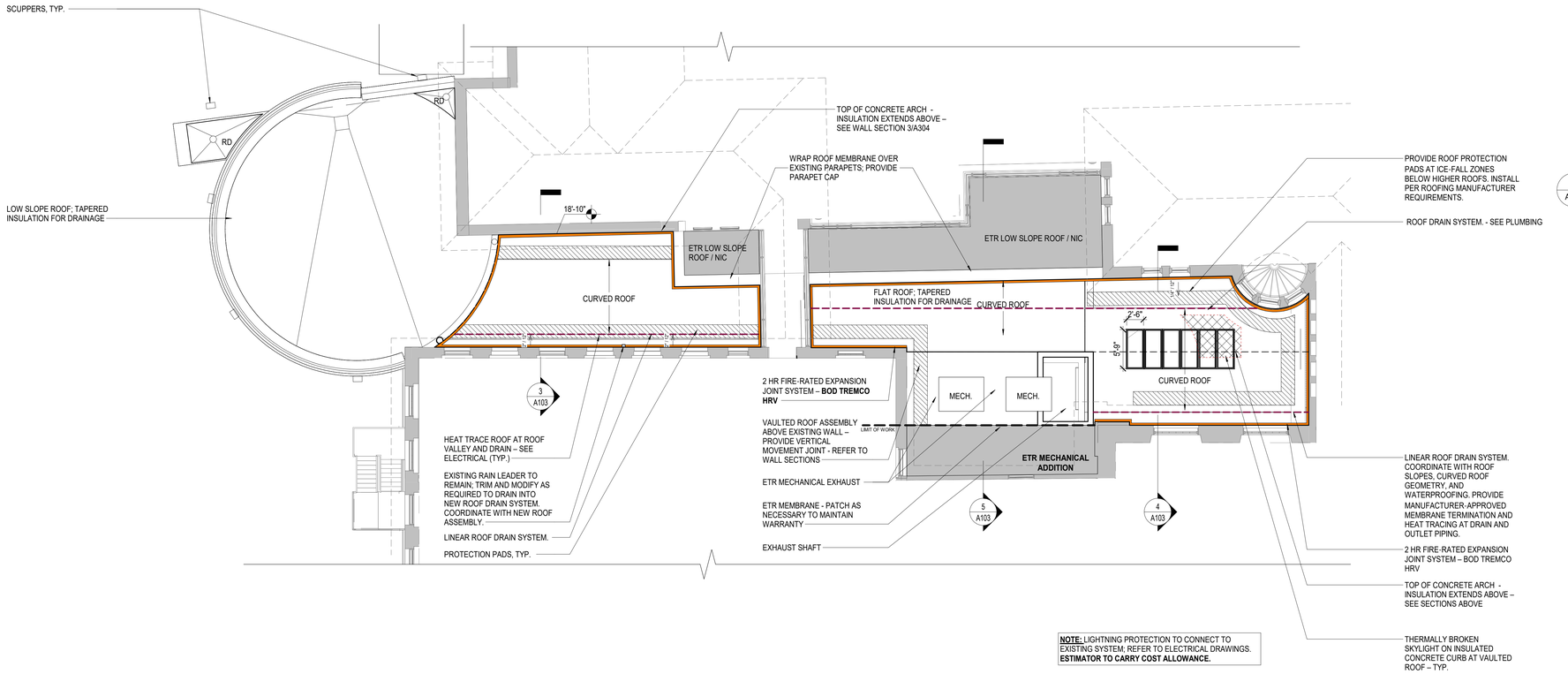
1. **DIMENSIONS:** ALL INTERIOR DIMENSIONS ARE TO FACE OF GWB OR TILE FINISH UNLESS OTHERWISE NOTED. EXTERIOR DIMENSIONS ARE TO NOMINAL CORNER OF MASONRY UNLESS NOTED OTHERWISE
2. PLANS ARE TO BE VIEWED IN CONJUNCTION WITH CIVIL, LANDSCAPE, STRUCTURAL, MEP/FP AND ALL OTHER TRADES, AS APPROPRIATE. DISCREPANCIES ARE TO BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR RESOLUTION BEFORE COMMENCING WORK.
3. ALL NON-ARCHITECTURAL INFORMATION SHOWN HERE IS FOR REFERENCE ONLY.
4. REFER TO CIVIL PLANS FOR LIMIT OF WORK.
5. REFER TO G200 LIFE SAFETY PLANS FOR LOCATIONS OF SMOKE AND FIRE RESISTANT RATED CONSTRUCTION.
6. THE DISTANCE FROM THE HINGE SIDE OF THE DOOR TO THE FACE OF ADJACENT PERPENDICULAR WALL SHALL BE 6 INCHES (INCLUDING FRAME) UNLESS NOTED OTHERWISE.
7. ALL VERTICAL AND HORIZONTAL PENETRATIONS THROUGH RATED ASSEMBLIES ARE TO BE BE SEALED WITH UL-LISTED FIRESAFING AND/OR SEALANT ASSEMBLIES TO MAINTAIN RATING.
8. KEEP STANDPIPES AND ASSOCIATED ASSEMBLIES CLEAR OF THE REQUIRED PATH OF EGRESS.

ROOF PLAN LEGEND

RD	ROOF DRAIN
MT	MAINTENANCE TIEDOWN
	GUIDE WIRE
SC	SCUPPER
SCP	SCUPPER TO PAD ON ROOF BELOW
SWRL	SCUPPER WITH RAIN LEADER TO PAD ON ROOF BELOW
RMF	ROOF MANIFOLD



1 A103 OVERALL ROOF PLAN
SCALE: 1" = 40'-0"



NOTE: LIGHTNING PROTECTION TO CONNECT TO EXISTING SYSTEM; REFER TO ELECTRICAL DRAWINGS. **ESTIMATOR TO CARRY COST ALLOWANCE.**

2 A103 ROOF PLAN - ENTRY & INFILL
SCALE: 1/8" = 1'-0"

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE
0 4' 8' 16'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 06/10/21
SCALE: As indicated
DRAWN BY: FFF
CHECKED BY: CP/SB

ISSUE LOG:

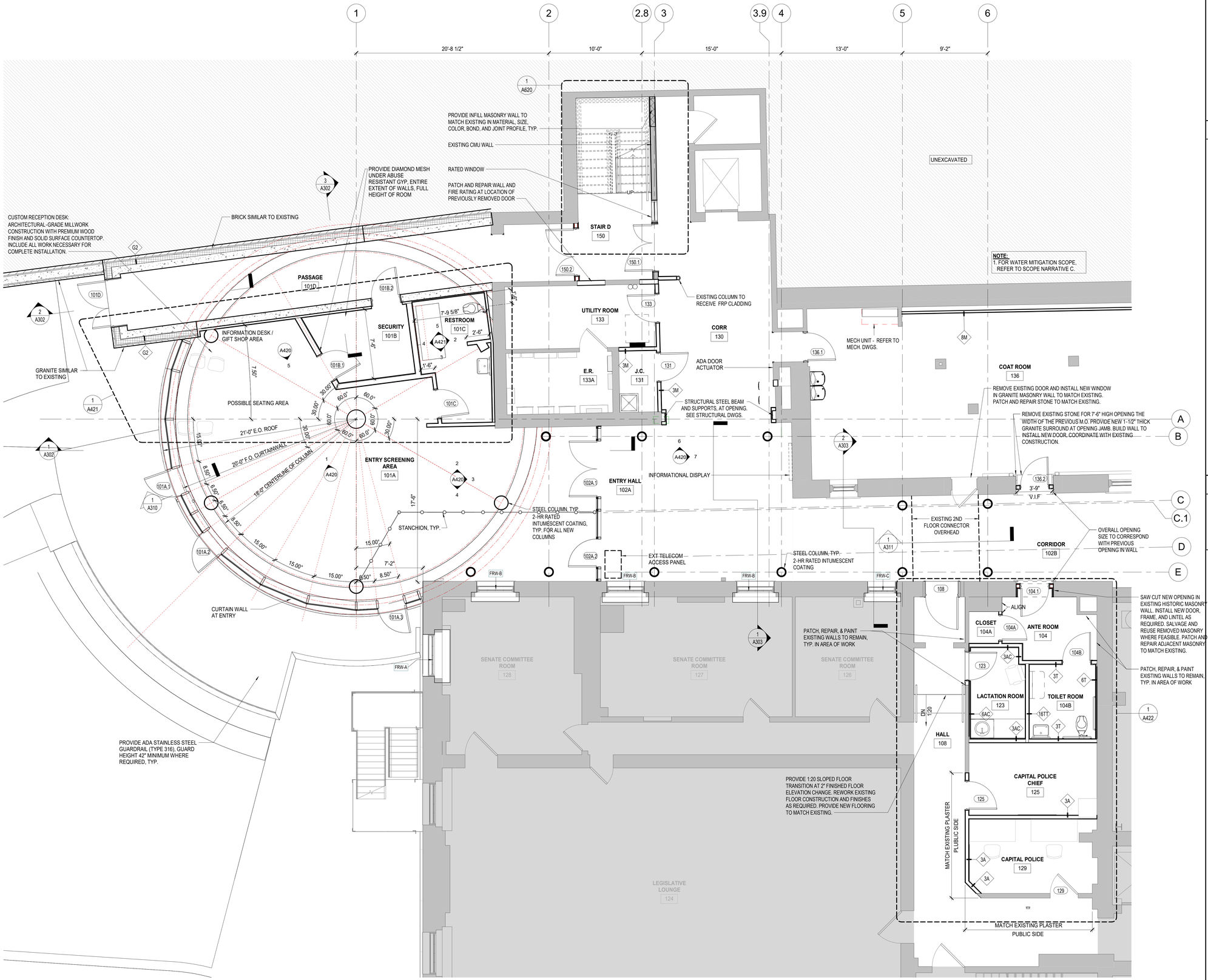
SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: OVERALL ROOF PLAN

SHEET NO: A103

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FLOOR PLAN GENERAL NOTES

ALSO SEE SYMBOL LEGEND ON COVER SHEET.

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5. REFER TO C200 LIFE SAFETY PLANS FOR LOCATIONS OF SMOKE AND FIRE RESISTANT RATED CONSTRUCTION.
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7. ALL VERTICAL AND HORIZONTAL PENETRATIONS THROUGH RATED ASSEMBLIES ARE TO BE BE SEALED WITH UL-LISTED FIRESAFING AND/OR SEALANT ASSEMBLIES TO MAINTAIN RATING.
8. KEEP STANDPIPES AND ASSOCIATED ASSEMBLIES CLEAR OF THE REQUIRED PATH OF EGRESS.

FLOOR PLAN LEGEND

ALSO SEE WALL TYPES SHEET A004

- EXISTING WALL/ COLUMN TO REMAIN
- NEW METAL STUD / GYPSUM WALLBOARD WALL
- NEW MASONRY WALL
- NEW STEEL/ CONCRETE COLUMN - SEE STRUCTURAL
- FEC-X — FIRE EXTINGUISHER CABINET: FEC-1: SEMI-RECESSED CABINET W/ FE-1; FEC-2: SURFACE MOUNT CABINET W/ FE-1
- FE-X — FIRE EXTINGUISHER ON WALL BRACKET: FE-1: MULTI-PURPOSE DRY CHEM. EXTINGUISHER (TYPE A-B-C); FE-2: KITCHEN/ GREASE EXTINGUISHER (TYPE K)
- GCE — GWB COLUMN ENCLOSURE
- MCE — METAL COLUMN ENCLOSURE
- PCE — PORCELAIN TILE COLUMN ENCLOSURE

Room name — 101 — ROOM TAG - SEE A900 FOR FINISHES: ROOM NAME / ROOM NUMBER

11 — WALL TAG - SEE SHEETS A003, A004: WALL TYPE. WHERE A WALLTYPE LEADER PASSES THROUGH 2 OR MORE WALLS, ALL OF THOSE WALLS SHALL BE OF THE TYPE INDICATED

101 — DOOR TAG - SEE SHEET A800: DOOR NUMBER

A — WINDOW TAG: SEE SHEET A810

CW — CURTAINWALL TYPE: SEE SHEET A700

FLOOR PLAN NOTES

1. PROVIDE TEMPORARY 2-HOUR FIRE-RESISTANCE-RATED SHAFT WALL PROTECTION AT EXISTING HISTORIC WINDOWS AND OTHER OPENINGS AT 2HR WALL DURING CONSTRUCTION. MAINTAIN REQUIRED RATING UNTIL PERMANENT RATED GLAZING ASSEMBLIES ARE INSTALLED. REMOVE TEMPORARY PROTECTION UPON COMPLETION.

1 / A110 — ENLARGED PLAN - WEST
SCALE: 1/4" = 1'-0"

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE
0 2' 4' 8'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	As indicated
DRAWN BY: FFF	CHECKED BY: CP/SB

ISSUE LOG:

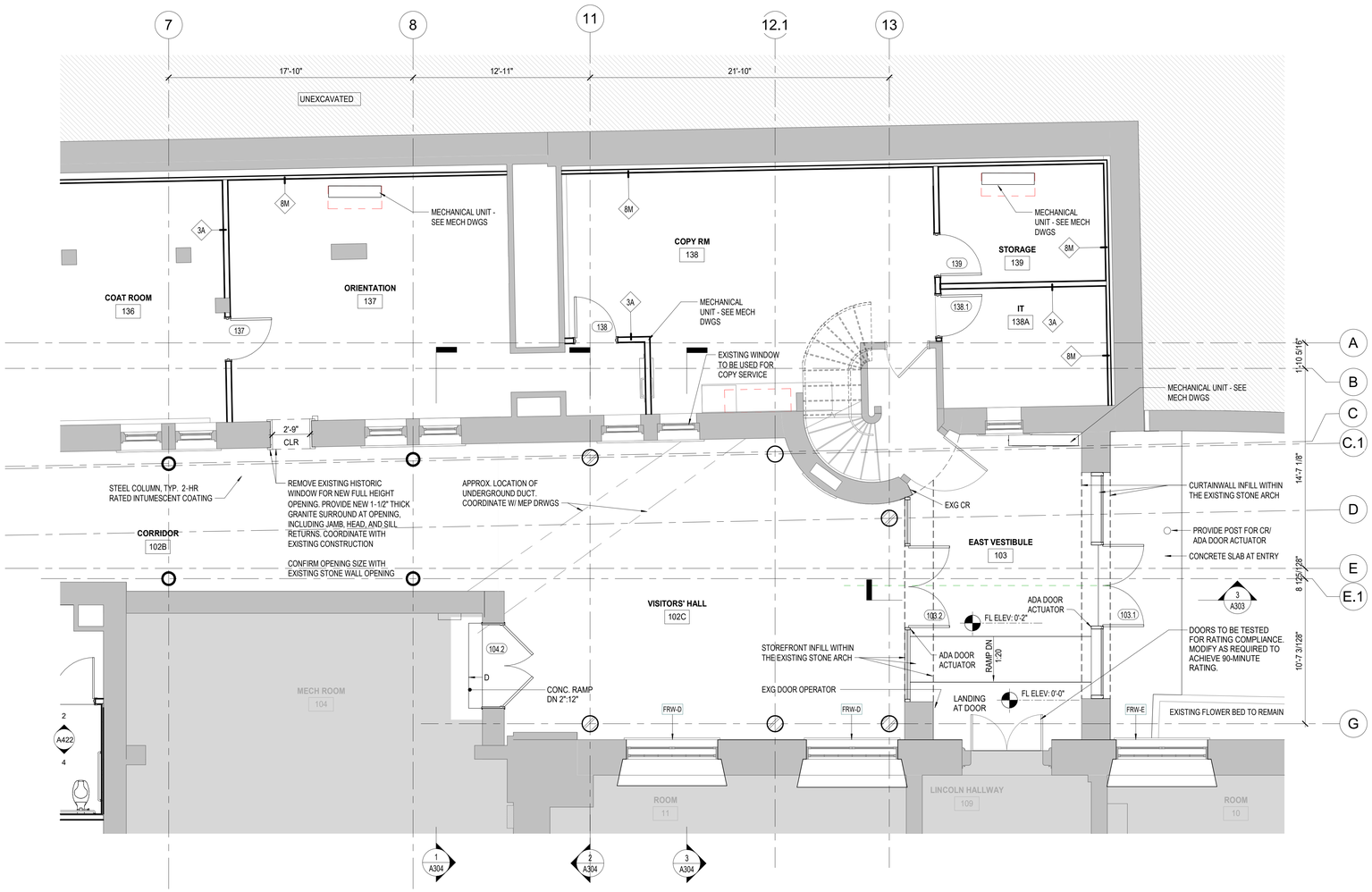
SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: ENLARGED PLAN LEVEL 1 - WEST

SHEET NO: A110

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FLOOR PLAN GENERAL NOTES

ALSO SEE SYMBOL LEGEND ON COVER SHEET.

1. **DIMENSIONS:** ALL INTERIOR DIMENSIONS ARE TO FACE OF GWB OR TILE FINISH UNLESS OTHERWISE NOTED. EXTERIOR DIMENSIONS ARE TO NOMINAL CORNER OF MASONRY UNLESS NOTED OTHERWISE
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FLOOR PLAN LEGEND

ALSO SEE WALL TYPES SHEET A004

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- NEW MASONRY WALL
- NEW STEEL/ CONCRETE COLUMN - SEE STRUCTURAL
- FEC-X — FIRE EXTINGUISHER CABINET: FEC-1: SEMI-RECESSED CABINET W/ FE-1 FEC-2: SURFACE MOUNT CABINET W/ FE-1
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Room name — ROOM TAG - SEE A900 FOR FINISHES — ROOM NAME
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ti — WALL TAG - SEE SHEETS A003, A004 WALL TYPE WHERE A WALLTYPE LEADER PASSES THROUGH 2 OR MORE WALLS, ALL OF THOSE WALLS SHALL BE OF THE TYPE INDICATED

101 — DOOR TAG - SEE SHEET A800 DOOR NUMBER

A — WINDOW TAG SEE SHEET A810

CW — CURTAINWALL TYPE SEE SHEET A700

FLOOR PLAN NOTES

1. PROVIDE TEMPORARY 2-HOUR FIRE-RESISTANCE-RATED SHAFT WALL PROTECTION AT EXISTING HISTORIC WINDOWS AND OTHER OPENINGS AT 2HR WALL DURING CONSTRUCTION. MAINTAIN REQUIRED RATING UNTIL PERMANENT RATED GLAZING ASSEMBLIES ARE INSTALLED. REMOVE TEMPORARY PROTECTION UPON COMPLETION.

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	As indicated
DRAWN BY: FFF	CHECKED BY: CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:

ENLARGED PLAN LEVEL 1 - EAST

SHEET NO: **A111**

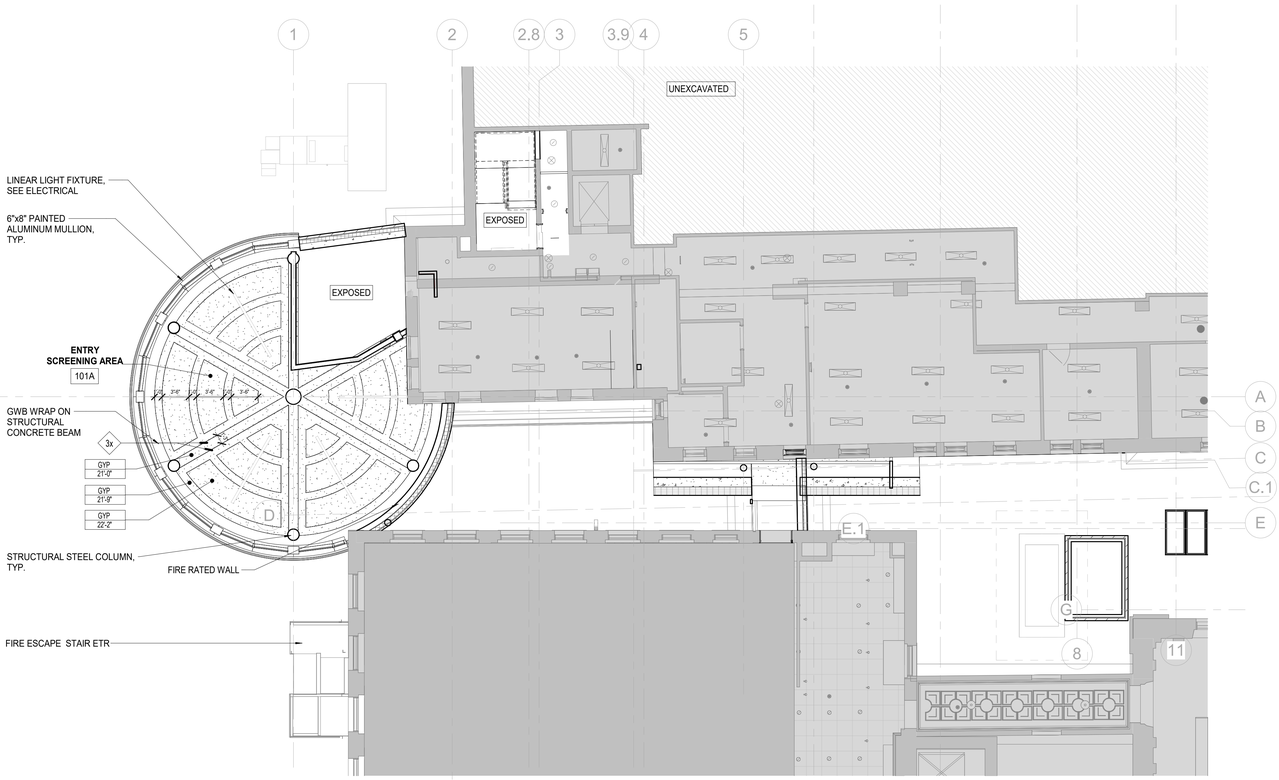
1 / A111 ENLARGED PLAN - EAST
SCALE: 1/4" = 1'-0"

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

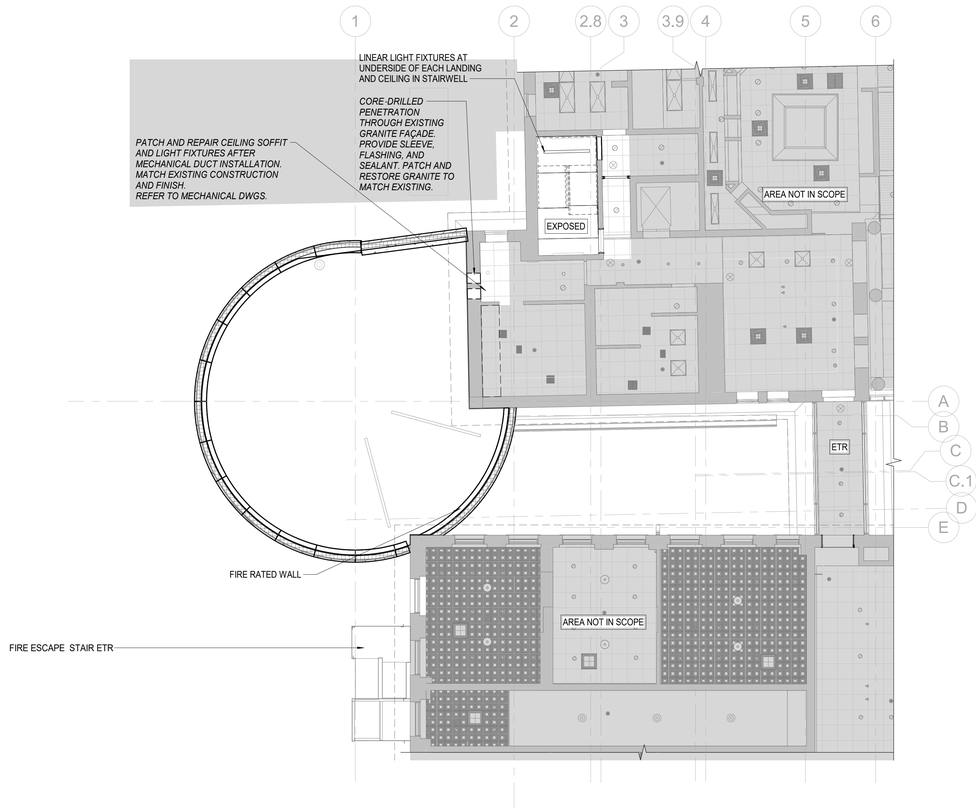
GRAPHIC SCALE 0 2' 4' 8'

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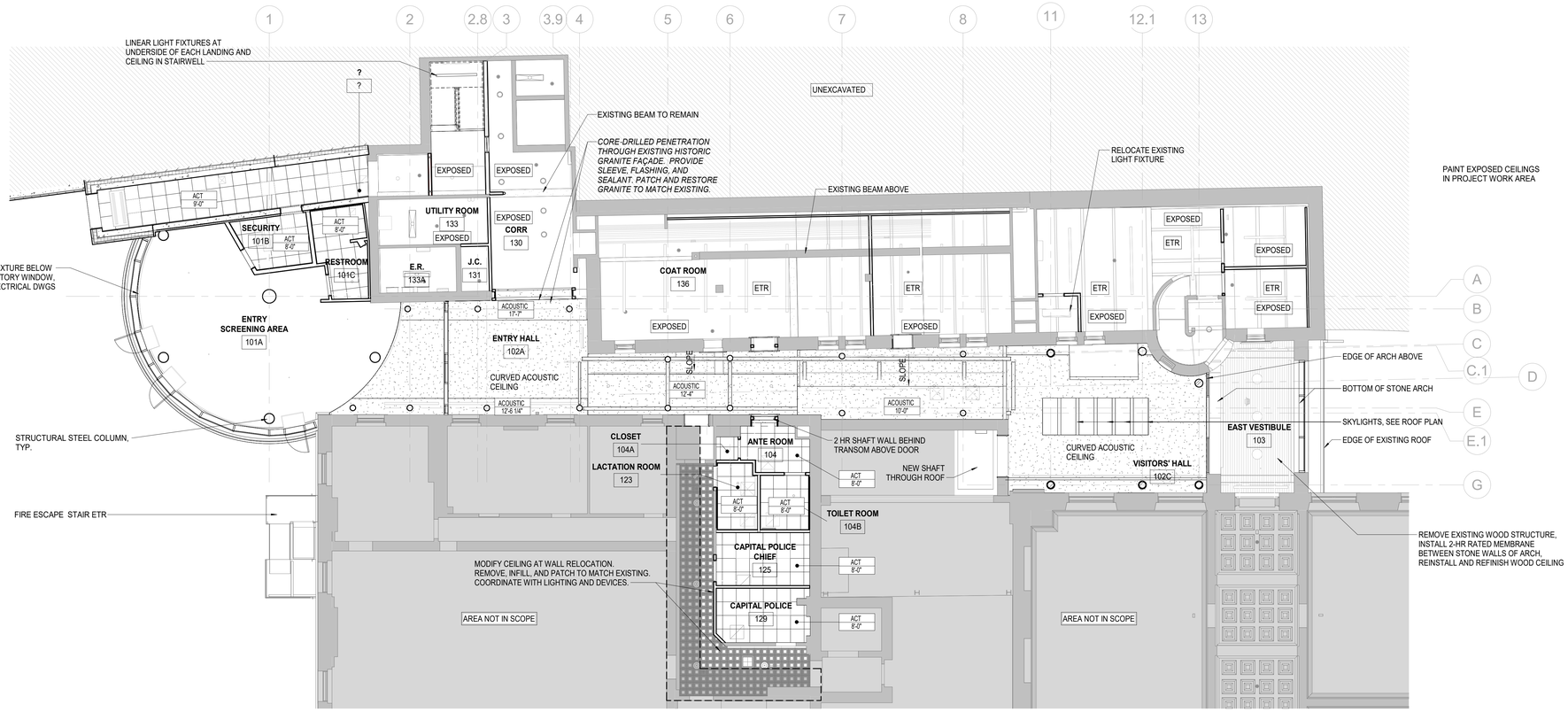
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3 A120 MEZZANINE REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"



2 A120 LEVEL 2 REFLECTIVE CEILING PLAN
SCALE: 1/8" = 1'-0"



1 A120 LEVEL 1 REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

REFLECTED CEIL. PLAN GENERAL NOTES

1. IF LOCATIONS OF ITEMS ON ARCHITECTURAL REFLECTED CEILING PLAN DIFFER FROM LOCATIONS ON DRAWINGS OF OTHER DISCIPLINES, BRING DISCREPANCIES TO THE ARCHITECT'S ATTENTION FOR RESOLUTION PRIOR TO STARTING THE WORK.
2. REFER TO ELECTRICAL DRAWINGS FOR LIGHT FIXTURE TYPES AND QUANTITIES, ETC.
3. REFER TO DWG A900 BASIS OF DESIGN SCHEDULE & FINISH SCHEDULE FOR DETAILS.

REFLECTED CEILING PLAN LEGEND

CEILING TYPES

- ACT-1 2'-0" x 2'-0"
- EXPOSED — NO CEILING
- GYPSUM BOARD
- MOISTURE RESISTANT ACT 2'-0" x 2'-0"
- MOISTURE RESISTANT GYPSUM BOARD
- EXT 4" WOOD PLANK CEILING TO BE REINSTALLED

LIGHT FIXTURES

- RECESSED CAN
- 1'x4' LINEAR BOX
- 2'x2' TROFFER
- 2'x4' TROFFER
- RECESSED LINEAR
- SUSPENDED LINEAR
- SURFACE MOUNTED
- PENDANT
- EXIT SIGN (FILL INDICATES FACE)
- RECESSED CEILING PROJECTOR SCREEN

MECHANICAL ITEMS

- LINEAR SUPPLY GRILL
- 2x2 SUPPLY GRILL
- 2x2 RETURN GRILL
- RADIANT HEATING CEILING PANELS

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE
0 4' 8' 16'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	1/8" = 1'-0"
DRAWN BY: FFF	CHECKED BY: CP/SB

ISSUE LOG:

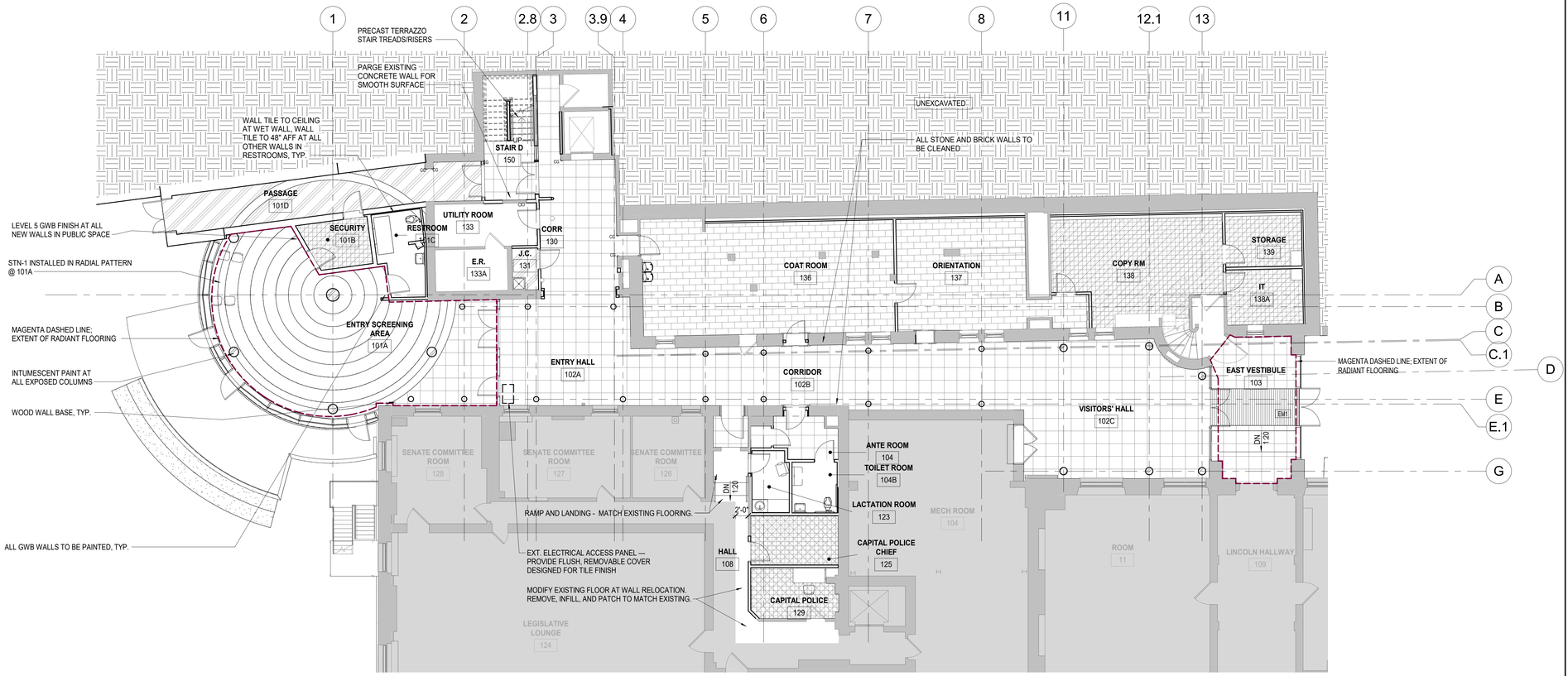
SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:
REFLECTED CEILING PLAN - LEVEL 1

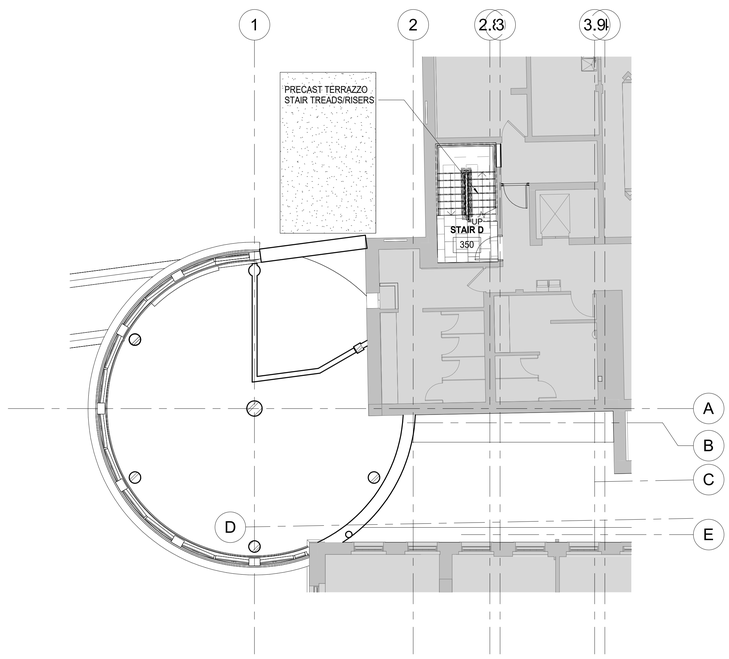
SHEET NO:
A120

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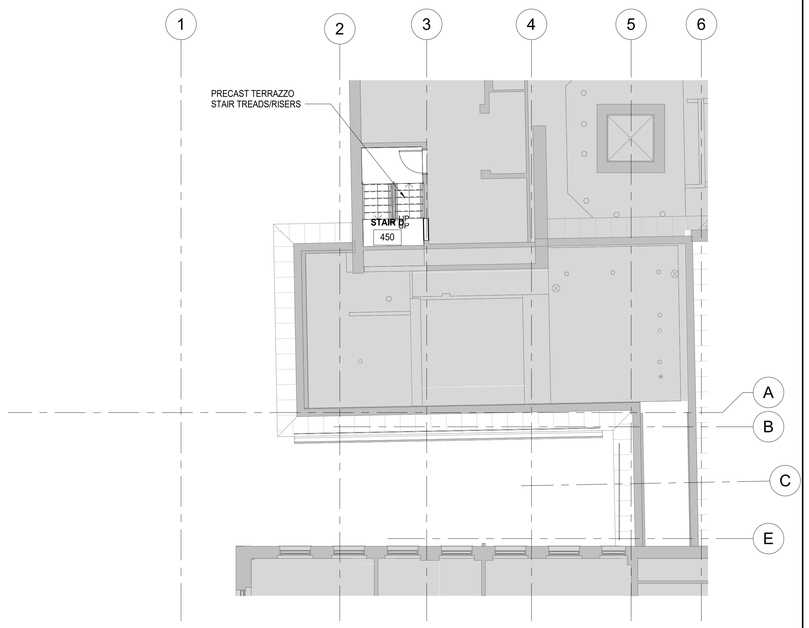
10/29/2026 4:00:15 PM



1 A130 FINISH PLAN LEVEL 1
SCALE: 1/8" = 1'-0"



2 A130 FINISH PLAN LEVEL 2
SCALE: 1/8" = 1'-0"



3 A130 FINISH PLAN LEVEL 3
SCALE: 1/8" = 1'-0"

FINISH SCHEDULE LEGEND

ACT	ACOUSTIC CEILING TILE
ACP	ACOUSTIC CEILING PANEL
AWP	ACOUSTIC WALL PANEL
BBT	BIO-BASED TILE
CG	CORNER GUARD
CONC	CONCRETE
CPT	CARPET
CQS	COMPOSITE QUARTZ SURFACE
CT	CERAMIC TILE
CUSH	CUSHION
DPG	DECORATIVE PLASTIC GLAZING
EM	ENTRY MAT
EPX	EPOXY FLOORING
EXP	EXPOSED, NO CEILING
FAF	FLUID APPLIED FLOORING
FRP	FIBER REINFORCED PLASTIC PANELS
GWB	GYPSUM WALL BOARD
GWB-A	GWB - ABUSE RESISTANT
GWB-M	GWB - MOISTURE RESISTANT
LIN	LINOLEUM
LVT	LUXURY VINYL TILE
PL	PLASTIC LAMINATE
PLSTR	PLASTER
PT	PAINT
PTD	PAINTED
RAF	RESILIENT ATHLETIC FLOOR
RB	RUBBER (FLOORING OR WALL BASE)
SDT	STATIC DISSIPATIVE TILE
SF	STOREFRONT
SS	STAINLESS STEEL
SSF	SOLID SURFACE
ST	STONE TILE
WC	WALL COVERING
WCS	WOOD CEILING SYSTEM
WD	WOOD
WDV	WOOD VENEER
WPN	WALL PROTECTION
WS	WINDOW SHADE
WSF	WOOD SPORTS FLOORING SYSTEM
VCT	VINYL COMPOSITION TILE

FINISH

FLOOR MATERIALS

- CONC-1 - SEALED CONCRETE
- ST-1 - STONE TILE - DANBY MARBLE
- CT-1 - CERAMIC TILE
- RF-1 - RESILIENT FLOORING LINOLEUM - SHEET
- RF-2 - RESILIENT FLOORING RUBBER TILE
- EPX-1 - EPOXY FLOORING
- EM-1 - ENTRANCE MATS - ALUMINUM GRATE W/ METAL PAN & DRAIN

N - PROJECT NORTH
T - TRUE NORTH
m - MAGNETIC NORTH

GRAPHIC SCALE
0 4' 8' 16'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

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FFF	CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
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100% DD SET	10/23/2026

SHEET CONTENTS: FINISH PLANS

SHEET NO: A130

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1 / A200 WEST ELEVATION
SCALE: 1/8" = 1'-0"

GRAPHIC SCALE
0 4' 8' 16'

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DRAWN BY: FFF	CHECKED BY: CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:

WEST EXTERIOR ELEVATION

SHEET NO: **A200**

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1 / A201 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

GRAPHIC SCALE
0 4' 8' 16'

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DRAWN BY:	CHECKED BY:
FFF	CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
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100% DD SET	10/23/2026

SHEET CONTENTS:

SOUTH EXTERIOR ELEVATION

SHEET NO:

A201

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1 / A202 EAST ELEVATION
SCALE: 1/8" = 1'-0"

GRAPHIC SCALE
0 4' 8' 16'

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75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:

EAST EXTERIOR ELEVATION

SHEET NO:

A202

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1 / A203 NORTH ELEVATION
SCALE: 1/8" = 1'-0"

GRAPHIC SCALE
0 4' 8' 16'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 06/10/21
SCALE: 1/8" = 1'-0"
DRAWN BY: FFF
CHECKED BY: CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

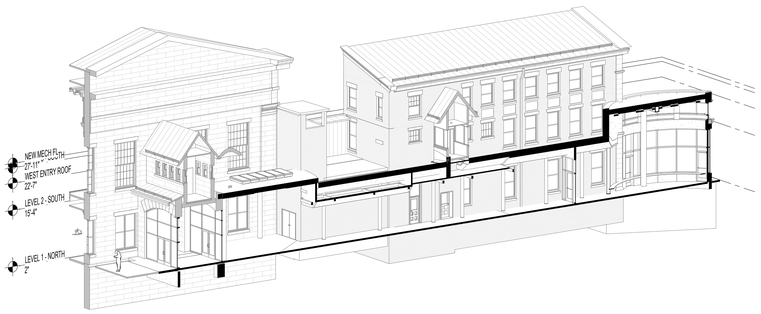
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NORTH EXTERIOR ELEVATION

SHEET NO: A203

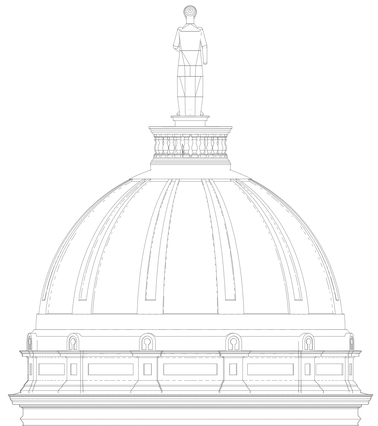
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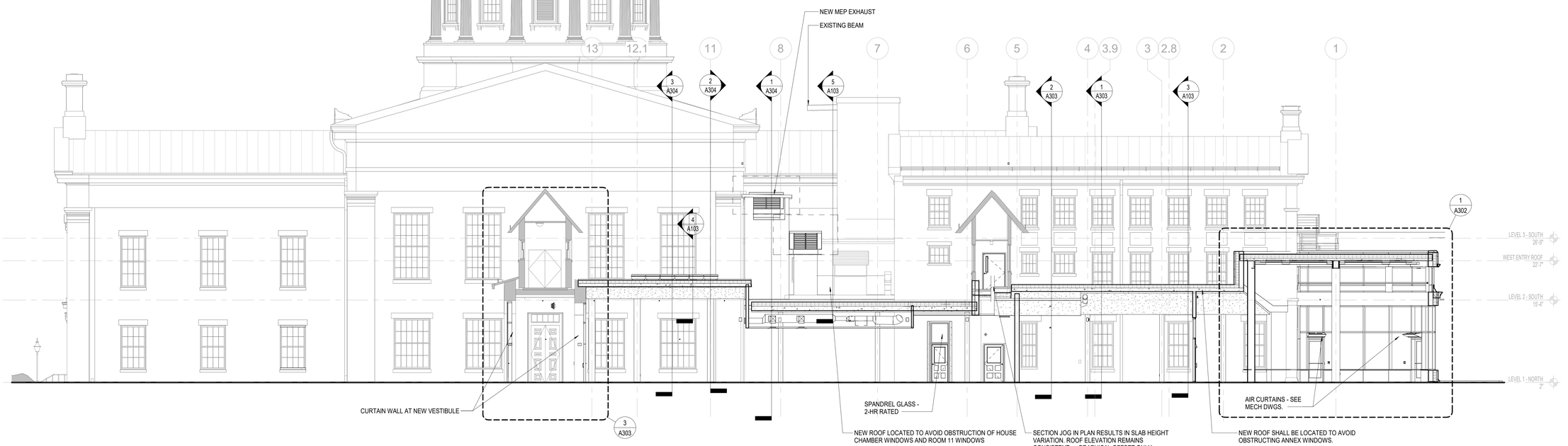
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2 / A300 3D SECTION LOOKING - SOUTH

SCALE:





1 / A300 BUILDING SECTION - SOUTH

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

GRAPHIC SCALE

0 4' 8' 16'

TYP. EXTERIOR ASSEMBLIES

ALSO SEE SYMBOL LEGEND ON COVER SHEET

NOTE: ASSEMBLIES ARE LISTED FROM EXTERIOR TO INTERIOR. SEE ASSOCIATED DETAILS FOR CLARIFICATION.

EXTERIOR WALL 1 - TYPICAL STONE WALL ON COLD-FORMED METAL FRAMING

- 2-1/4" STONE VENEER
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 1" METAL FURRING
- 6" METAL FRAMING
- 1" METAL FURRING
- 5/8" GYPSUM WALL BOARD

EXTERIOR WALL 2 - TYPICAL STONE WALL ON CONCRETE

- 2-1/4" STONE
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 10" CAST-IN-PLACE CONCRETE

EXTERIOR WALL 3 - TYPICAL BRICK WALL ON CONCRETE

- 3-1/2" BRICK VENEER
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 10" CAST-IN-PLACE CONCRETE

RF-1 - ROOF ASSEMBLY 1 - EPDM ON CONCRETE

- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 5 1/2" COMPOSITE ROOF DECK

RF-2 - ROOF ASSEMBLY 2 - EPDM ON CURVED CONCRETE

- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 6 1/2" COMPOSITE ROOF DECK

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 06/10/21

SCALE: As indicated

DRAWN BY: FFF

CHECKED BY: CP/SB

ISSUE LOG:

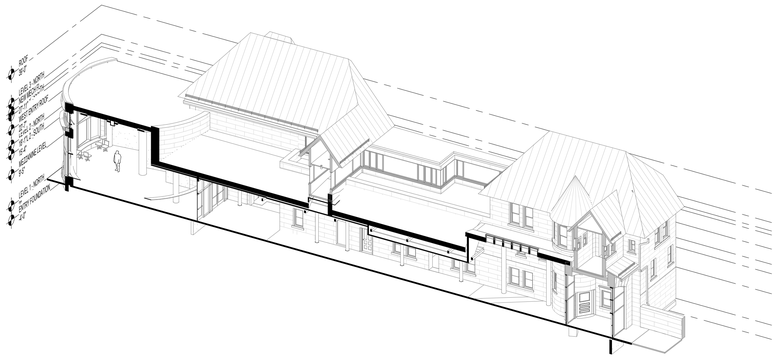
SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: BUILDING SECTIONS - SOUTH

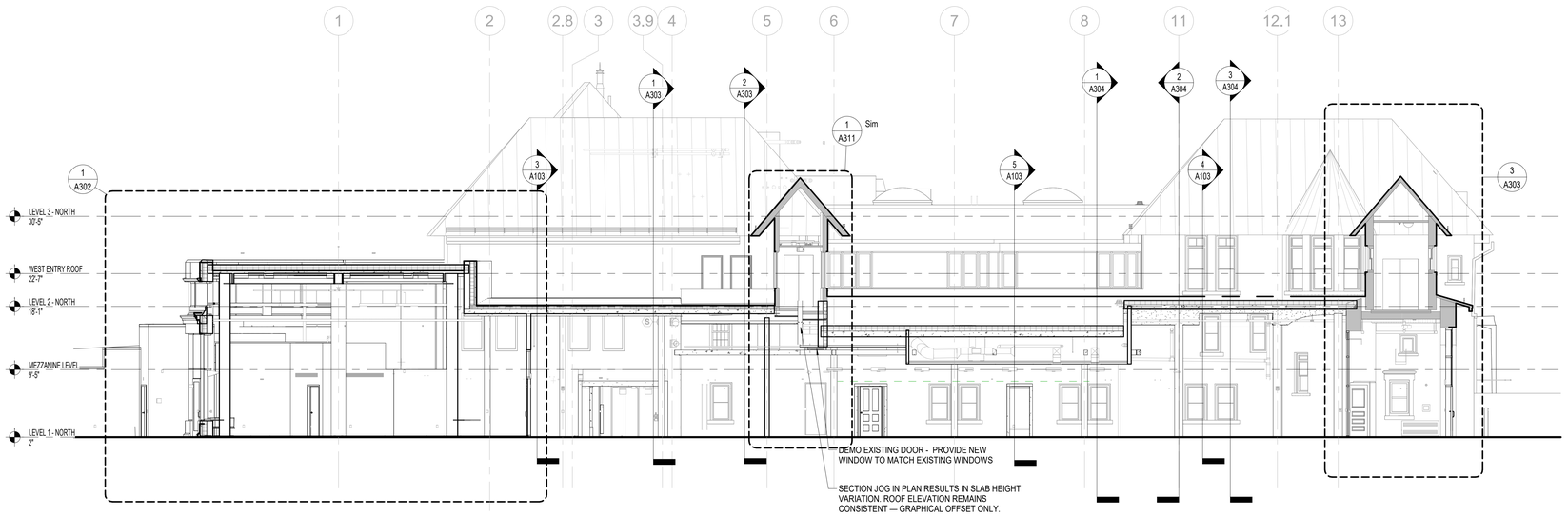
SHEET NO: A300

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4 A301 — 3D SECTION LOOKING NORTH
SCALE:



1 A301 — BUILDING SECTION - NORTH
SCALE: 1/8" = 1'-0"

TYP. EXTERIOR ASSEMBLIES

ALSO SEE SYMBOL LEGEND ON COVER SHEET

NOTE: ASSEMBLIES ARE LISTED FROM EXTERIOR TO INTERIOR. SEE ASSOCIATED DETAILS FOR CLARIFICATION.

EXTERIOR WALL 1 - TYPICAL STONE WALL ON COLD-FORMED METAL FRAMING

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- 1-1/4" AIR GAP
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- 5/8" GYPSUM SHEATHING
- 1" METAL FURRING
- 6" METAL FRAMING
- 1" METAL FURRING
- 5/8" GYPSUM WALL BOARD

EXTERIOR WALL 2 - TYPICAL STONE WALL ON CONCRETE

- 2-1/4" STONE
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 10" CAST-IN-PLACE CONCRETE

EXTERIOR WALL 3 - TYPICAL BRICK WALL ON CONCRETE

- 3-1/2" BRICK VENEER
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 10" CAST-IN-PLACE CONCRETE

RF-1 - ROOF ASSEMBLY 1 - EPDM ON CONCRETE

- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 5 1/2" COMPOSITE ROOF DECK

RF-2 - ROOF ASSEMBLY 2 - EPDM ON CURVED CONCRETE

- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 6 1/2" COMPOSITE ROOF DECK

GRAPHIC SCALE
0 4' 8' 16'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	As indicated
DRAWN BY:	CHECKED BY:
FFF	CP/SB

ISSUE LOG:

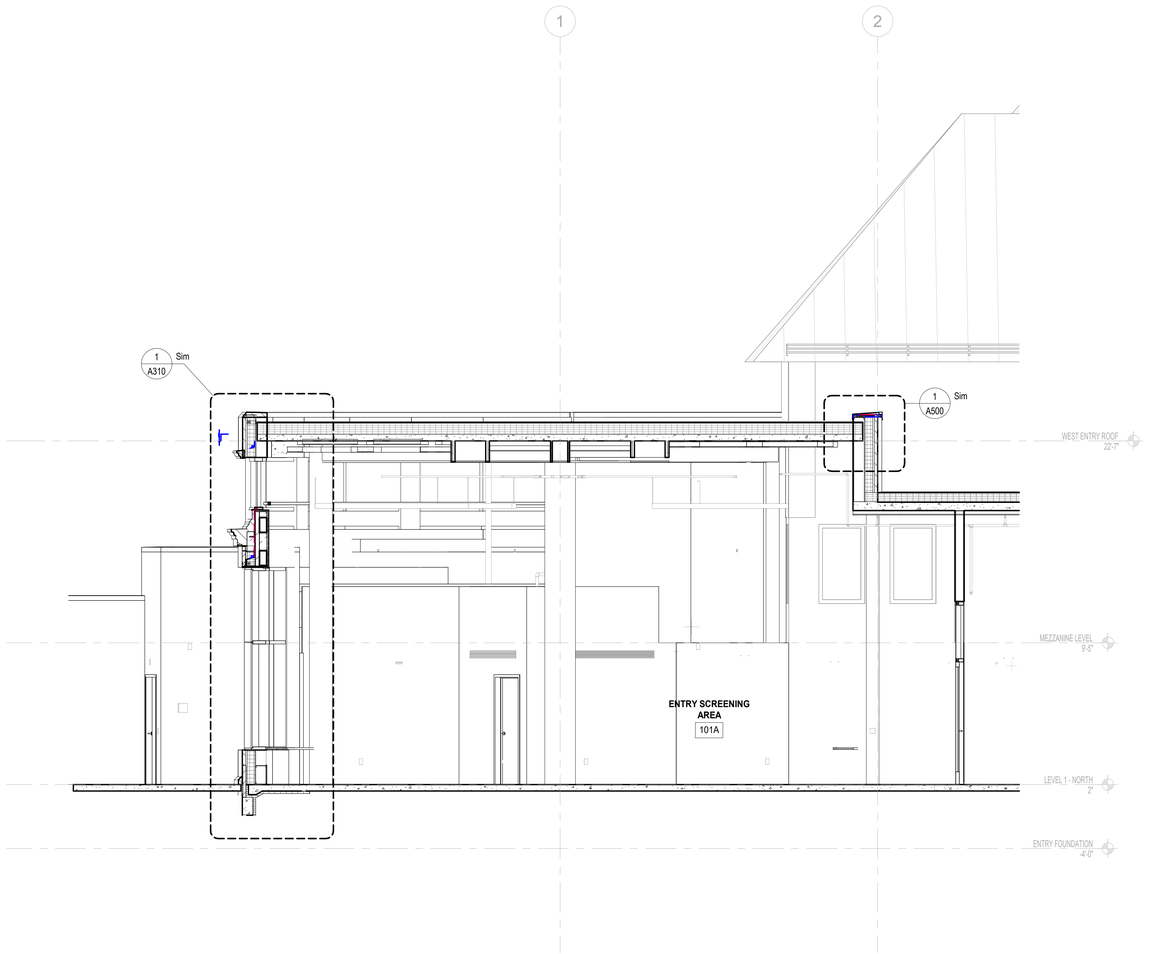
SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: BUILDING SECTIONS - NORTH

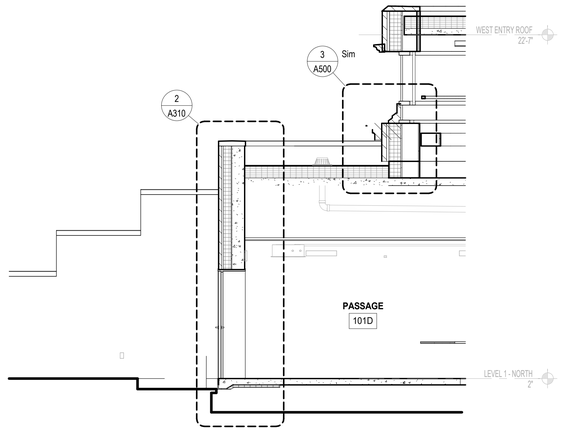
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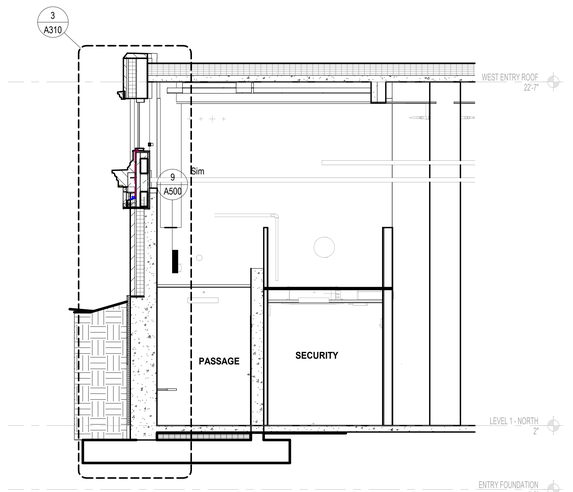
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1 A302 BUILDING SECTION @ ENTRY
SCALE: 1/4" = 1'-0"



2 A302 BUILDING SECTION @ PASSAGE
SCALE: 1/4" = 1'-0"



3 A302 BULDING SECTION @ NORTH SIDE OF SERVICE ENTRY PASSAGEWAY
SCALE: 1/4" = 1'-0"

TYP. EXTERIOR ASSEMBLIES

ALSO SEE SYMBOL LEGEND ON COVER SHEET

NOTE: ASSEMBLIES ARE LISTED FROM EXTERIOR TO INTERIOR. SEE ASSOCIATED DETAILS FOR CLARIFICATION.

EXTERIOR WALL 1 - TYPICAL STONE WALL ON COLD-FORMED METAL FRAMING

- 2-1/4" STONE VENEER
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 1" METAL FURRING
- 6" METAL FRAMING
- 1" METAL FURRING
- 5/8" GYPSUM WALL BOARD

EXTERIOR WALL 2 - TYPICAL STONE WALL ON CONCRETE

- 2-1/4" STONE
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 10" CAST-IN-PLACE CONCRETE

EXTERIOR WALL 3 - TYPICAL BRICK WALL ON CONCRETE

- 3-1/2" BRICK VENEER
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 10" CAST-IN-PLACE CONCRETE

RF-1 - ROOF ASSEMBLY 1 - EPDM ON CONCRETE

- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 5 1/2" COMPOSITE ROOF DECK

RF-2 - ROOF ASSEMBLY 2 - EPDM ON CURVED CONCRETE

- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 6 1/2" COMPOSITE ROOF DECK

GRAPHIC SCALE
0 2' 4' 8'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 01/27/26
SCALE: As indicated
DRAWN BY: FFF
CHECKED BY: CP/SB

ISSUE LOG:

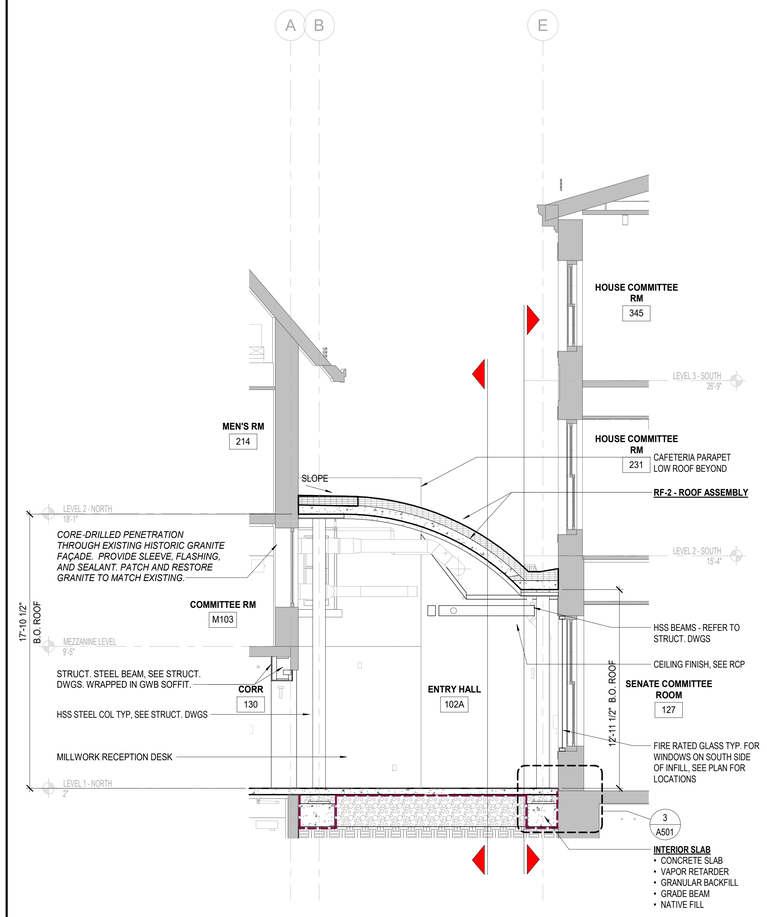
SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: BUILDING SECTIONS

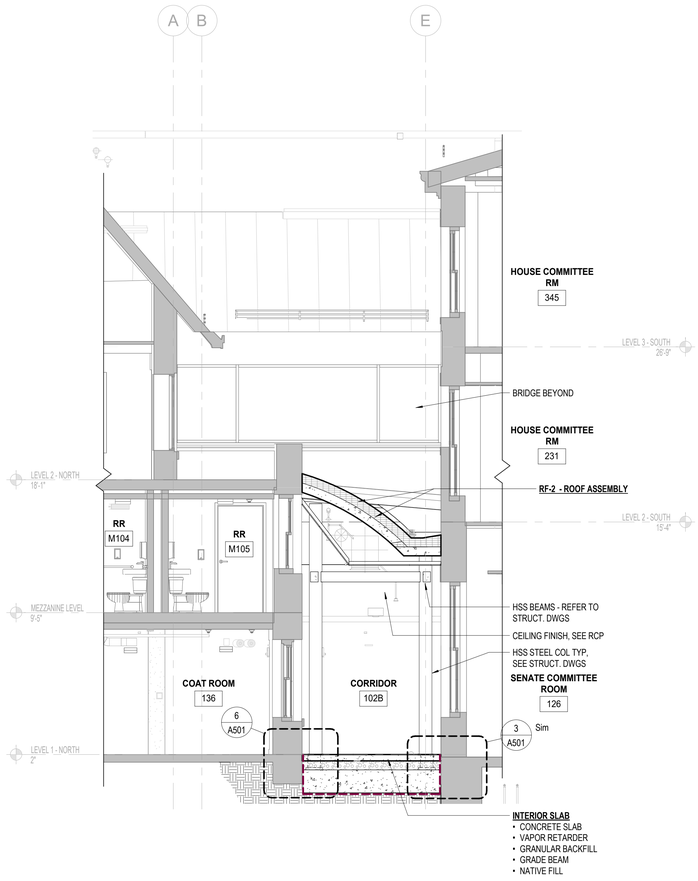
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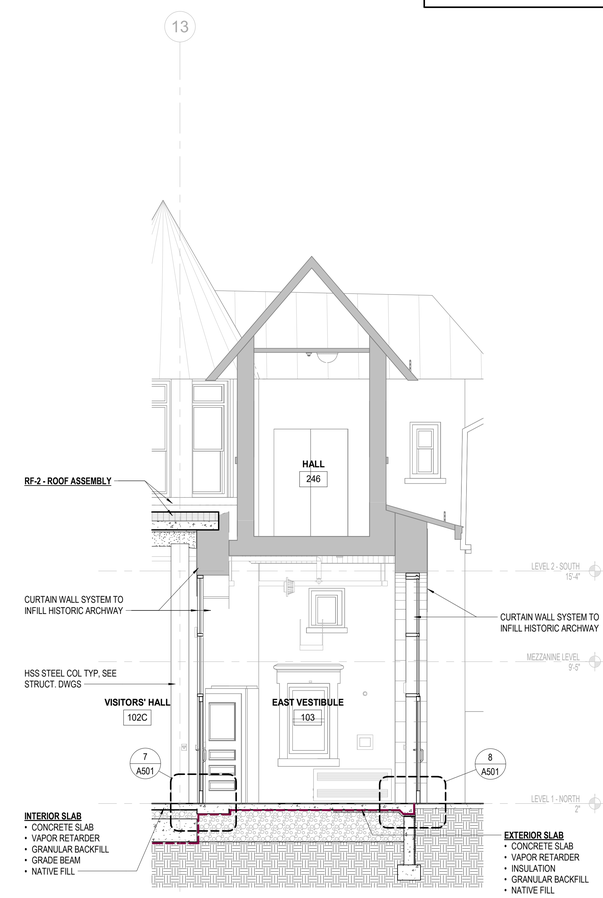
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1 A303 SECTION INFILL @ GRID 3-4
SCALE: 1/4" = 1'-0"



2 A303 SECTION INFILL @ GRID 4-5
SCALE: 1/4" = 1'-0"



3 A303 SECTION @ EAST BRIDGE
SCALE: 1/4" = 1'-0"

TYP. EXTERIOR ASSEMBLIES

ALSO SEE SYMBOL LEGEND ON COVER SHEET

NOTE: ASSEMBLIES ARE LISTED FROM EXTERIOR TO INTERIOR. SEE ASSOCIATED DETAILS FOR CLARIFICATION.

EXTERIOR WALL 1 - TYPICAL STONE WALL ON COLD-FORMED METAL FRAMING

- 2-1/4" STONE VENEER
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- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 1" METAL FURRING
- 6" METAL FRAMING
- 1" METAL FURRING
- 5/8" GYPSUM WALL BOARD

EXTERIOR WALL 2 - TYPICAL STONE WALL ON CONCRETE

- 2-1/4" STONE
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 10" CAST-IN-PLACE CONCRETE

EXTERIOR WALL 3 - TYPICAL BRICK WALL ON CONCRETE

- 3-1/2" BRICK VENEER
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 10" CAST-IN-PLACE CONCRETE

RF-1 - ROOF ASSEMBLY 1 - EPDM ON CONCRETE

- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 5 1/2" COMPOSITE ROOF DECK

RF-2 - ROOF ASSEMBLY 2 - EPDM ON CURVED CONCRETE

- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 6 1/2" COMPOSITE ROOF DECK

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 06/10/21
SCALE: As indicated
DRAWN BY: FFF
CHECKED BY: CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: BUILDING SECTIONS

SHEET NO: A303

GRAPHIC SCALE
0 2' 4' 8'

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TYP. EXTERIOR ASSEMBLIES

ALSO SEE SYMBOL LEGEND ON COVER SHEET

NOTE: ASSEMBLIES ARE LISTED FROM EXTERIOR TO INTERIOR. SEE ASSOCIATED DETAILS FOR CLARIFICATION.

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- 6" METAL FRAMING
- 1" METAL FURRING
- 5/8" GYPSUM WALL BOARD

EXTERIOR WALL 2 - TYPICAL STONE WALL ON CONCRETE

- 2-1/4" STONE
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 10" CAST-IN-PLACE CONCRETE

EXTERIOR WALL 3 - TYPICAL BRICK WALL ON CONCRETE

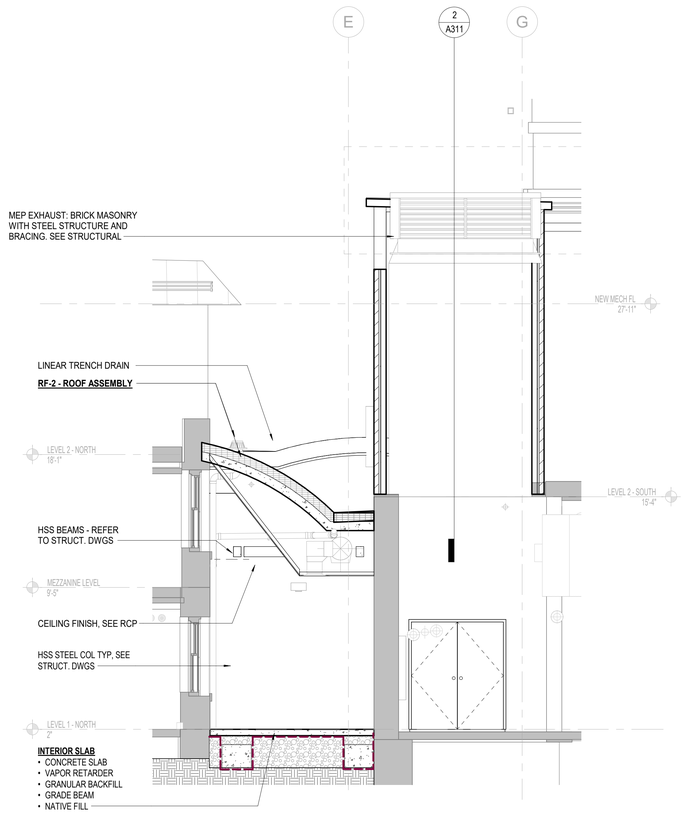
- 3-1/2" BRICK VENEER
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 10" CAST-IN-PLACE CONCRETE

RF-1 - ROOF ASSEMBLY 1 - EPDM ON CONCRETE

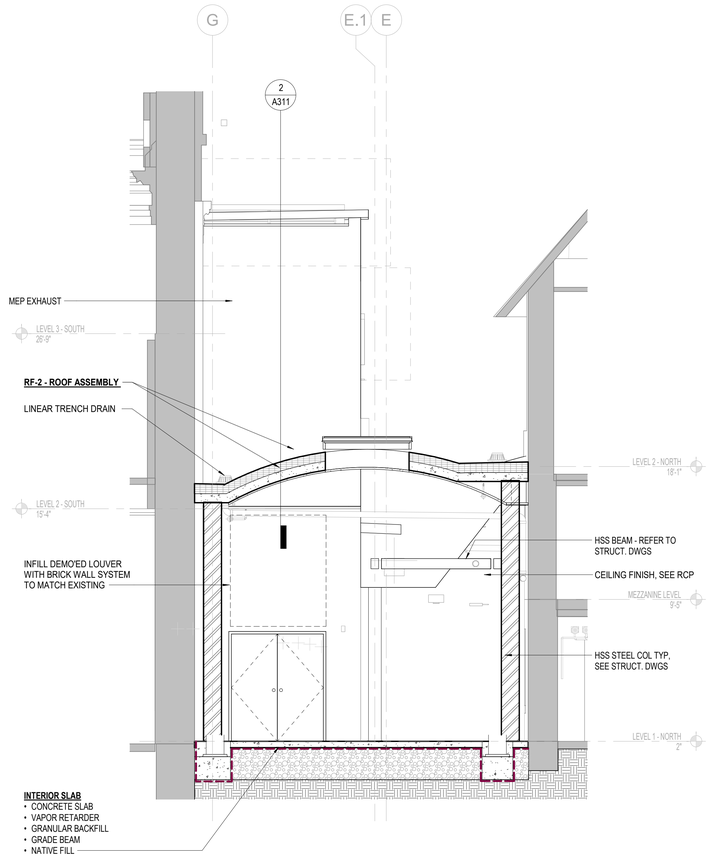
- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 5 1/2" COMPOSITE ROOF DECK

RF-2 - ROOF ASSEMBLY 2 - EPDM ON CURVED CONCRETE

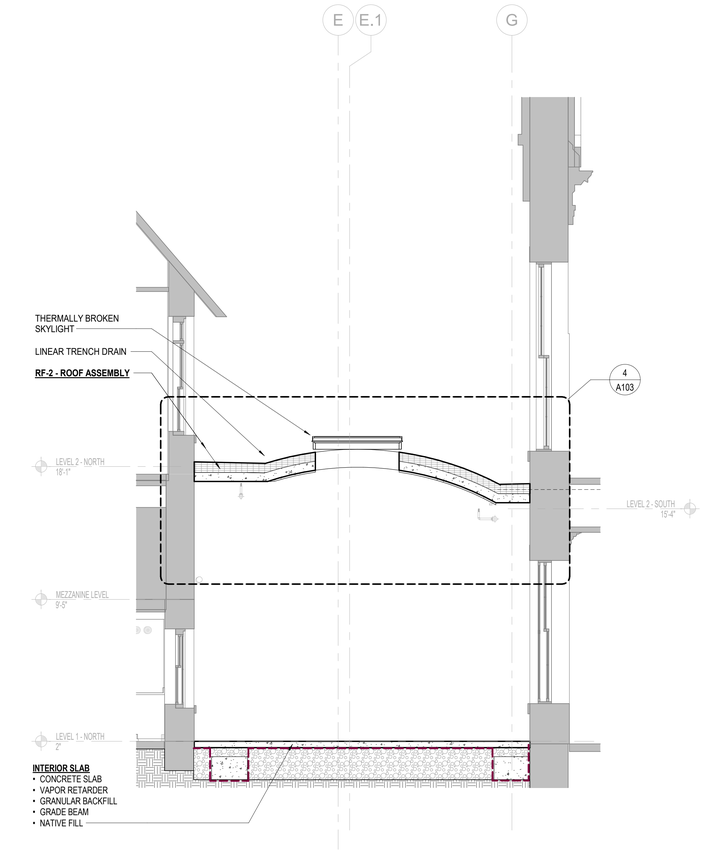
- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 6 1/2" COMPOSITE ROOF DECK



1 A304 SECTION INFILL @ GRID 9-10
SCALE: 1/4" = 1'-0"



2 A304 SECTION INFILL @ GRID 11
SCALE: 1/4" = 1'-0"



3 A304 SECTION INFILL @ GRID 11-12
SCALE: 1/4" = 1'-0"

GRAPHIC SCALE
0 2' 4' 8'

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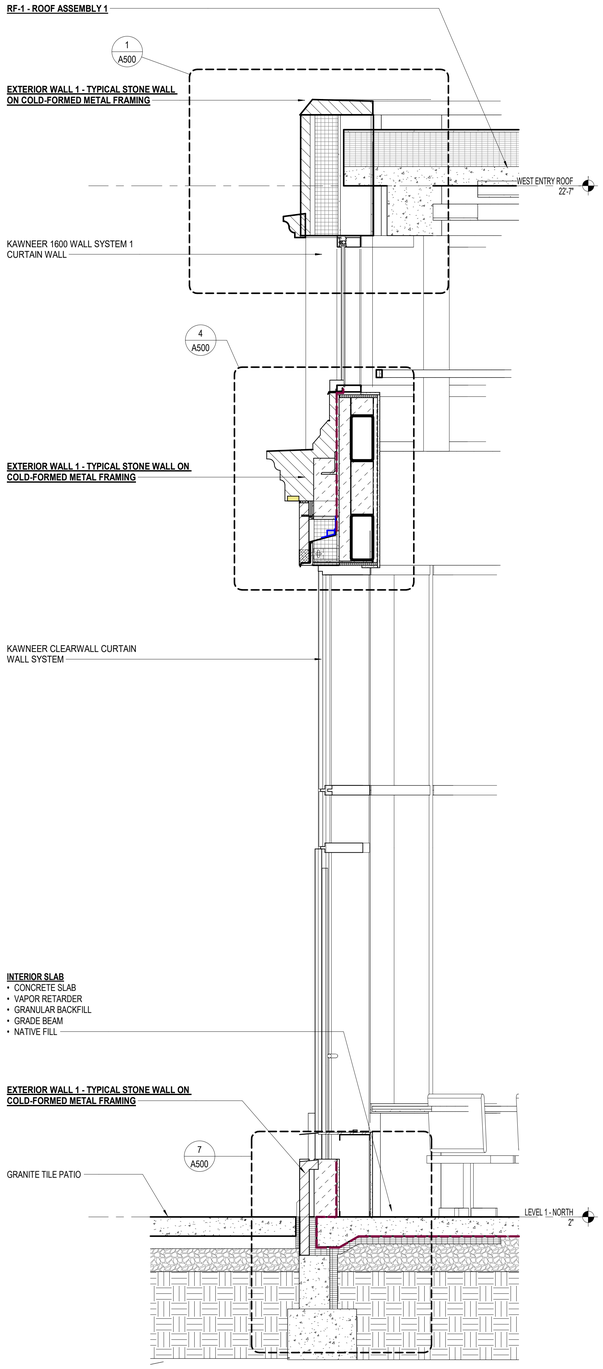
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75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: BUILDING SECTIONS

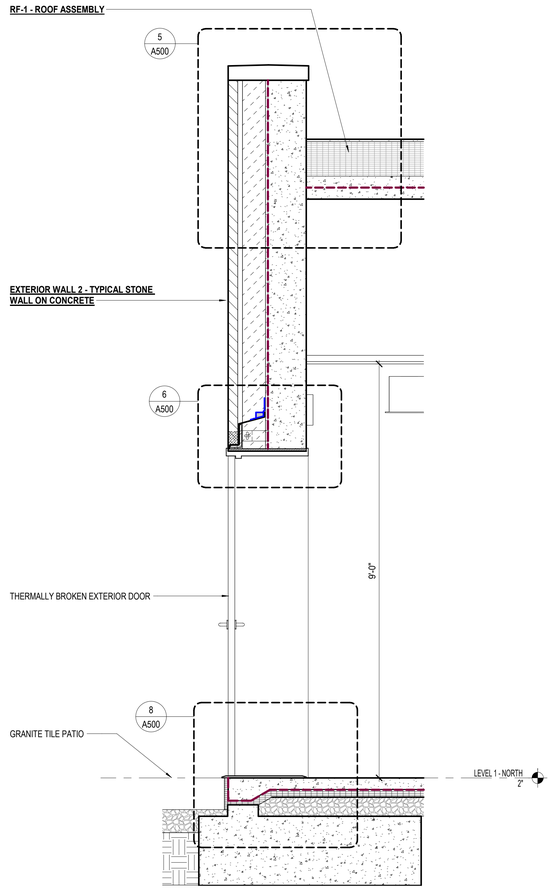
SHEET NO: A304

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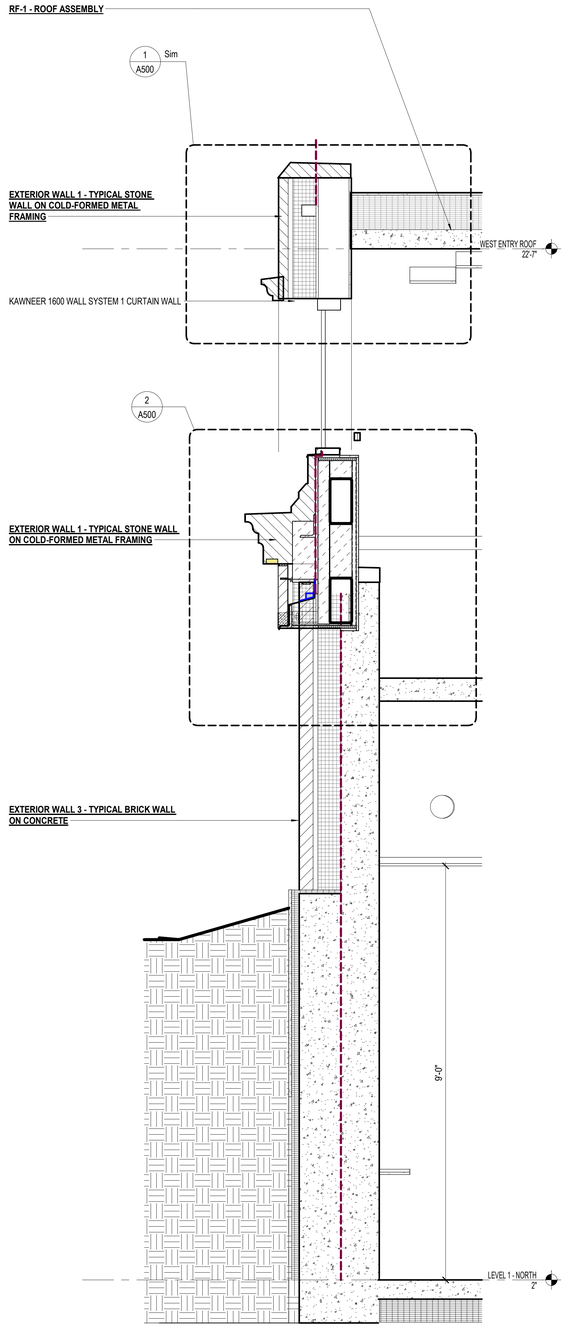
10/23/2026 4:00:33 PM



1 A310 WALL SECTION @ CURVED ENTRY
SCALE: 3/4" = 1'-0"



2 A310 WALL SECTION @ PASSAGE DOOR
SCALE: 3/4" = 1'-0"



3 A310 WALL SECTION @ PASSAGE
SCALE: 3/4" = 1'-0"

TYP. EXTERIOR ASSEMBLIES

ALSO SEE SYMBOL LEGEND ON COVER SHEET

NOTE: ASSEMBLIES ARE LISTED FROM EXTERIOR TO INTERIOR. SEE ASSOCIATED DETAILS FOR CLARIFICATION.

EXTERIOR WALL 1 - TYPICAL STONE WALL ON COLD-FORMED METAL FRAMING

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- 1" METAL FURRING
- 6" METAL FRAMING
- 1" METAL FURRING
- 5/8" GYPSUM WALL BOARD

EXTERIOR WALL 2 - TYPICAL STONE WALL ON CONCRETE

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- 10" CAST-IN-PLACE CONCRETE

EXTERIOR WALL 3 - TYPICAL BRICK WALL ON CONCRETE

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RF-1 - ROOF ASSEMBLY 1 - EPDM ON CONCRETE

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- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 5 1/2" COMPOSITE ROOF DECK

RF-2 - ROOF ASSEMBLY 2 - EPDM ON CURVED CONCRETE

- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 6 1/2" COMPOSITE ROOF DECK

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 02/18/26
SCALE: As indicated
DRAWN BY: FFF
CHECKED BY: CP/SB

ISSUE LOG:

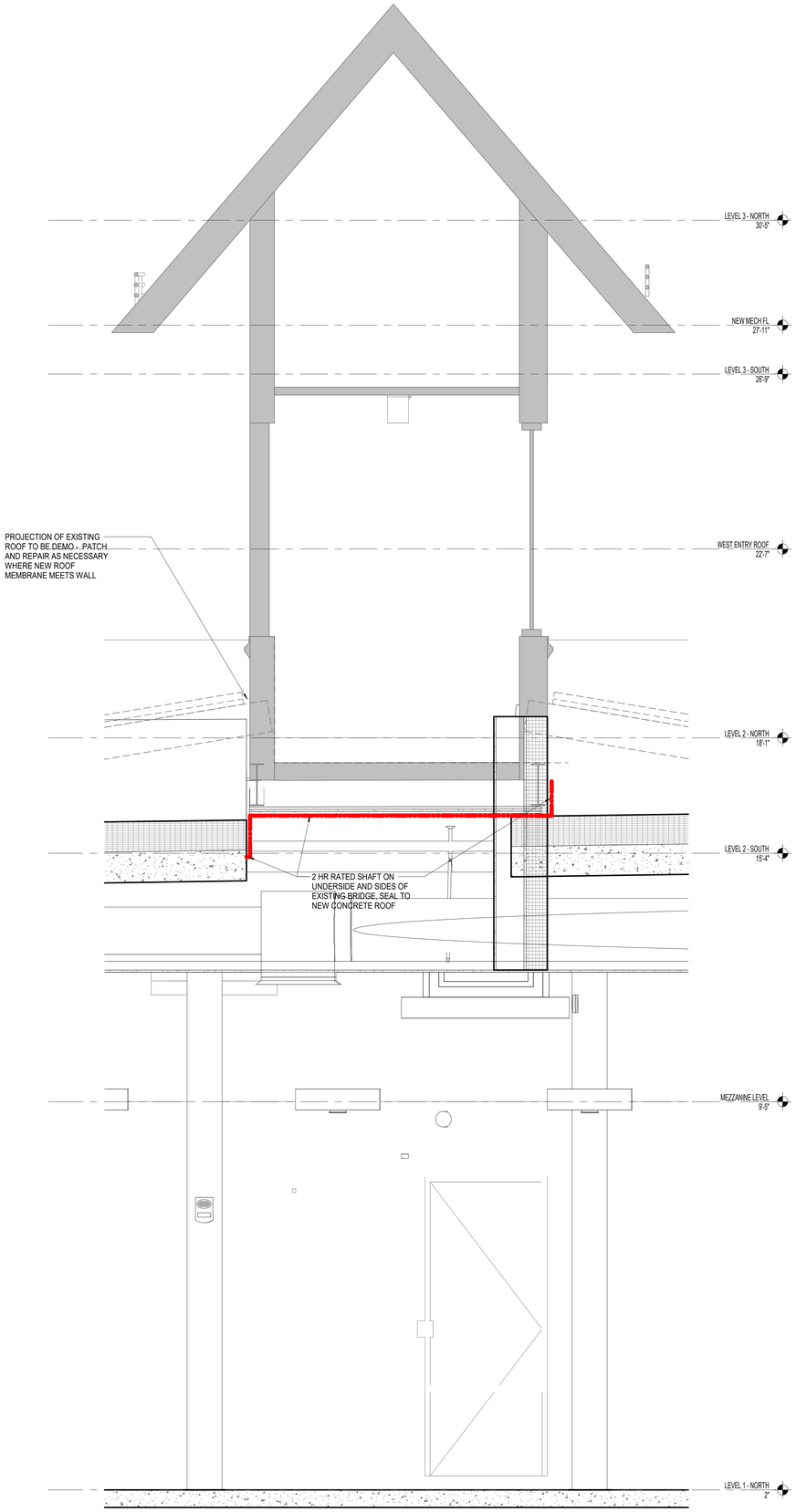
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75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: WALL SECTIONS

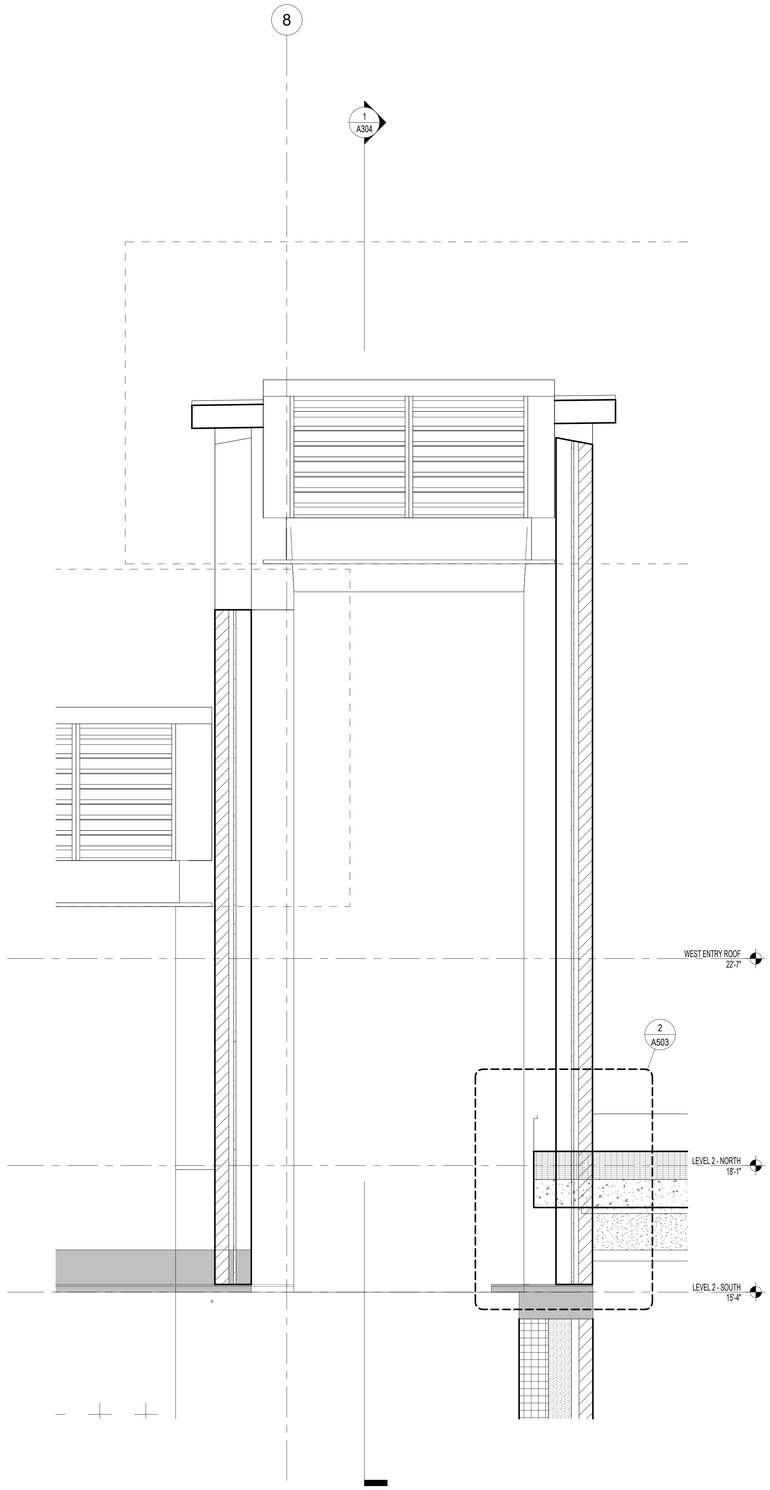
SHEET NO: A310

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10/23/2026 4:00:33 PM



1 A311 SECTION @ WEST BRIDGE
SCALE: 3/4" = 1'-0"



2 A311 SECTION @ MECHANICAL EXHAUST TOWER
SCALE: 3/4" = 1'-0"

TYP. EXTERIOR ASSEMBLIES

ALSO SEE SYMBOL LEGEND ON COVER SHEET

NOTE: ASSEMBLIES ARE LISTED FROM EXTERIOR TO INTERIOR. SEE ASSOCIATED DETAILS FOR CLARIFICATION.

EXTERIOR WALL 1 - TYPICAL STONE WALL ON COLD-FORMED METAL FRAMING

- 2-1/4" STONE VENEER
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 1" METAL FURRING
- 6" METAL FRAMING
- 1" METAL FURRING
- 5/8" GYPSUM WALL BOARD

EXTERIOR WALL 2 - TYPICAL STONE WALL ON CONCRETE

- 2-1/4" STONE
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 10" CAST-IN-PLACE CONCRETE

EXTERIOR WALL 3 - TYPICAL BRICK WALL ON CONCRETE

- 3-1/2" BRICK VENEER
- 1-1/4" AIR GAP
- 6" MINERAL WOOL INSULATION
- 0" WEATHER BARRIER
- 5/8" GYPSUM SHEATHING
- 10" CAST-IN-PLACE CONCRETE

RF-1 - ROOF ASSEMBLY 1 - EPDM ON CONCRETE

- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 5 1/2" COMPOSITE ROOF DECK

RF-2 - ROOF ASSEMBLY 2 - EPDM ON CURVED CONCRETE

- 1/8" EPDM MEMBRANE
- 1/2" COVER BOARD
- 9" RIGID INSULATION, TAPERED
- 0" WEATHER BARRIER
- 6 1/2" COMPOSITE ROOF DECK

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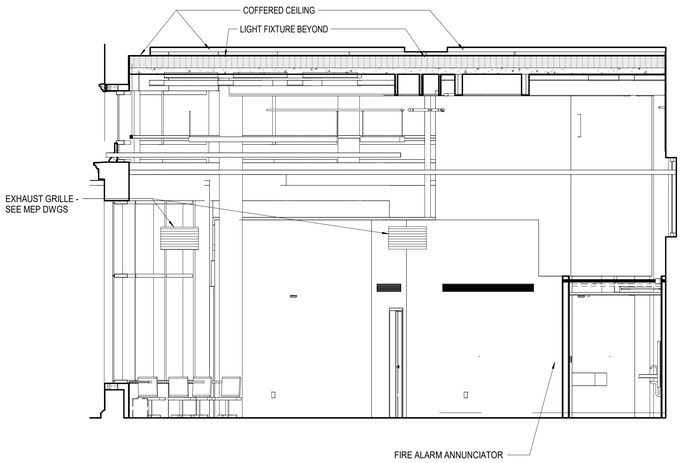
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75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: WALL SECTIONS

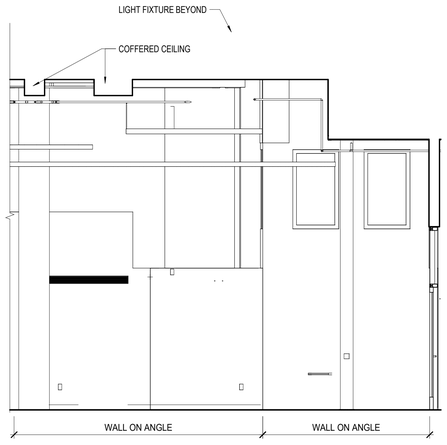
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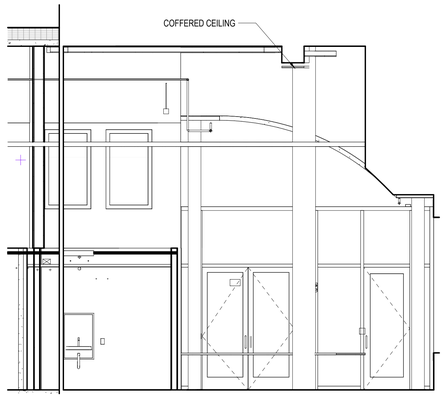
10/22/2026 4:00:34 PM



1 A420 ENTRY SCREENING AREA - NORTHWEST
SCALE: 1/4" = 1'-0"



2 A420 ENTRY SCREENING AREA - NORTH
SCALE: 1/4" = 1'-0"



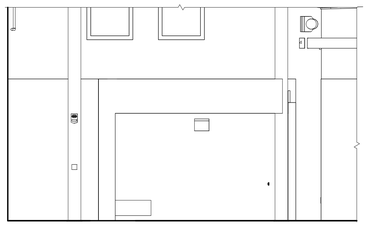
3 A420 ENTRY SCREENING AREA - EAST
SCALE: 1/4" = 1'-0"



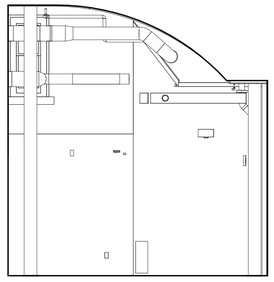
4 A420 ENTRY SCREENING AREA - SOUTH
SCALE: 1/4" = 1'-0"



5 A420 SECURITY - SOUTH
SCALE: 1/4" = 1'-0"



6 A420 ENTRY HALL - NORTH
SCALE: 1/4" = 1'-0"



7 A420 ENTRY HALL - EAST
SCALE: 1/4" = 1'-0"

ENLARGED FLOOR PLAN & INTERIOR ELEVATION GENERAL NOTES

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2. ALL HORIZONTAL CLEARANCES TO ADJACENT WALLS ARE AS MEASURED TO FINISHED WALL.
3. COORDINATE WITH ARCHITECT THE LOCATION OF ALL CONTROL DEVICES.
4. WHEN MULTIPLE DEVICES ARE IN CLOSE PROXIMITY, PROVIDE LAYOUT FOR ARCHITECT APPROVAL.
5. CANE DETECTOR BARRIER IS REQUIRED BELOW ACCESSORIES THAT PROJECT >4" FROM WALL.
6. SEE A001 FOR TYPICAL MOUNTING HEIGHTS & LOCATIONS.
7. SEE A900 & FOR FINISH SCHEDULE & MATERIALS LEGEND.
8. COORDINATE & PROVIDE BLOCKING FOR ALL WALL-MOUNTED ACCESSORIES, INCLUDING OWNERFURNISHED.
9. FF&E SHOWN FOR REFERENCE ONLY.
10. PROVIDE BLOCKING FOR ALL WALL-MOUNTED CASEWORK
11. SEE A650 FOR TYPICAL CASEWORK DETAILS.
12. ALL EXPOSED SURFACES ON ALL CASEWORK TO BE FINISHED. PROVIDE END PANELS WHERE CASEWORK DOES NOT END AT WALL.
13. ROVIDE FLOOR-TO CEILING ADJUSTABLE SHELVES AT ALL STORAGE ROOMS. SEE A650.
14. ***PROVIDE SHELF & ROD AT ALL COAT CLOSETS, SEE A650***
15. ALL CABINET & DRAWER HARDWARE TO BE ADA COMPLIANT. REFER TO CASEWORK DETAILS FOR HARDWARE SELECTION.
16. ***PROVIDE METAL TRIM PIECE AT ALL EXPOSED CUT TILE CORNERS & EDGES. SEE A640.***
17. SEE A640 FOR TYPICAL MATERIAL TRANSITIONS AND TILE LAYOUT.
18. SEE FINISH FLOOR PLANS FOR EXTENT OF WALL PROTECTION
19. ALL ACCESSORIES CFCI, U.N.O.
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24. SEE ELECTRCAL DRAWINGS FOR LIGHTING, POWER, & DATA DETAILS. COORDINATE LOCATIONS WITH ARCHITECT.

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 06/10/21
SCALE: As indicated
DRAWN BY: FFF
CHECKED BY: CP/SB

ISSUE LOG:
SCHEMATIC DESIGN 07/25/2025
75% DD SET/OWNER REV. 05/29/2026
100% DD SET 10/23/2026

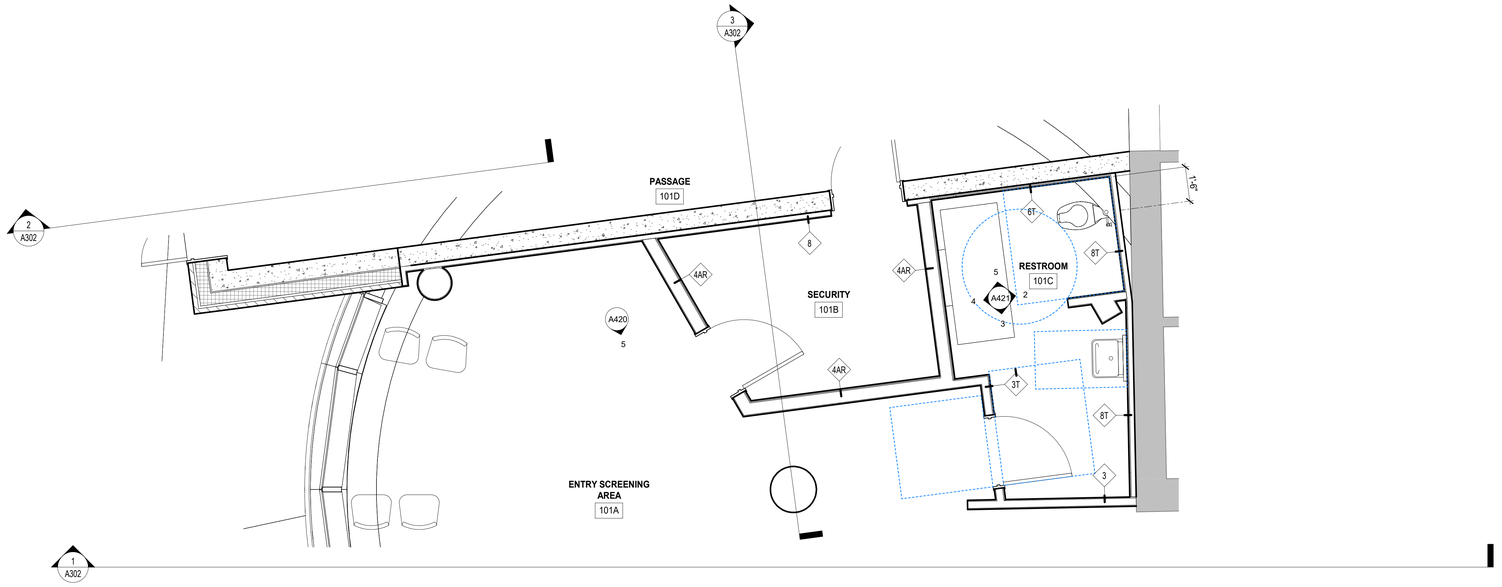
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INTERIOR ELEVATIONS

SHEET NO: A420

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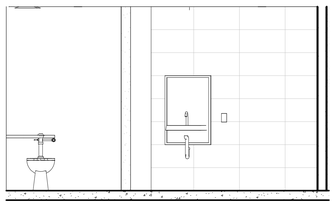
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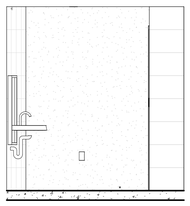
1 A421 ENLARGED ENTRY PLAN

SCALE: 3/8" = 1'-0"



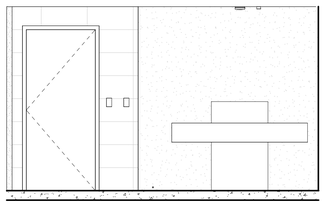
2 A421 RESTROOM 101C EAST ELEVATION

SCALE: 3/8" = 1'-0"



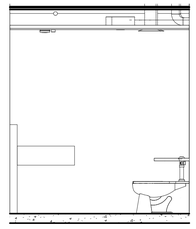
3 A421 RESTROOM 101C SOUTH ELEVATION

SCALE: 3/8" = 1'-0"



4 A421 RESTROOM 101C WEST ELEVATION

SCALE: 3/8" = 1'-0"



5 A421 RESTROOM 101C NORTH ELEVATION

SCALE: 3/8" = 1'-0"

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STATE HOUSE COPY ROOM PROJECT

MONTPELIER, VT

FFF PROJECT NO:

ORIGINATION DATE:	SCALE:
06/10/21	As indicated
DRAWN BY:	CHECKED BY:
Author	Checker

ISSUE LOG:

SHEET CONTENTS:

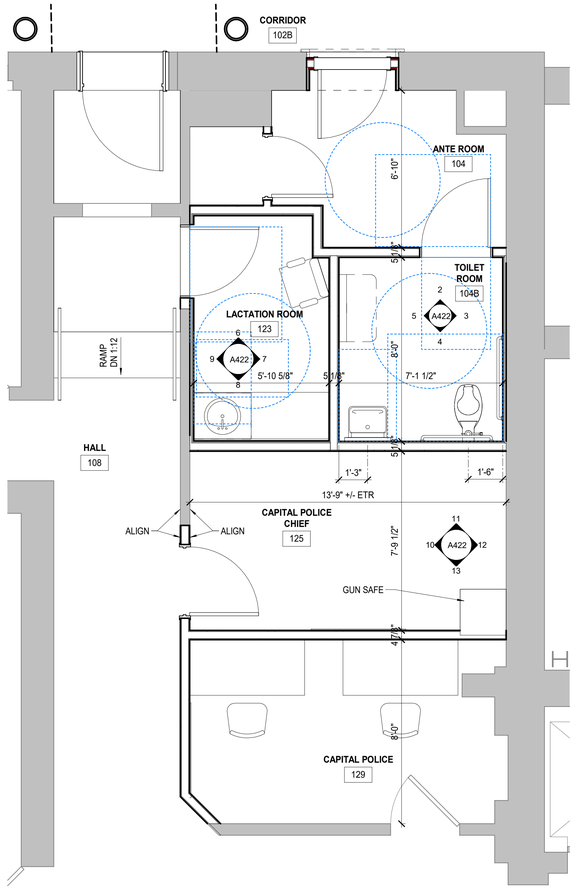
ENLARGED PLAN & INTERIOR ELEVATIONS

SHEET NO:

A421

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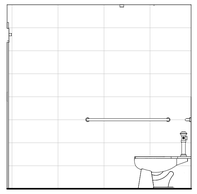
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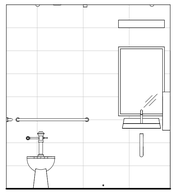
1 A422 ACCESSIBLE RESTROOMS
SCALE: 3/8" = 1'-0"



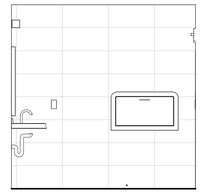
2 A422 TOILET ROOM 104B NORTH ELEVATION
SCALE: 3/8" = 1'-0"



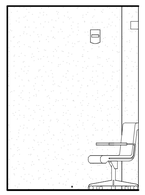
3 A422 TOILET ROOM 104B EAST ELEVATION
SCALE: 3/8" = 1'-0"



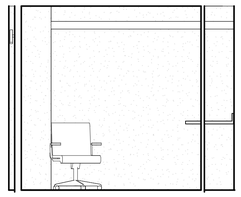
4 A422 TOILET ROOM 104B SOUTH ELEVATION
SCALE: 3/8" = 1'-0"



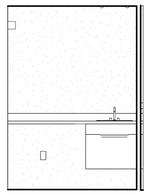
5 A422 TOILET ROOM 104B WEST ELEVATION
SCALE: 3/8" = 1'-0"



6 A422 LACTATION ROOM NORTH
SCALE: 3/8" = 1'-0"



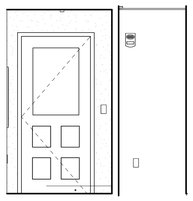
7 A422 LACTATION ROOM EAST
SCALE: 3/8" = 1'-0"



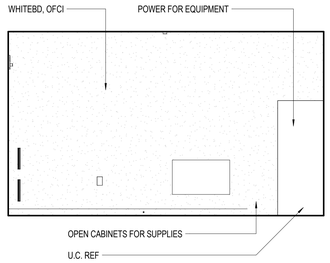
8 A422 LACTATION ROOM SOUTH
SCALE: 3/8" = 1'-0"



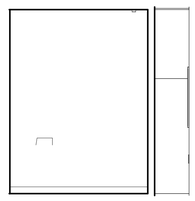
9 A422 LACTATION ROOM WEST
SCALE: 3/8" = 1'-0"



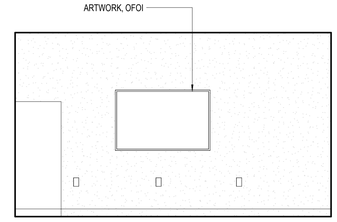
10 A422 CAPITOL POLICE CHIEF - WEST ELEVATION
SCALE: 3/8" = 1'-0"



11 A422 CAPITOL POLICE CHIEF - NORTH ELEVATION
SCALE: 3/8" = 1'-0"



12 A422 CAPITOL POLICE CHIEF - EAST ELEVATION
SCALE: 3/8" = 1'-0"



13 A422 CAPITOL POLICE CHIEF - SOUTH ELEVATION
SCALE: 3/8" = 1'-0"

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GRAPHIC SCALE
0 2' 4' 8'

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 06/10/21
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DRAWN BY: FFF
CHECKED BY: CP/SB

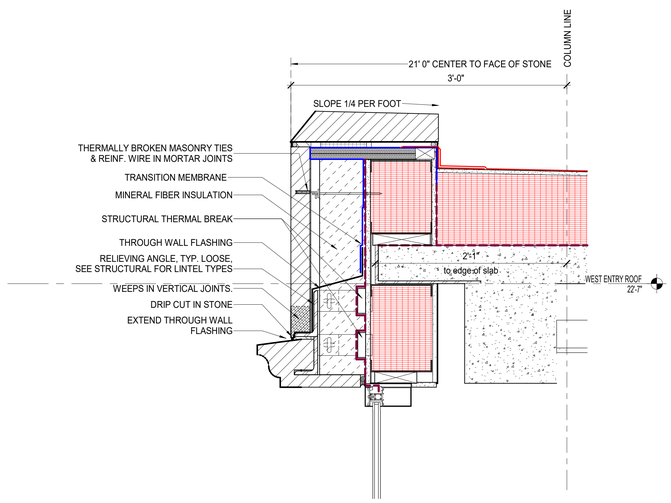
ISSUE LOG:
SCHEMATIC DESIGN 07/25/2025
75% DD SET/OWNER REV. 05/29/2026
100% DD SET 10/23/2026

SHEET CONTENTS:
ENLARGED PLANS & ELEVATIONS

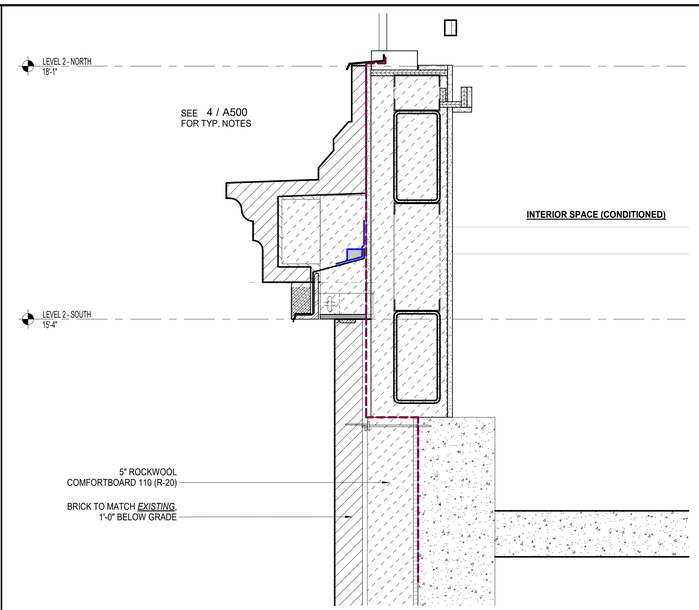
SHEET NO: A422

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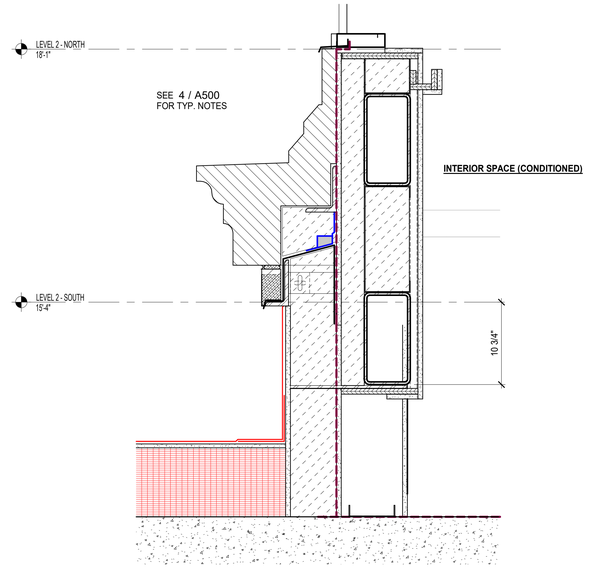
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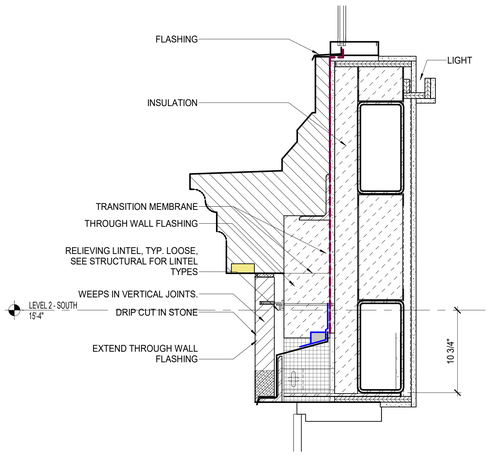
1 A500 CURVED ENTRY - PARAPET DETAIL
SCALE: 1 1/2" = 1'-0"



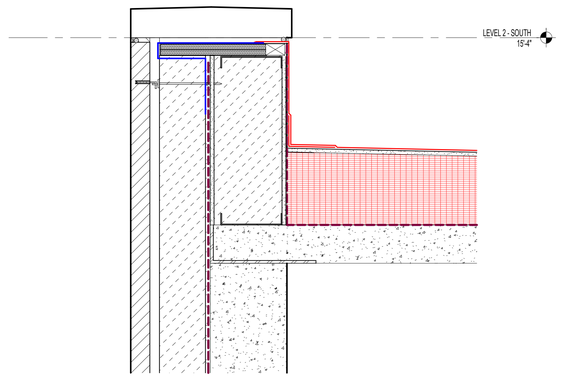
2 A500 ARCHITRAVE DETAIL - HILLSIDE
SCALE: 1 1/2" = 1'-0"



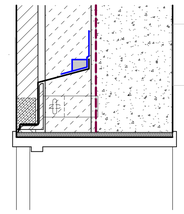
3 A500 ARCHITRAVE DETAIL - ABOVE ROOF
SCALE: 1 1/2" = 1'-0"



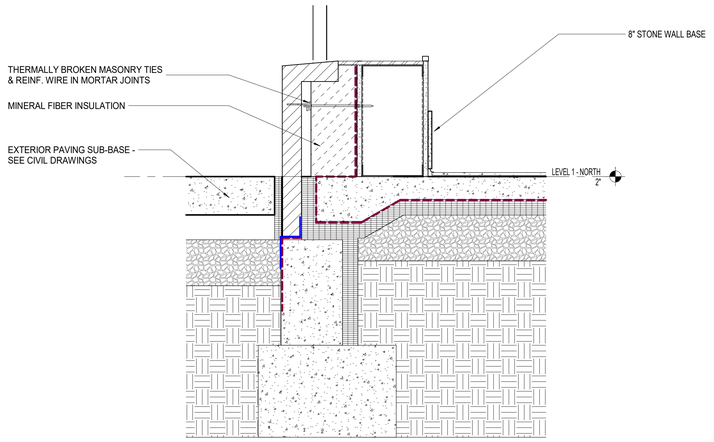
4 A500 CURVED ENTRY - ARCHITRAVE DETAIL
SCALE: 1 1/2" = 1'-0"



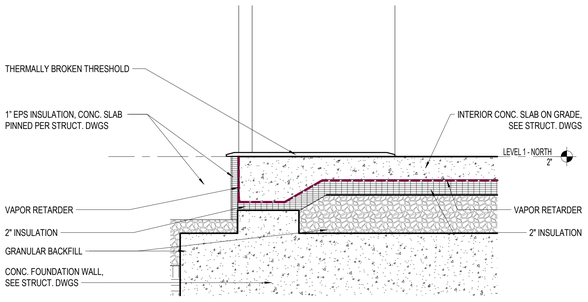
5 A500 ROOF DETAIL - EGRESS EXIT
SCALE: 1 1/2" = 1'-0"



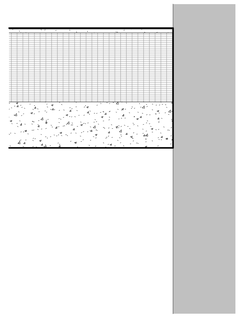
6 A500 ROOF DETAIL - EGRESS EXIT DOOR HEAD
SCALE: 1 1/2" = 1'-0"



7 A500 CURVED ENTRY - FOUNDATION DETAIL
SCALE: 1 1/2" = 1'-0"



8 A500 FOUNDATION DETAIL - EGRESS EXIT
SCALE: 1 1/2" = 1'-0"



9 A500 EGRESS ROOF-CAFE DETAIL
SCALE: 1 1/2" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 06/10/21
SCALE: 1 1/2" = 1'-0"
DRAWN BY: FFF
CHECKED BY: CP/SB

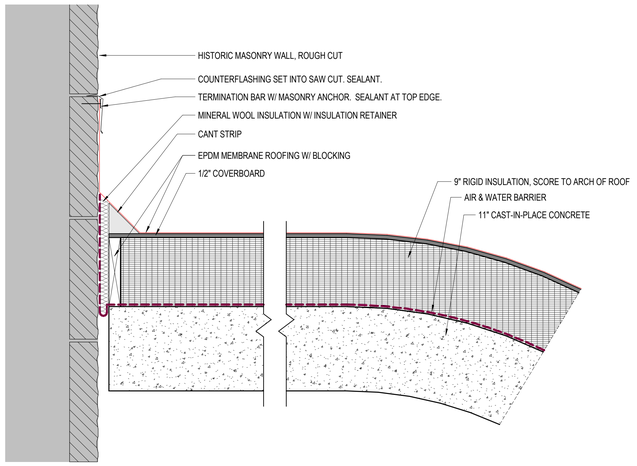
ISSUE LOG:
SCHEMATIC DESIGN 07/25/2025
75% DD SET/OWNER REV. 05/29/2026
100% DD SET 10/23/2026

SHEET CONTENTS:
SECTION DETAILS - ENTRY

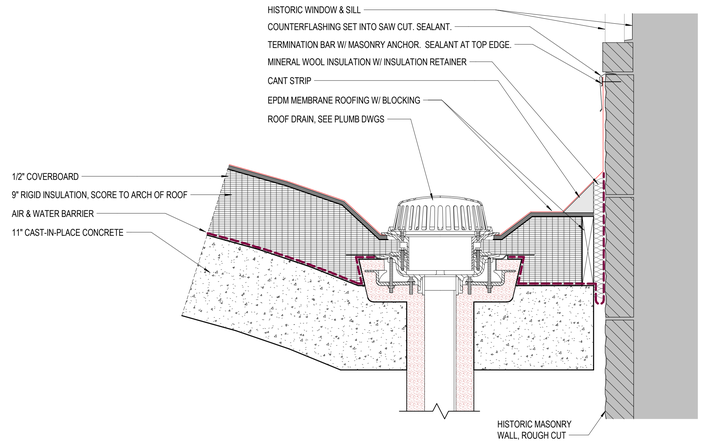
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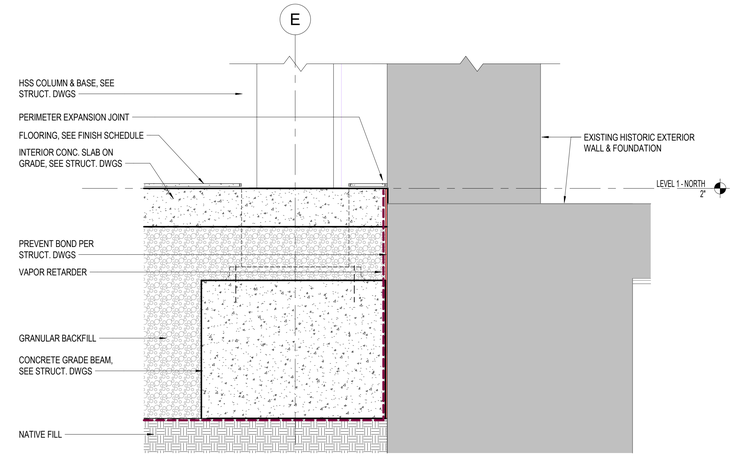
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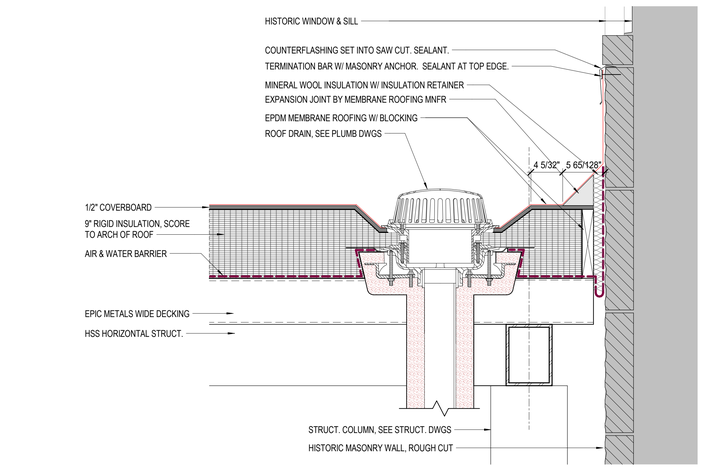
1 A501 DIAGRAMMATIC SECTION @ CURVED ROOF - UPPER
SCALE: 1 1/2" = 1'-0"



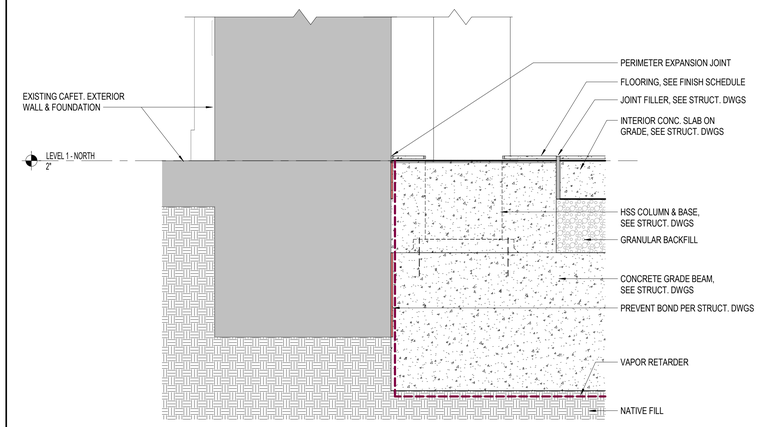
2 A501 DIAGRAMMATIC SECTION @ CURVED ROOF - LOWER
SCALE: 1 1/2" = 1'-0"



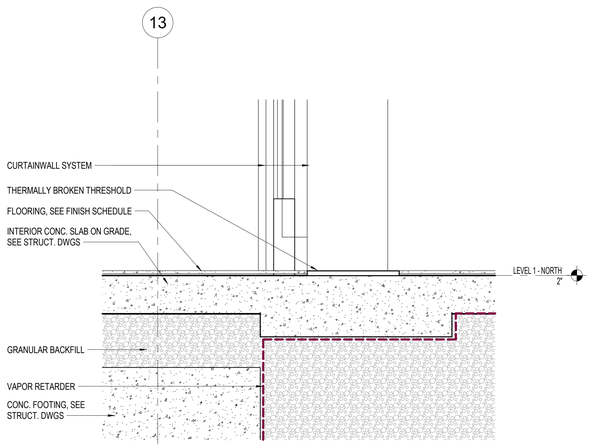
3 A501 INFILL-ANNEX FOUNDATION SECTION DETAIL, TYP
SCALE: 1 1/2" = 1'-0"



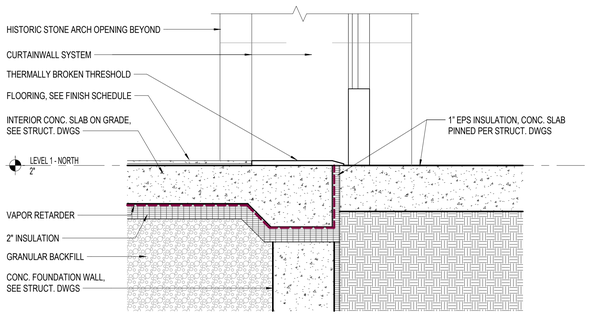
5 A501 DIAGRAMMATIC SECTION - ANGLED ROOF - LOWER
SCALE: 1 1/2" = 1'-0"



6 A501 INFILL-CAFE FOUNDATION SECTION DETAIL, TYP
SCALE: 1 1/2" = 1'-0"



7 A501 EAST BRIDGE INTERIOR SLAB SECTION DETAIL
SCALE: 1 1/2" = 1'-0"



8 A501 EAST BRIDGE-EXTERIOR SECTION DETAIL
SCALE: 1 1/2" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE: 05/26/26
SCALE: 1 1/2" = 1'-0"
DRAWN BY: JG
CHECKED BY: CP/SB

ISSUE LOG:

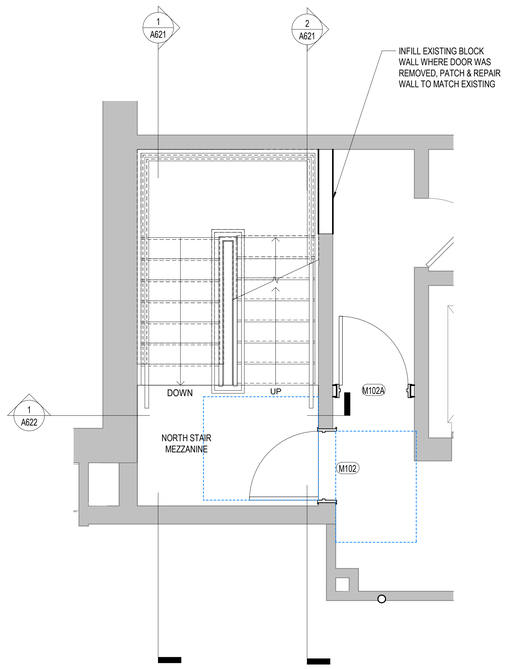
SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:
SECTION DETAILS - CENTER

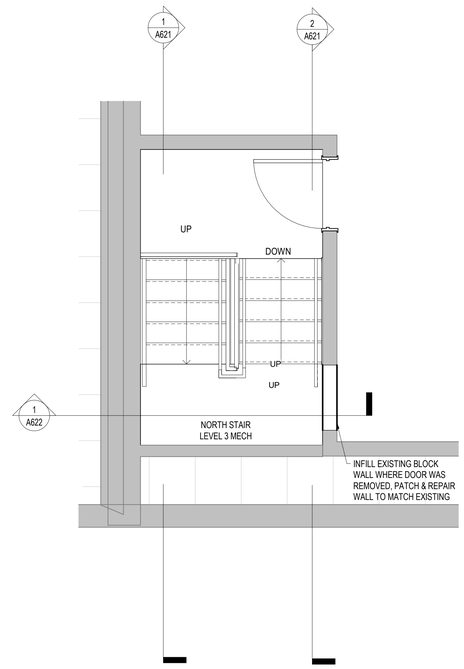
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A501

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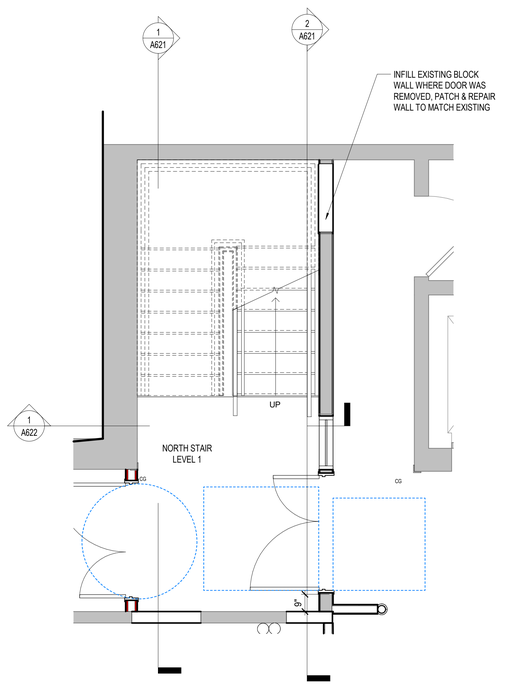
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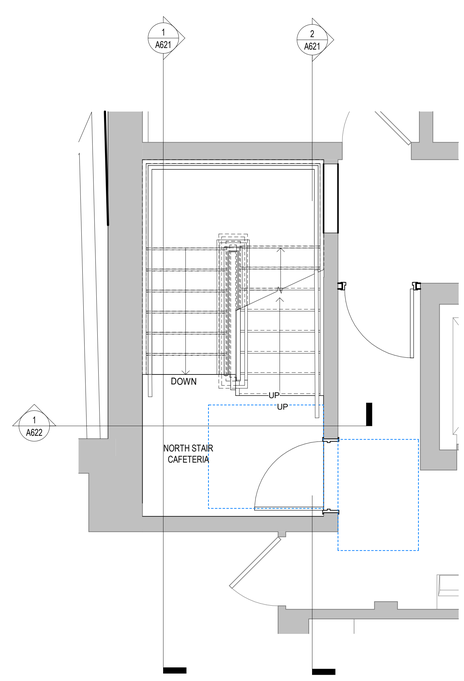
2 A620 ENLARGED PLAN - STAIR D - MEZZANINE LEVEL NORTH
SCALE: 3/8" = 1'-0"



5 A620 ENLARGED PLAN - STAIR D - L3 NORTH (MECH)
SCALE: 3/8" = 1'-0"



1 A620 ENLARGED PLAN - STAIR D -LEVEL 1 NORTH
SCALE: 3/8" = 1'-0"



3 A620 ENLARGED PLAN - STAIR D - LEVEL 2 NORTH
SCALE: 3/8" = 1'-0"

10/29/2024 4:00:43 PM

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 07/03/25
SCALE: 3/8" = 1'-0"
DRAWN BY: FFF
CHECKED BY: CP/SB

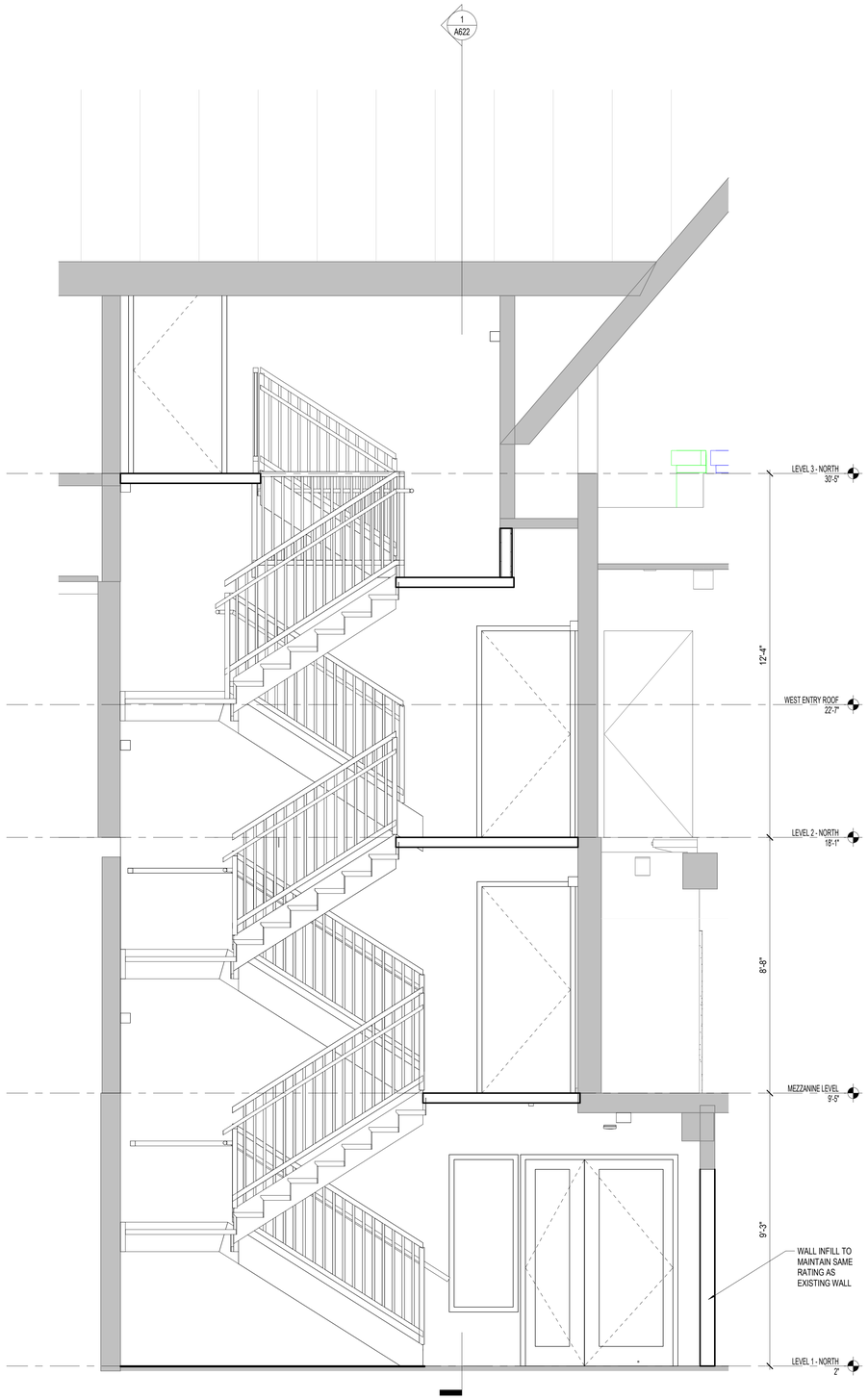
ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

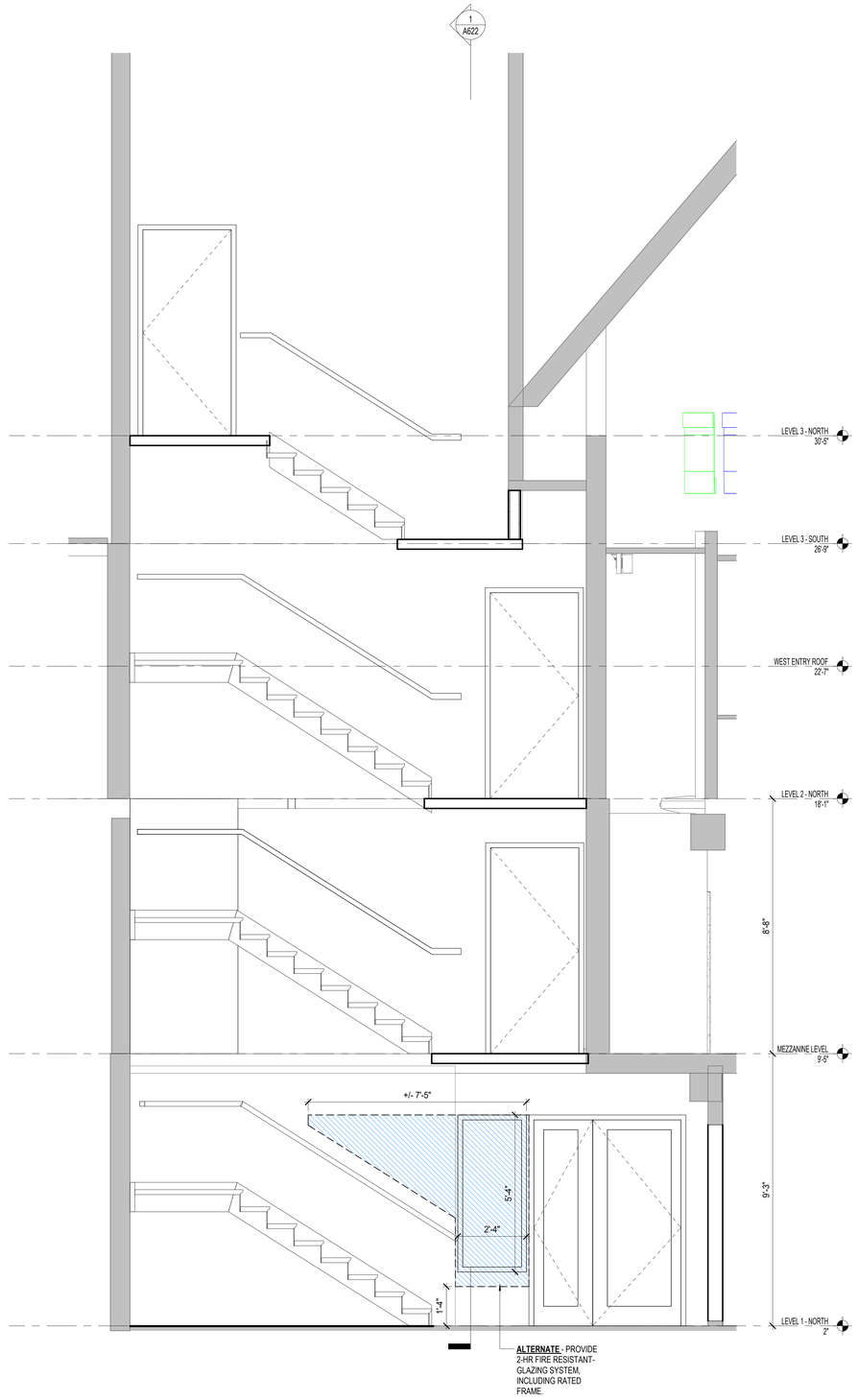
SHEET CONTENTS: STAIR PLANS

SHEET NO: A620

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1 A621 NORTH STAIR SECTION A
SCALE: 1/2" = 1'-0"



2 A621 NORTH STAIR SECTION B
SCALE: 1/2" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE:	SCALE:
02/03/26	1/2" = 1'-0"
DRAWN BY:	CHECKED BY:
FFF	CP/SB

ISSUE LOG:

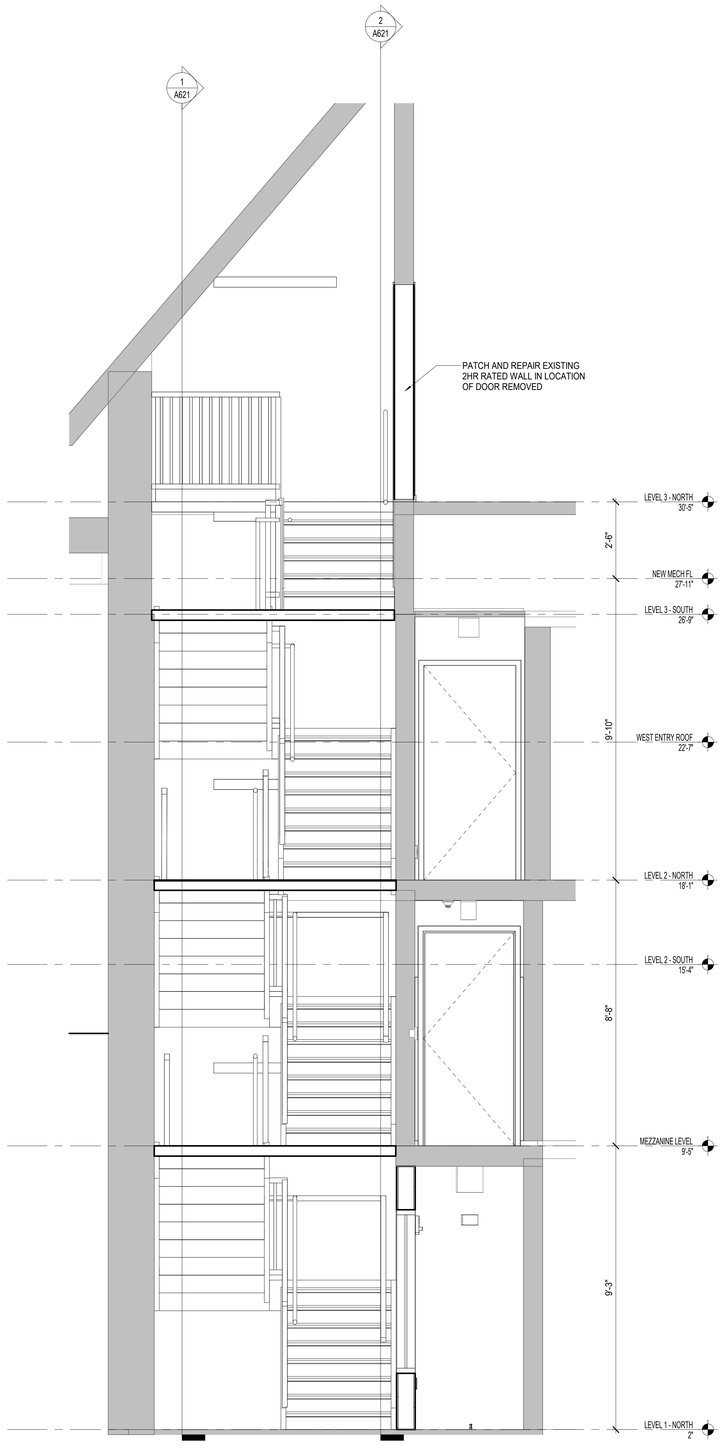
SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:
STAIR SECTIONS

SHEET NO:
A621

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1 / A622 NORTH STAIR SECTION C

SCALE: 1/2" = 1'-0"

10/23/2026 4:00:43 PM

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE:	SCALE:
02/06/26	1/2" = 1'-0"
DRAWN BY:	CHECKED BY:
FFF	CP/SB

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

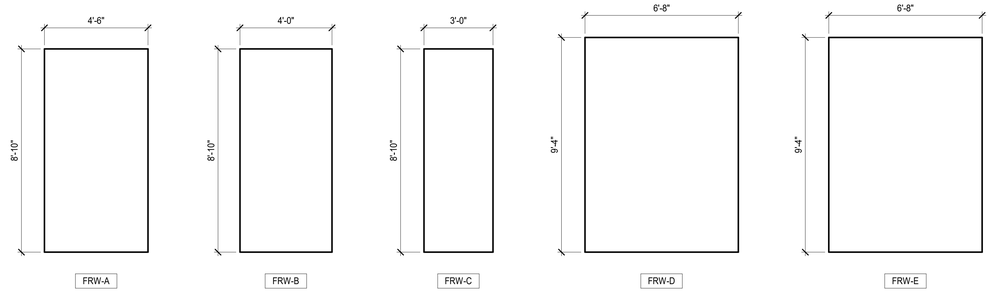
SHEET CONTENTS:

STAIR SECTIONS

SHEET NO:

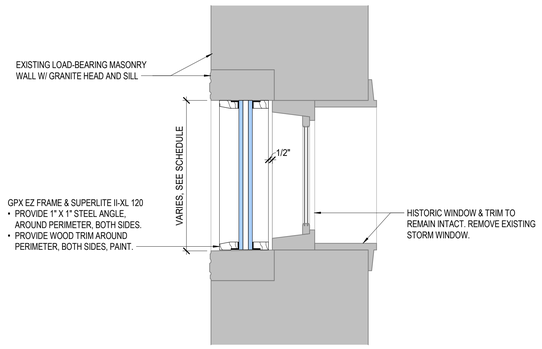
A622

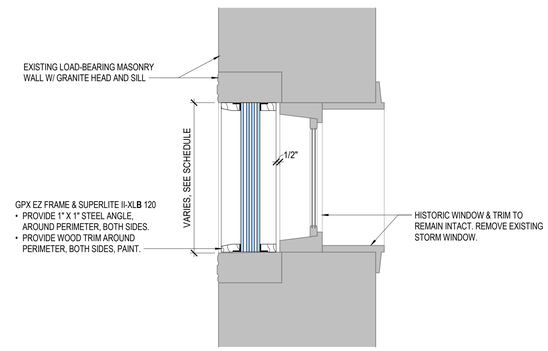
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Fire Rated Windows				
Key Value	Keynote Text	Location	SQFT	Frame Type
FRW-A	FIRE RATED WINDOW A (4'-6" x 8'-10")	EXTERIOR	39.75	SUPERLITE II-XL**B** 120 IGU
FRW-B	FIRE RATED WINDOW B (4'-0" x 8'-10")	INTERIOR	35.33	GPX EZ FRAME & SUPERLITE II-XL**B**120
FRW-C	FIRE RATED WINDOW C (3'-0" x 8'-10")	INTERIOR	26.5	GPX EZ FRAME & SUPERLITE II-XL120
FRW-D	FIRE RATED WINDOW D (6'-8" x 9'-4")	INTERIOR	62.22	GPX EZ FRAME & SUPERLITE II-XL**B**120
FRW-E	FIRE RATED WINDOW E (6'-8" x 9'-4")	EXTERIOR	62.22	SUPERLITE II-XL**B** 120 IGU
FRW-G	FIRE RATED WINDOW G (4'-6" x 7'-6")	EXTERIOR	33.75	SUPERLITE II-XL120 IGU
FRW-H	FIRE RATED WINDOW H (4'-6" x 6-7")	EXTERIOR	29.63	SUPERLITE II-XL120 IGU
FRW-I	FIRE RATED WINDOW I (4'-0" x 5'-11")	EXTERIOR	23.66	SUPERLITE II-XL120 IGU

GENERAL NOTES:
1. COORDINATE WITH OWNER FOR RESTORATION OF HISTORIC WINDOWS BEFORE FIRE RATED WINDOWS ARE INSTALLED.
2. PROVIDE ALTERNATE COST FOR INTERIOR WINDOW FRAME TO GO FROM GPX EX FRAME TO FRAMED SUPERLITE II-XL 120.
3. PROVIDE ALTERNATE COST FOR INTERIOR WINDOW FRAME TO GO FROM GPX EX FRAME TO FRAMED SUPERLITE II-XL**B** 120.
4. THE SUFFIX **B** IS REQUIRED WHEN THE SQFT IS GREATER THAN 34 SQFT.

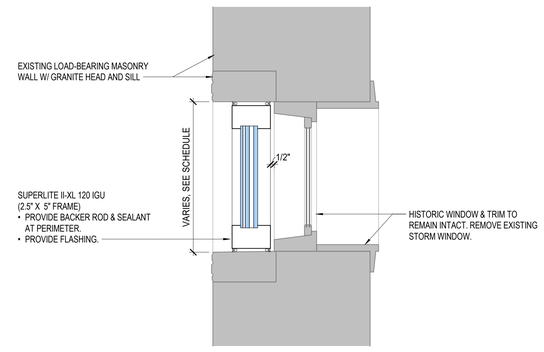


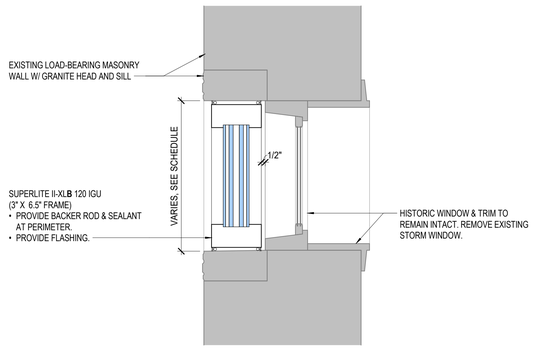


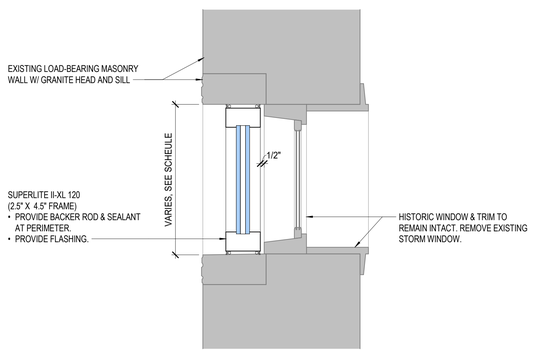
1 A700 RATED WINDOW TYPES
SCALE: 3/8" = 1'-0"

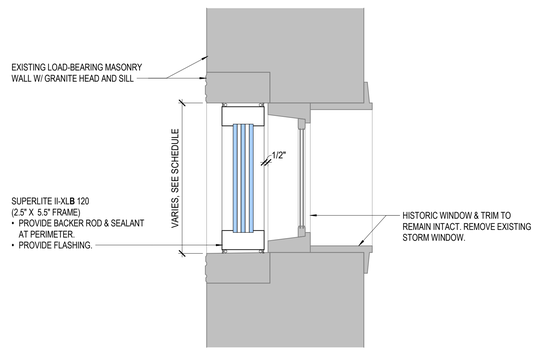
2 A700 RATED WINDOW DETAIL - INTERIOR FRAME A
SCALE: 1 1/2" = 1'-0"

3 A700 RATED WINDOW DETAIL - INTERIOR FRAME B
SCALE: 1 1/2" = 1'-0"









4 A700 RATED WINDOW - EXTERIOR FRAME A
SCALE: 1 1/2" = 1'-0"

5 A700 RATED WINDOW - EXTERIOR FRAME B
SCALE: 1 1/2" = 1'-0"

6 A700 RATED WINDOW - ALT INTERIOR FRAME A
SCALE: 1 1/2" = 1'-0"

7 A700 RATED WINDOW - ALT INTERIOR FRAME B
SCALE: 1 1/2" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE: **06/10/21** | SCALE: **As indicated**

DRAWN BY: **Author** | CHECKED BY: **Checker**

ISSUE LOG:

SCHEMATIC DESIGN	**07/25/2025**
75% DD SET/OWNER REV.	**05/29/2026**
100% DD SET	**10/23/2026**

SHEET CONTENTS: **WINDOW TYPES - SCHEDULES, FRAMES AND NOTES**

SHEET NO: **A700**

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10/23/2026 4:55:44 PM

DOOR SCHEDULE

DOOR NO.	ROOM NO. FROM	ROOM NO. TO	ROOM NAME FROM	ROOM NAME TO	DOOR TYPE	Fire Rating - Scheduled	DOOR W	DOOR H	DOOR TH	DOOR MAT'L	DOOR FIN.	FRAME TYPE	FRAME MAT'L	FRAME FIN.	HARDWARE	NOTES
101A.1		101A		ENTRY SCREENING AREA	AL		2'-11 7/8"	8'-0"	1 3/4"	AL-GL	MFR		AL	MFR		
101A.2		101A		ENTRY SCREENING AREA	AL		2'-11 7/8"	8'-0"	1 3/4"	AL-GL	MFR		AL	MFR		
101A.3		101A		ENTRY SCREENING AREA	AL		2'-11 7/8"	8'-0"	1 3/4"	AL-GL	MFR		AL	MFR		
101B.1	101A	101B	ENTRY SCREENING AREA	SECURITY	F		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
101B.2	101D	101B	PASSAGE	SECURITY	N	90 MIN	3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
101C	101A	101C	ENTRY SCREENING AREA	RESTROOM	F		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
101D		101D		PASSAGE	2F-F		5'-0"	7'-0"	1 3/4"	WD	CLR	2	HM	PTD		
102A.1	102A	101A	ENTRY HALL	ENTRY SCREENING AREA	2AL		6'-0"	8'-0"	1 3/4"	AL-GL	MFR		AL	MFR		
102A.2	102A	101A	ENTRY HALL	ENTRY SCREENING AREA	AL		3'-0"	8'-0"	1 3/4"	AL-GL	MFR		AL	MFR		
103.1	103		EAST VESTIBULE		2AL		6'-0"	7'-0	1 3/4"	AL-GL	MFR		AL	MFR		ADA DOOR ACTUATOR
103.2	102C		VISITORS' HALL		2AL		5'-11 1/2"	6'-11 3/4"	1 3/4"	AL-GL	MFR		AL	MFR		ADA DOOR ACTUATOR
104.1	102B	104	CORRIDOR	ANTE ROOM	G		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
104.2	104	102C	MECH ROOM	VISITORS' HALL	2F	90 MIN	6'-0"	7'-0"	1 3/4"	WD	CLR	2	HM	PTD		
104A	104A	104	CLOSET	ANTE ROOM	F		2'-8"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
104B	104	104B	ANTE ROOM	TOILET ROOM			3'-0"	7'-0"	1 3/8"							
108	102B		CORRIDOR		G	90 MIN	3'-6"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		MAGNETIC HOLD OPEN
123	123	108	LACTATION ROOM	HALL			3'-0"	7'-0"	1 3/8"							REUSE DOOR & FRAME FROM PREVIOUS COPY ROOM, NEEDS ACCESS CONTROL
125	108	125	HALL	CAPITAL POLICE CHIEF	G		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		REUSE DOOR, FRAME AND HARDWARE FROM PREVIOUS CAPITOL POLICE ROOM
130					AL		2'-11 7/8"	8'-0"	1 3/4"	AL-GL	MFR		AL	MFR		
131	130	131	CORR	J.C.	N		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
132					AL		2'-11 7/8"	8'-0"	1 3/4"	AL-GL	MFR		AL	MFR		
133	130	133	CORR	UTILITY ROOM	N		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
134					AL		2'-11 7/8"	8'-0"	1 3/4"	AL-GL	MFR		AL	MFR		
136.1	130	136	CORR	COAT ROOM	G		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
136.2	102B	136	CORRIDOR	COAT ROOM			3'-0"	7'-0"	1 3/8"							
137	136	137	COAT ROOM	ORIENTATION	F		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
138	137	138	ORIENTATION	COPY RM	N		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
138.1	138	138A	COPY RM	IT	F		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
139	138	139	COPY RM	STORAGE	F		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
150.1	130	150	CORR	STAIR D			5'-0"	7'-0"	1 3/4"							
150.2	150	101D	STAIR D	PASSAGE	2F-F		5'-0"	7'-0"	1 3/4"	WD	CLR	2	HM	PTD		
238	238	337	CARD ROOM	BRIDGE	N	90 MIN	4'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
300.1		350		STAIR D	F	60 MIN	3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
300.2	300	300	PASS	PASS	F		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
400	400	450	MECH ATTIC 1	STAIR D	F	60 MIN	3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
M102	M102	M150	HALL	STAIR D	F	60 MIN	3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		
M102A	M102A	M102	HALL	HALL	F		3'-0"	7'-0"	1 3/4"	WD	CLR	1	HM	PTD		

DOOR HARDWARE LEGEND

DOOR HARDWARE SETS ARE DEFINED IN BOTH DRAWINGS AND SPECIFICATIONS. HARDWARE SETS IN THE DRAWINGS DESCRIBE HARDWARE UNIQUE TO EACH DOOR'S HARDWARE, AND SPECIFICATIONS ADD REQUIREMENTS THAT APPLY TO ALL DOORS. SPECIFICATIONS ALSO DEFINE BASIS OF DESIGN MANUFACTURERS, QUALITY STANDARDS, FINISHES, SUBMITTAL REQUIREMENTS, ETC.

HARDWARE SETS ARE DEFINED BY A THREE PART IDENTIFIER WITH EACH PART SEPARATED BY DASHES (-), AS ILLUSTRATED BY THE EXAMPLE BELOW:

Example Door Hardware Code:
F84/E2171-1-A/Co
1 2 3

1. ANSI HARDWARE FUNCTION. F84: Classroom function cylindrical latchset/ E2171: Classroom function cylindrical deadbolt
2. ANSI 156 HARDWARE GRADE. 1: Grade 1 (more durable, for high use areas)
3. SPECIAL FEATURES. SEE LIST BELOW. A: Acoustical- provide full weatherstripping and door bottom/ Co- Omit closer required by rating, provide rated hardware.

DOOR HARDWARE CODES

1. ANSI HARDWARE FUNCTION. ONLY COMMONLY USED CODES USED IN THIS PROJECT ARE LISTED. REFER TO ANSI FOR ANY IDENTIFIER NOT LISTED. FOR EXIT DEVICES, "M", "V",or "R" ADDED TO THE ANSI NUMBER INDICATES "M"ORTISE, CONCEALED "V"ERTICAL ROD, OR "R"IM TYPE EXIT DEVICE.

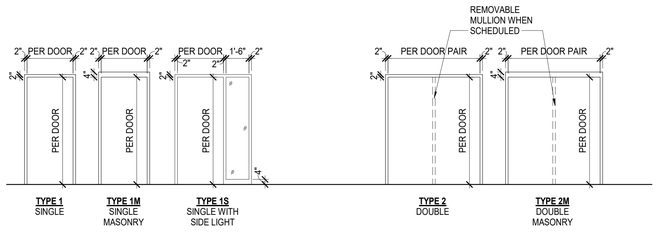
   F75: Passage Function cylindrical latch
   F76: Privacy Function cylindrical latch
   F81: Entrance Function cylindrical latch
   F82: Office Function cylindrical latch
   F84: Classroom Function cylindrical latch
   F87: Storeroom Function cylindrical latch
   E2153: Single Cylinder Deadbolt Lock
   L496: Occupancy Indicator Deadbolt (no ANSI number, using Schlage code)
   01: Exit device, exit only, no trim. M/V/R indicates type as described above.
   06: Exit device, Entrance by thumbpiece when released by pullside key; M/V/R indicates type as described above.

2. HARDWARE GRADE. PROVIDE HARDWARE OF THE ANSI 156 GRADE INDICATED FOR ALL HARDWARE COMPONENTS ON THIS DOOR.
3. SPECIAL FEATURES. ADD HARDWARE INDICATED BY THE LIST BELOW. MULTIPLE REQUIREMENTS ARE SEPARATED BY FORWARD SLASHES (/)
   A- Acoustical door. Provide door gasketing mounted to the door frame and provide a door bottom mounted to the door using products described in the specifications.
   Ar- Armor Plate. Provide armorplate as described in the specifications. *A kickplate is a larger metal plate fastened to both faces, generally covering the bottom 30" of the door surface to protect from marring the finish. Contrast with Kickplate below.*
   C- Closer. Provide a door closer concealed in the door as described in the specifications. All closers shall include a stop unless otherwise noted. Cc indicates a closer concealed in the door; otherwise provide exposed type with cover. Ch or Cch indicates a closer with a holdopen. All closers should be appropriate for the fire rating indicated. Co indicates omit closer required by rated opening and provide rated hardware instead.
   CR- Card Reader. Provide all power transfers, electrified hardware, sensors, etc. to allow the card access door to function as described in the *[door security narrative attached to the hardware specification] [security drawings and specifications]. Choose one option.*
   E- Electronically controlled. Et- Timeclock controlled; Er- Remote controlled via access control system. Provide all power transfers, electrified hardware, sensors, etc. to allow the electronically controlled door to function as described in the *[door security narrative attached to the hardware specification] [Elecrical Drawings] [security drawings and specifications]. Choose one option.*
   H- Holdopen. H= manual holdopen; Hm= magnetic holdopen. See specifications for additional details, and *[life safety] [code] [fire alarm] [security] drawings [and/or door security narrative attached to the hardware specification]* for information on magnetic holdopens. *[Choose all that apply, see also "Closer" above]*
   K- Kickplate. Provide kickplate as described in the specifications. *A kickplate is a smaller metal plate fastened to both faces, near the bottom of the door, to prevent marring the paint or wood surface of a heavily used door.*
   O- Electrified opening with auto opener. Provide actuator of type listed in "hardware notes" column. Provide all power transfers, electrified hardware, sensors, etc. to allow the electronically controlled door to function as described in the *[door security narrative attached to the hardware specification] [Elecrical Drawings] [security drawings and specifications]. Choose one option.*
   So-Omit stop. Otherwise, provide wall or overhead stop for every swinging door per specifications.
   Sp- Spring hinges. *Will create a self-closing door but not as reliable as closers and generally not allowable for rated openings*
   T- Thermal Weatherstripping. Provide heavy duty gasketing mounted to all three sides of the door frame and a *gasketed threshold, as described by the specifications.*
4. OPENING FIRE RESISTANCE RATING: Provide door, frame, and hardware rated for the fire resistance, which is indicated in minutes.

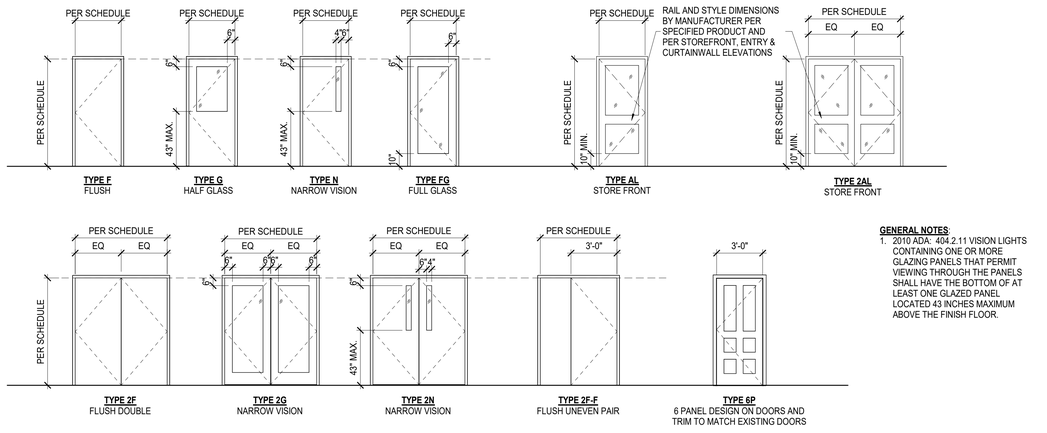
DOOR SCHEDULE LEGEND

W	WIDTH
H	HEIGHT
TH	THICKNESS
MAT'L	MATERIAL
FIN	FINISH
HDWR	HARDWARE SET
AL	ALUMINUM
WD	WOOD
STL	STEEL
HM	HOLLOW METAL
GL	GLASS
CLR	CLEAR FINISH
STN	STAINED
PTD	PAINTED
ANOD	ANODIZED
FACT	FACTORY APPLIED OPAQUE FINISH
ETR	EXISTING TO REMAIN
L	LITE (WIDTH)
PP	PUSH PLATE

ALL DOORS AND WINDOWS MUST COMPLY WITH SAFETY GLAZING REQUIREMENTS, THIS SHEET



1 A801 DOOR FRAME TYPES
SCALE: 1/4" = 1'-0"



GENERAL NOTES:
1. 2010 ADA: 404.2.11 VISION LIGHTS CONTAINING ONE OR MORE GLAZING PANELS THAT PERMIT VIEWING THROUGH THE PANELS SHALL HAVE THE BOTTOM OF AT LEAST ONE GLAZED PANEL LOCATED 43 INCHES MAXIMUM ABOVE THE FINISH FLOOR.

2 A800 DOOR TYPES
SCALE: 1/4" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 06/10/21
SCALE: As indicated
DRAWN BY: FFF
CHECKED BY: CP/SB

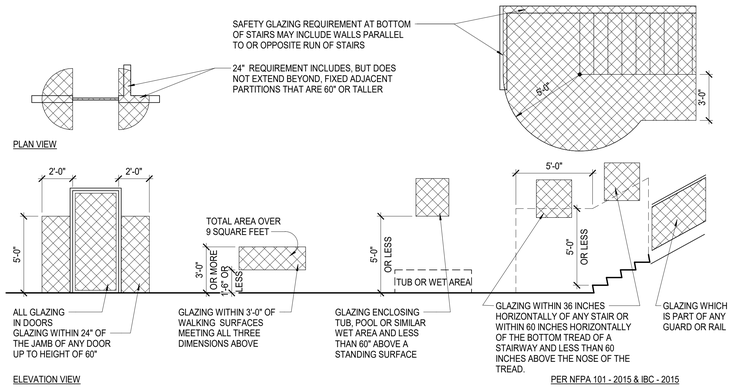
ISSUE LOG:
SCHEMATIC DESIGN 07/25/2025
75% DD SET/OWNER REV. 05/29/2026
100% DD SET 10/23/2026

SHEET CONTENTS:
DOOR TYPES - SCHEDULES, FRAMES AND NOTES

SHEET NO:
A800

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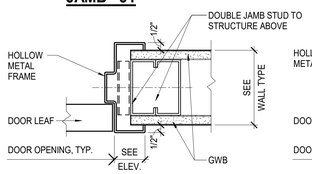
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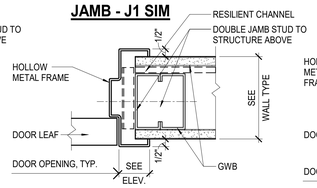
1 A801 SAFETY GLAZING REQUIREMENTS

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

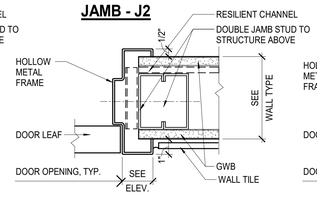
JAMB - J1



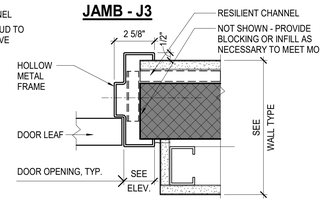
JAMB - J1 SIM



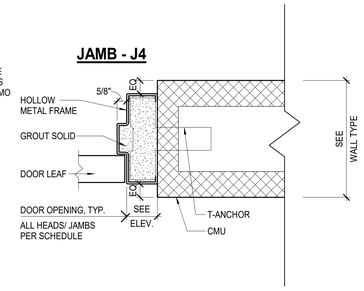
JAMB - J2



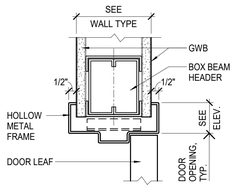
JAMB - J3



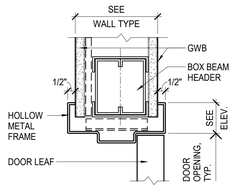
JAMB - J4



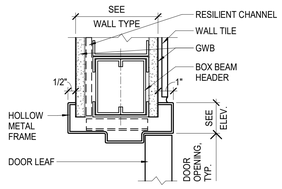
HEAD - H1



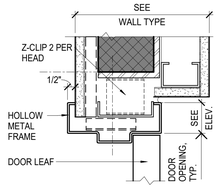
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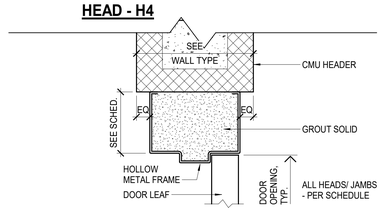
HEAD - H2



HEAD - H3



HEAD - H4



NOTE: WALL TYPES INCLUDE CMU, GWB ON METAL STUD, AND OTHER ASSEMBLIES. SEE A-000 SERIES DRAWINGS. J1/H1 INDICATE A DIRECT RELATIONSHIP BETWEEN WALL THICKNESS AND JAMB THROAT

3 A801 HOLLOW METAL FRAME DETAILS, TYP.

SCALE: 3" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
06/10/21	As indicated
DRAWN BY: FFF	CHECKED BY: FFF

ISSUE LOG:

SCHEMATIC DESIGN	07/25/2025
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: DOOR DETAILS

SHEET NO: A801

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BASIS OF DESIGN FINISH LEGEND

TAG	MANUFACTURER	PROUCT LINE	COLOR/ PATTERN	LAYOUT NOTES	COMMENTS
06 400 FRP PANELING					
FRP-1	CRANE COMPOSITES	FRP	GLASSBOARD SMOOTH FRP	WHITE	PROVIDE MFR-RECOMMENDED TRIM PIECES
06 4100 ARCHITECTURAL WOOD CASEWORK\					
SSM	CORIAN	SOLID SURFACE	PRICE GROUP "D"		COUNTERTOP
WD1	TBD	WOOD TYPE/FINISH			
WDV-1	VENEER ART - LAMINART	WOOD VENEER			CASEWORK
08 8700 - WINDOW FILMS					
WFM-1	3M	WINDOW FILM - FASARA	DUSTED		
09 2600- GYPSUM PLASTERING					
PP-1	NATIONAL GYPSUM	GOLD BOND - KAL-KOTE SMOOTH FINISH PLASTER	MATCH EXISTING		PATCH ONLY PLASTER
09 3000 TILING					
CT-1	CREATIVE MATERIALS CORPORATION	HYANNIS	GREY	12"X24" MATTE; 1/8" GROUTLINES	FLOOR AND WALL TILES
CT-2	CREATIVE MATERIALS CORPORATION	HYANNIS	GREY	6" X 24" MATTE; 1/8" GROUTLINES	WALL BASE
GROUT	LATICRETE				COORDINATE WITH TILE TYPE & SPEC
ST-1	VERMONT STRUCTURAL SLATE	VT NATURAL STONE / TILE	HARDWICK GRANITE - FLAMED FINISH	18" X 24" X 3/8"	1/8" GROUT JOINT - STAGGERED LAYOUT
ST-2	VERMONT STRUCTURAL SLATE	VT NATURAL STONE / WALL BASE	HARDWICK GRANITE - FLAMED FINISH	6" X 24" X 3/8"	1/8" GROUT JOINT
09 5100 ACOUSTICAL CEILINGS					
ACT1	ARMSTRONG	ULTIMA	WHITE	24"X24", 9/16" TEGULAR	9/16" SUPRAFINE SUSPENSION SYSTEM
LIC-1	ARMSTRONG	WOODS GRILLE-CLASSICS/ ITEM 7099	WARM OAK (GWO)	SEE RCP	BACKER AND DOWEL
09 6500 RESILIENT FLOORING					
RB1	JOHNSONITE	4" TRADITIONAL RUBBER WALL BASE	TBD	4" BUTT TOE	ROLLS
RF-1	FORBO	LINOLUEM	MARMOLEUM CONCRETE	TILES	
RF-2	FORBO	LINOLEUM	MARMOLEUM PIANO	TILES	
09 6700 FLUID-APPLIED FLOORING					
EPX1	DUR-A-FLEX	DUR-A-QUARTZ EPOXY BROADCAST	COLOR: Q28-23, ORANGE PEEL TEXTURE	QUARTZ EPOXY BROADCAST W. URETHANE TOPCOAT	WITH 7" +/- INTEGRAL BASE
09 9000 PAINT & COATING					
PT-1	SHERWIN WILLIAMS	SEE SPECIFICATION	TBD		GENERAL INTERIOR WALLS
PT-2	SHERWIN WILLIAMS	SEE SPECIFICATION	TBD		GWB CEILINGS
PT-3	SHERWIN WILLIAMS	SEE SPECIFICATION	TBD		DOOR FRAMES
PT-4	SHERWIN WILLIAMS	SEE SPECIFICATION	TBD		ACCENT WALLS
PT-5	SHERWIN WILLIAMS	SEE SPECIFICATION	TBD		CONCRETE CEILING
10 2600 WALL & DOOR PROTECTION					
CG1	INPRO	1.5" CORNER GUARD	STAINLESS STEEL		SELECT: CEMENT-ON OR SCREW-ON
10 2800 TOILET, BATH, & LAUNDRY ACCESSORIES					
BCH	KOALA KARE	BABY CHANGING STATION		KB200-01SS	CFCI
FOD		FOOT OPERADED DOOR OPENER			CFCI
GB	BOBRICK	GRAB BAR		B-6806 SERIES	CFCI
HSD		HAND SANITZIER DISPENSER			OFCI
MIR	BOBRICK	MIRROR - WALL MOUNTED		B-290	CFCI
MOP	BOBRICK	MOP HOLDER		B-223	CFCI
PS		PAPER SHELF			OFCI / LOCATE ON BACK OF TOILET DOOR
PTD		PAPER TOWEL DISPENSER			OFCI
RH	BOBRICK	ROBE HOOK		B-76727	CFCI / TWO (2) PER DOOR
SD		SOAP DISPENSER			OFCI
SND	BOBRICK	SANITARY NAPKIN DISPOSAL		B-254	CFCI
SNV		SANITARY NAPKIN VENDING			OFCI
SSD		SECURE SHARPS DISPOSAL			CFCI
12 4800 ENTRANCE FLOOR MATS & FRAMES					
EM-1	MATTER	DESIGN TRACK / RECESSED	ALUMINUM		COORDINATE PANEL THICKNESS WITH OWNER REQUIREMENTS
CI					
ECA-1	L&M CONSTRUCTION CHEMICALS	LIONHARD, PETROTEX	POLISHED FINISH	SERVICE AREAS	AREAS TO RECEIVE GLOSS LEVEL 3 (GRIT LEVEL: 800)

INTERIOR FINISH NOTES

GENERAL

1. REFER TO SPECIFICATION INSTALLATION REQUIREMENTS, U.N.O.
2. REFER TO SPECIFICATION FOR FINISH SAMPLE REQUIREMENTS.
3. SEE A900 FOR FINISH MATERIALS KEY AND SCHEDULE
4. SEE FINISH PLANS FOR FLOORING TRANSITION LOCATIONS AND FLOORING PATTERNS IF NOT INDICATED ON A900
5. SEE REFLECTED CEILING PLANS FOR CEILING CHANGES
6. PROVIDE BLOCKING FOR **ALL** WALL-MOUNTED SHELVING, ACCESSORIES, & SPECIALTY FINISHES, U.N.O.
7. ALL DIMENSIONS TO BE VERIFIED IN FIELD WHERE PRIOR TO INSTALL.

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

1. ALL WINDOW SILLS TO BE ***(SELECT TYPE – SSM#, WD#, GWB PAINTED TO MATCH WALL)***
2. PROVIDE ADJUSTABLE SHELVING AT STORAGE, JANITOR, ***& INCLUDE OTHER ROOMS TO RECEIVE SHELVING, FINISH TO BE (SELECT WDV#, PL#, WHITE MELAMINE)***
3. PROVIDE ADA COMPLIANT CABINET & DRAWER HARDWARE. ARCHITECT TO APPROVE HARDWARE & FINISH. ***OR B.O.D.: INCLUDE B.O.D. PRODUCT & FINISH***
4. CABINET DOORS TO BE:
   STYLE: ***FULL OVERLAY/ PARTIAL OVERLAY/INSET***
   DOOR TYPE: ***RAISED PANEL/RECESSED PANEL (SHAKER)/ SLAB(FLAT)/MULLION FRAME; OPEN FRAME (GLASS INSERT)/***
   DESIGNER TO UPDATE CABINETS TO MATCH STYLE IN PROJECT ELEVATIONS; UPDATE BASE AS NEEDED (RB/SOLID WOOD/WD VENEER/PL, SCRIBED TO FLOOR)

DIVISION 09 – FINISHES

1. REFER TO A640 FOR TYPICAL MATERIAL TRANSITIONS.
2. ADA COMPLIANCE REQUIRED FOR ALL THRESHOLDS & FLOOR TRANSITIONS.
3. REFER TO INTERIOR ELEVATIONS *& A640* FOR EXTENT AND PATTERN OF WALL TILE WHERE LOCATED.
4. ACCESSORIES AND MILLWORK TO BE MOUNTED THROUGH WALL TILE WHERE APPLICABLE.
5. REFER TO B.O.D. FINISH SCHEDULE FOR SPECIALTY TILE REQUIREMENTS. PROVIDE SCHLUTER ***JOLLY*** TRANSITION AT EXPOSED TILE EDGES, FINISH TO BE SELECTED BY ARCHITECT.
6. PROVIDE WATERPROOFING MEMBRANE WHERE TILE IS SCHEDULED IN "WET" AREAS. REFER TO SPECIFICATION FOR ACCEPTABLE MEMBRANES.
7. PROVIDE ANTIFRACTURE MEMBRANE WHERE TILE IS SCHEDULED IN ALL OTHER AREAS. DO NOT INSTALL OVER EXPANSION JOINTS. REFER TO SPECIFICATION FOR ACCEPTABLE MEMBRANES.
8. CONSULT WITH ARCHITECT FOR LOCATIONS OF SOFT JOINTS AND EXPANSION JOINTS IN TILE INSTALLATION. ALIGN TILE JOINTS WITH SUBFLOOR CONTROL JOINTS.
9. PROVIDE PENETRATING SEALER WHERE NATURAL STONE IS SCHEDULED FOR INTERIOR AREAS. REFER TO SPECIFICATION.
10. SCRIBE ALL FLOORING MATERIALS AROUND OBSTRUCTIONS. EXTEND TILE NEATLY TO AND AROUND ALL WALLS AND CORNERS. BROKEN OR CHIPPED TILE (VINYL, CERAMIC OR OTHER) WILL NOT BE ACCEPTED
11. CONTINUE ALL FLOORING MATERIALS UNDER CASEWORK & EQUIPMENT
12. RUBBER TRANSITION STRIPS/REDUCERS TO MATCH ADJACENT WALL BASE
13. PROVIDE MARBLE THRESHOLD AT ALL BATHROOMS AND SHOWER ROOMS, U.N.O.
14. SEE FINISH PLAN FOR TILE CARPETING INSTALLATION PATTERN IF NOT INDICATED ON FINISH SCHEDULE.
15. INSTALL CARPET IN CORRIDORS OR OPEN AREAS PRIOR TO INSTALLATION OF CLOSED ROOMS AND OFFICES. PATTERN MATCH CARPET AT ALL SEAMS.
16. FLOORING CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH THE SEAM LAYOUT OF ALL AREAS TO RECEIVE BROADLOOM CARPET OR RESILIENT SHEET FLOORING PRIOR TO INSTALLATION; SEE SPECIFICATIONS. THE SEAMS SHALL BE POSITIONED SO THAT WHERE POSSIBLE:
    - SEAMS RUN THE LENGTH OF THE AREA.
    - MAIN TRAFFIC RUNS LONG RATHER THAN ACROSS, THE SEAM.
    - INCIDENT LIGHT DOES NOT STRIKE ACROSS THE SEAM.
    - SEAMS ARE AWAY FROM AREAS SUBJECT TO PIVOTING TRAFFIC.
    - SEAMS ARE NOT PERPENDICULAR TO DOORWAY OPENINGS.
17. CARPET SHALL HAVE NAP RUNNING IN THE SAME DIRECTION. (TOWARDS THE ENTRANCE UNLESS NOTED OTHERWISE.)
18. REFER TO SPECIFICATION FOR PAINT FINISHES BY SURFACE TYPE, U.N.O
19. ALL GWB TO BE PAINTED, U.N.O.
20. ASSUME 25% OF WALLS TO RECEIVE ACCENT PAINT. ARCHITECT TO SELECT COLOR AND LOCATIONS IF NOT INDICATED ON FINISH PLANS.
21. ALL EXPOSED STRUCTURE TO BE SEALED & PAINTED, U.N.O.
22. PROVIDE EPOXY PAINT AT JANITORS' CLOSETS, U.N.O.
23. REFER A641 FOR TYPICAL CEILING TRANSITION DETAILS.

DIVISION 10 - SPECIALTIES

1. REFER TO RCP'S FOR WINDOW SHADE LOCATIONS
2. PROVIDE CORNERGUARDS AT OUTSIDE CORNERS AT CORRIDORS, U.N.O.
3. ADA COMPLIANCE REQUIRED FOR ALL TOILET, BATH, AND LAUNDRY ACCESSORY PRODUCTS AND INSTALLATION LOCATIONS.
4. TOILET ACCESSORY INFORMATION TO BE CONFIRMED WITH OWNER. WHERE VENDORS INSTALL ACCESSORIES, INSTALLATION MUST BE IN COMPLIANCE WITH ADA REQUIREMENTS.

DIVISION 12 – FURNISHINGS

1. OBTAIN FIELD MEASUREMENTS OF RECESSED AREAS TO RECEIVE ROLL MATS AND FRAMES PRIOR TO ORDER PLACEMENT; INCLUDE INFORMATION ON SQUARENESS AND LEVELNESS OF RECESS.

FINISH SCHEDULE LEGEND

ACT	ACOUSTIC CEILING TILE
ACP	ACOUSTIC CEILING PANEL
AWP	ACOUSTIC WALL PANEL
BBT	BIO-BASED TILE
CG	CORNER GUARD
CONC	CONCRETE
CPT	CARPET
CQS	COMPOSITE QUARTZ SURFACE
CT	CERAMIC TILE
CUSH	CUSHION
DPG	DECORATIVE PLASTIC GLAZING
EM	ENTRY MAT
EPX	EPOXY FLOORING
EXP	EXPOSED, NO CEILING
FAF	FLUID APPLIED FLOORING
FRP	FIBER REINFORCED PLASTIC PANELS
GWB	GYPSUM WALL BOARD
GWB-A	GWB - ABUSE RESISTANT
GWB-M	GWB - MOISTURE RESISTANT
LIN	LINOLEUM
LVT	LUXURY VINYL TILE
PL	PLASTIC LAMINATE
PLSTR	PLASTER
PT	PAINT
PTD	PAINTED
RAF	RESILIENT ATHLETIC FLOOR
RB	RUBBER (FLOORING OR WALL BASE)
SDT	STATIC DISSIPATIVE TILE
SF	STOREFRONT
SS	STAINLESS STEEL
SSF	SOLID SURFACE
ST	STONE TILE
WC	WALL COVERING
WCS	WOOD CEILING SYSTEM
WD	WOOD
WDV	WOOD VENEER
WPN	WALL PROTECTION
WS	WINDOW SHADE
WSF	WOOD SPORTS FLOORING SYSTEM
VCT	VINYL COMPOSITION TILE

ROOM FINISH SCHEDULE

ROOM #	NAME	FLOOR	BASE	WALL FINISH				MILLWORK			WAINSCOT		CEILING		COMMENTS
				NORTH	SOUTH	EAST	WEST	HORZ.	VERT.	BASE	MAT'L	HT	MAIN	SOFFIT	
07	SENATE COMMITTEE ROOM														
08	SENATE COMMITTEE ROOM														
09	ROOM														
10	ROOM														
11	ROOM														
101A	ENTRY SCREENING AREA	ST-1	ST-2	PT-1	N/A	N/A	N/A						GWB		
101B	SECURITY	ST-1	ST-2	PT-1	PT-1	PT-1	PT-1						ACT-1		
101C	RESTROOM	ST-1	ST-2	PT-1	PT-1	N/A	PT-1						ACT-1		
101D	PASSAGE	EPX-1	RB1	PT-1	PT-1	PT-1	PT-1						ACT-1		
102A	ENTRY HALL	ST-1	N/A	N/A	N/A	N/A	N/A						LIC-1		
102B	CORRIDOR	ST-1	N/A	N/A	N/A	N/A	N/A						LIC-1		
102C	VISITORS' HALL	ST-1	N/A	N/A	N/A	N/A	N/A						PT-5		
103	EAST VESTIBULE	ST-1	N/A	N/A	N/A	N/A	N/A						ETR		
104	ANTE ROOM	ST-1	ST-2	CT-1	CT-1	CT-1	CT-1						ACT-1		
104	MECH ROOM														
104A	CLOSET														
104B	TOILET ROOM	ST-1	ST-2	CT-1	CT-1	CT-1	CT-1						ACT-1		
104E	PASSAGE	EPX-1	RB1	PT-1	PT-1	PT-1	PT-1						ACT-1		
108	HALL	P+M	P+M	PP-1	PP-1	PP-1	PP-1						PT-2		
109	LINCOLN HALLWAY														
123	LACTATION ROOM	ST-1	ST-2	CT-1	CT-1	CT-1	CT-1						ACT-1		
124	LEGISLATIVE LOUNGE														
125	CAPITAL POLICE CHIEF	ST-1	ST-2	PT-1	PT-1	PT-1	PT-1						ACT-1		
126	SENATE COMMITTEE ROOM														
127	SENATE COMMITTEE ROOM														
128	SENATE COMMITTEE ROOM														
129	CAPITAL POLICE	RF-2	RB1	PT-1	PT-1	PT-1	PT-1						ACT-1		
130	CORR	ST-1	ST-2	PT-1	PT-1	PT-1	PT-1						EXPOSED		
131	J.C.	EPX-1	RB1	FRP-1	FRP-1	FRP-1	FRP-1						EXPOSED		
133	UTILITY ROOM	ECA-1	RB1	PT-1	PT-1	PT-1	PT-1						EXPOSED		
133A	E.R.	ECA-1	RB1	PT-1	PT-1	PT-1	PT-1						EXPOSED		
136	COAT ROOM	CT-1	CT-2	PT-1	PT-1	PT-1	PT-1						PT-5		
137	ORIENTATION	CT-1	CT-2	PT-1	PT-1	PT-1	PT-1						PT-5		
138	COPY RM	RF-1	RB1	PT-1	PT-1	PT-1	PT-1						PT-5		
138A	IT	RF-1	RB1	PT-1	PT-1	PT-1	PT-1						PT-5		
139	STORAGE	RF-1	RB1	PT-1	PT-1	PT-1	PT-1						PT-5		
150	STAIR D	ST-1	ST-2	PT-1	PT-1	PT-1	PT-1						PT-2		
349	Room														
351	Room														

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE: **06/10/21**

SCALE: **As indicated**

DRAWN BY: **FFF**

CHECKED BY: **CP/SB**

ISSUE LOG:

SCHEMATIC DESIGN	**07/25/2025**
75% DD SET/OWNER REV.	**05/29/2026**
100% DD SET	**10/23/2026**

SHEET CONTENTS:

FINISH SCHEDULE AND NOTES

SHEET NO:

A900

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10/29/2024 4:00:45 PM

FIRE PROTECTION LEGEND

(NAME)	NEW PIPING (BOLD)
(NAME)	EXISTING PIPING (LIGHT)
F	FIRE PROTECTION WATER MAIN
SPKR	SPRINKLER MAIN/BRANCH
SP	STANDPIPE MAIN
DR	SPRINKLER DRAIN
VS VS	LOW PRESSURE DROP DOUBLE CHECK BACKFLOW PREVENTER
VS	O.S. & Y. OR OTHER INDICATING VALVE WITH TAMPER SWITCH
WF	FLOW SWITCH
PS	LOW PRESSURE SWITCH
	CHECK VALVE
E	ELECTRIC BELL
	WATER MOTOR GONG
W	WET ALARM VALVE
D	DRY ALARM VALVE
	PIPE CONTINUES
	STRAINER
	CONNECT NEW TO EXISTING
	LIMIT OF WORK
	FIRE DEPARTMENT CONNECTION - SIAMESE
	FIRE DEPARTMENT CONNECTION - STORZ
	BRANCH OUT OF TOP OF MAIN
	BRANCH OUT OF BOTTOM OF MAIN
	CAP
	CONCEALED PENDENT SPRINKLER
	EXPOSED PENDENT SPRINKLER
	UPRIGHT SPRINKLER
	SIDEWALL SPRINKLER
D	DRY SIDEWALL SPRINKLER ON WET PIPE SYSTEM (TYP FOR ALL HEAD TYPES)
	UNION
	EXPANSION JOINT
	PIPING AND DEVICES TO BE REMOVED
D	INSPECTORS TEST & DRAIN
	BALL VALVE

FIRE PROTECTION ABBREVIATIONS

CONN	CONNECT
D	DRY SPRINKLER
DEPT	DEPARTMENT
ETBR	EXISTING TO BE REMOVED
ETR	EXISTING TO REMAIN
F	FIRE PROTECTION
F.D.	FIRE DEPARTMENT
FHC	FIRE HOSE CABINET
FHV	FIRE HOSE VALVE
FHVC	FIRE HOSE VALVE CABINET
FP	FIRE PUMP
GC	GENERAL CONTRACTOR
P.I.V.	POST INDICATOR VALVE
SP	STANDPIPE
SPKR	SPRINKLER
W	WET SPRINKLER
W/	WITH

FIRE PROTECTION TRADE NOTES

FP-1 COORDINATE LOCATION OF ALL PIPING AND EQUIPMENT WITH ALL OTHER TRADES.

FP-2 MAINTAIN MINIMUM REQUIRED WORKING CLEARANCES ADJACENT TO ELECTRICAL EQUIPMENT PER LATEST EDITION OF NATIONAL ELECTRIC CODE.

FP-3 PROVIDE PIPE SLEEVES WHEREVER PIPING PENETRATES ANY WALL, FLOOR, OR CEILING.

FP-4 INSTALL ALL PIPING AND WIRING NEATLY AND SQUARE WITH BUILDING FEATURES.

FP-5 ALL PENETRATIONS THROUGH NEW OR EXISTING WALLS, CEILINGS AND FLOORS SHALL BE EITHER CORE DRILLED OR SAW CUT. CHISELED OR HAMMERED PENETRATIONS ARE NOT ALLOWED.

FP-6 WHERE PIPING PENETRATES A FIRE-RATED WALL, FLOOR, OR CEILING, FIRE STOPPING INSULATION SHALL BE PROVIDED BY THE FIRE PROTECTION CONTRACTOR.

FP-7 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACCESS PANELS IN AREAS TO BE FINISHED BY GENERAL CONTRACTOR. THE FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL OTHER ACCESS DOORS. COORDINATE AS REQUIRED.

FP-8 ALL PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE, UNLESS OTHERWISE INDICATED.

FP-9 FIRE PROTECTION SUB-CONTRACTOR SHALL COORDINATE FINAL SPRINKLER HEAD LAYOUT WITH MOST CURRENT ARCHITECTURAL REFLECTED CEILING PLAN. FINAL HEAD LAYOUT SHALL BE INCLUDED ON THE SUBMITTAL DRAWINGS WHICH SHALL BE APPROVED BY THE ARCHITECT AND ENGINEER PRIOR TO INTALLATION.

FIRE PROTECTION DEMOLITION NOTES

D-1 ALL EXISTING FIRE PROTECTION SYSTEMS, EQUIPMENT AND APPURTENANCES LOCATED IN THE EXISTING FACILITY ARE TO BE REMOVED WHERE NOTED ON THE ARCHITECTURAL AND/OR FIRE PROTECTION PLANS, AND/OR IN THE PROJECT SPECIFICATIONS. THE OWNER MAY WISH TO SALVAGE CERTAIN ITEMS; CONSULT OWNER FOR FURTHER INSTRUCTIONS. ITEMS IDENTIFIED TO BE SALVAGED ARE TO BE CAREFULLY DISASSEMBLED AND REMOVED, AND TURNED OVER TO THE OWNER AS DIRECTED.

D-2 WORK SHALL INCLUDE, BUT IS NOT LIMITED TO, THE REMOVAL OF ALL FIRE PROTECTION PIPING SYSTEMS, SPRINKLERS, APPURTENANCES, HANGERS, SUPPORTS, ETC.

D-3 NO EXISTING FIRE PROTECTION EQUIPMENT, SYSTEMS, OR APPURTENANCES SHALL BE ABANDONED IN PLACE.

D-4 COORDINATE WITH THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR AND ALL OTHER SUB-CONTRACTORS IN ORDER TO DETERMINE OVERALL PROJECT PHASING AND DEMOLITION WORK SEQUENCING. COORDINATE REQUIRED DEMOLITION BY OTHER TRADES RESULTING FROM FIRE PROTECTION SYSTEMS DEMOLITION.

D-5 REFER TO THE ARCHITECT'S DEMOLITION NOTES AND PROJECT SPECIFICATIONS FOR ADDITIONAL DEMOLITION INFORMATION AND REQUIREMENTS.

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY TO ALL RIST-FROST-SHUMWAY ENGINEERING, INC., DRAWINGS AND TRADES ASSOCIATED WITH THOSE DRAWINGS INVOLVED ON THIS PROJECT:

G-1 RIST-FROST-SHUMWAY ENGINEERING, INC., WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS, AND/OR THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE GUIDANCE OF RIST-FROST-SHUMWAY ENGINEERING, INC., GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES, OR CONFLICTS WHICH ARE DISCOVERED OR ALLEGED.

G-2 ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS INCLUDING, BUT NOT LIMITED TO, IBC 2018, IMC 2018, IPC 2018, NFPA, UL, ANSI, OSHA AND NEC.

G-3 CONTRACTOR AND ALL SUBCONTRACTORS SHALL PROTECT THE WORK SITE, SURROUNDING AREAS AND OCCUPANTS FROM DAMAGE AND INJURY.

G-4 CONTRACTOR AND ALL SUBCONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE CONTRACT DOCUMENTS. ALL DRAWINGS OF ANY PARTICULAR TRADE SHALL BE USED IN CONJUNCTION WITH DRAWINGS OF ALL OTHER TRADES TO COORDINATE ALL CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED WORK. ANY PROPOSED CHANGES, VARIATIONS, OR SUBSTITUTIONS MUST BE REVIEWED AND ACCEPTED BY THE ENGINEER PRIOR TO IMPLEMENTATION.

G-5 ALL DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN INTENT AND EXTENT OF THE WORK. THEY SHALL BE CONSIDERED PARTLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR ROUGHING-IN MEASUREMENTS OR TO SERVE AS SHOP DRAWINGS.

G-6 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS (AS-BUILT OR OTHERWISE) BEFORE COMMENCING FABRICATION, AND/OR ORDERING MATERIALS.

G-7 DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS OTHERWISE INDICATED.

G-8 IN THE EVENT THE CONTRACTOR ENCOUNTERS MATERIAL REASONABLY BELIEVED TO BE HAZARDOUS WHICH HAS NOT BEEN RENDERED HARMLESS, THE CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO THE OWNER AND ARCHITECT/ENGINEER IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED UNTIL WRITTEN VERIFICATION BY THE OWNER THAT THE MATERIAL HAS BEEN REMOVED OR OTHERWISE RENDERED HARMLESS.

PROVIDE WET AUTOMATIC SPRINKLER SYSTEM OVER ENTIRE FLOOR. SYSTEM SHALL BE BASED ON NFPA 13 COVERAGE REQUIREMENTS ACCORDING TO THE FOLLOWING GENERAL GUIDELINES:

LOCATION	DENSITY AND AREA
1. OFFICES, COMMON SPACES, ETC. WHERE COMBUSTIBILITY IS AT A MINIMUM SHALL BE CONSIDERED LIGHT HAZARD.	0.10 GPM/SQ. FT. OVER 1500 SQ. FT.
2. ELECTRIC CLOSETS SHALL BE CONSIDERED ORDINARY HAZARD GROUP I.	0.15 GPM/SQ. FT. OVER 1500 SQ. FT.
3. STORAGE AREAS, MECHANICAL ROOMS, TRASH ROOMS AND COPY/MAIL ROOMS SHALL BE CONSIDERED ORDINARY HAZARD GROUP II.	0.20 GPM/SQ. FT. OVER 1500 SQ. FT.

IN AREAS WHERE SEVERAL DIFFERENT OCCUPANCIES EXIST THE SPRINKLER SYSTEMS SHALL BE DESIGNED TO MEET THE MOST HYDRAULICALLY DEMANDING DENSITY AND AREA REQUIREMENTS. AN ALLOWANCE OF 100 GPM SHALL BE INCORPORATED IN DESIGN FOR HOSE STREAMS.

CONTRACTOR SHALL INSTALL NEW SPRINKLER HEADS IN ACCORDANCE WITH THE ABOVE DESIGN CRITERIA AND SHALL COORDINATE DESIGN CRITERIA WITH BUILDING OWNER'S INSURANCE COMPANY.

FIRE PROTECTION SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING NEW SPRINKLER HEAD LAYOUT WITH EXISTING & NEW SURFACE MOUNTED LIGHTS.

SPRINKLER HEAD SCHEDULE

SYMBOL	STYLE	MANUFACTURER AND MODEL
●	CONCEALED PENDENT	TYCO MODEL RFII QUICK RESPONSE CONCEALED PENDENT SPRINKLER, 155°F TEMPERATURE RATING, 5.6 K-FACTOR, 1/2" ORIFICE. PROVIDE ADJUSTABLE CONCEALED SPRINKLER ASSEMBLY FOR ALL CONCEALED SPRINKLER HEADS
○	UPRIGHT	TYCO MODEL TY-FRB QUICK RESPONSE UPRIGHT SPRINKLER, 155°F TEMPERATURE RATING, 1/2" ORIFICE, 5.6 "K" FACTOR.

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE: **10/23/26**

SCALE: **1 1/2" = 1'-0"**

DRAWN BY: **APS**

CHECKED BY: **APS**

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

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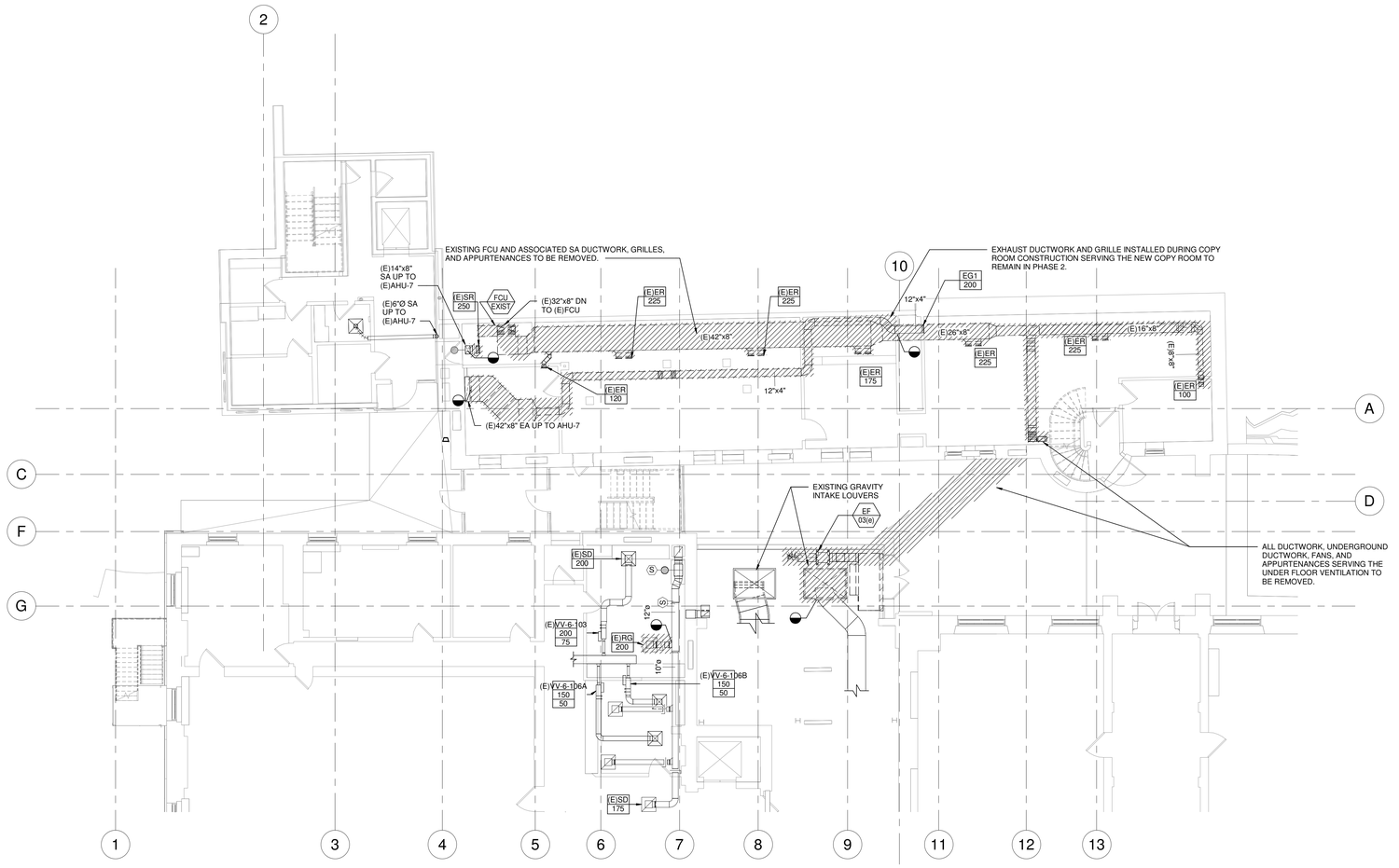
FIRE PROTECTION LEGEND, NOTES & ABBREVIATIONS

SHEET NO:

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1 LEVEL 1 DUCTWORK DEMOLITION PLAN - PHASE 2
1/8" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE: **10/23/26**

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

DRAWN BY: **Author**

CHECKED BY: **Checker**

ISSUE LOG:

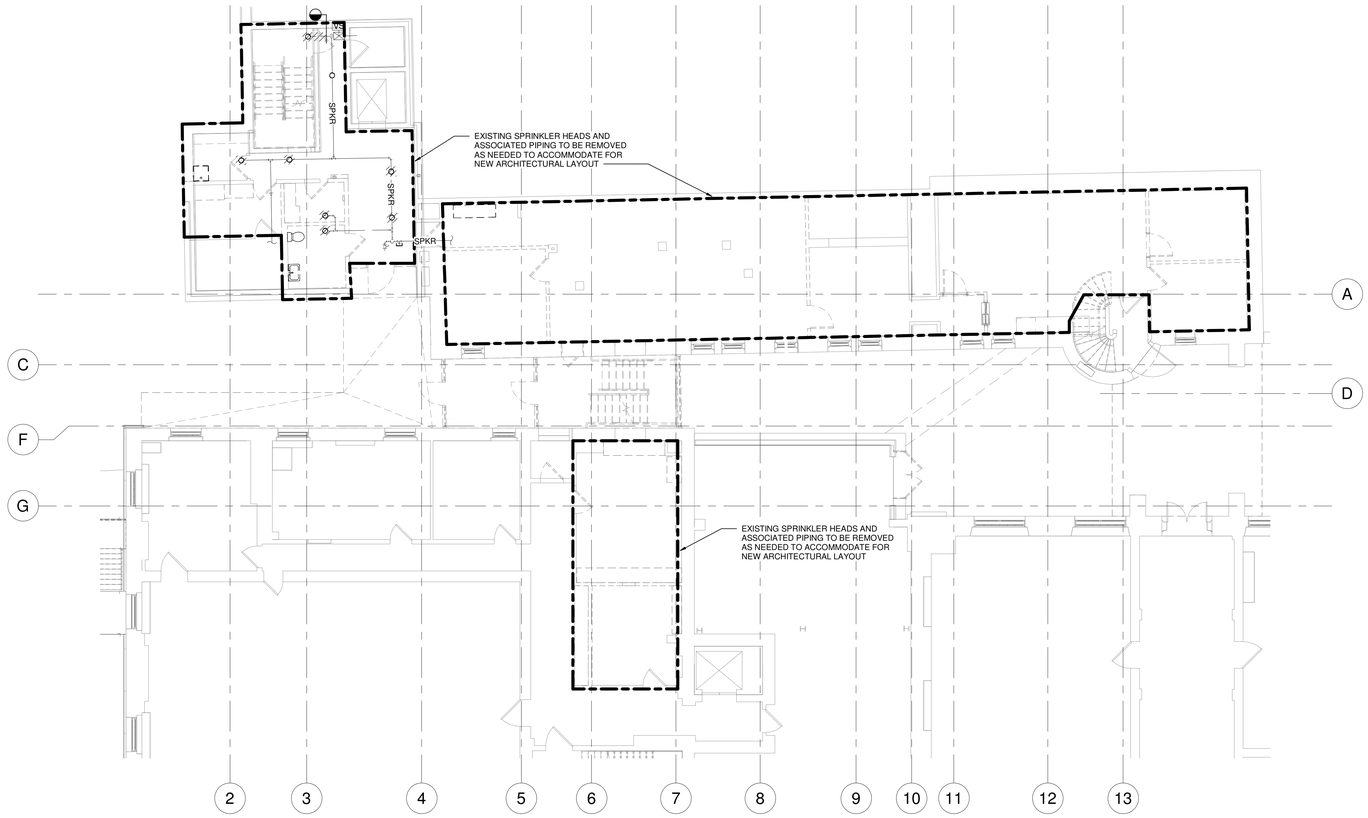
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75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

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LEVEL 1 DUCTWORK DEMOLITION PLAN

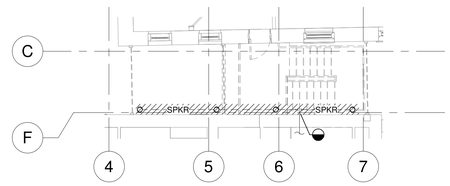
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MD121

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1 LEVEL 1 FIRE PROTECTION DEMO PLAN
1/8" = 1'-0"



2 MEZZANINE LEVEL FIRE PROTECTION DEMO PLAN
1/8" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE:	SCALE:
10/23/26	1/8" = 1'-0"
DRAWN BY:	CHECKED BY:
APS	APS

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

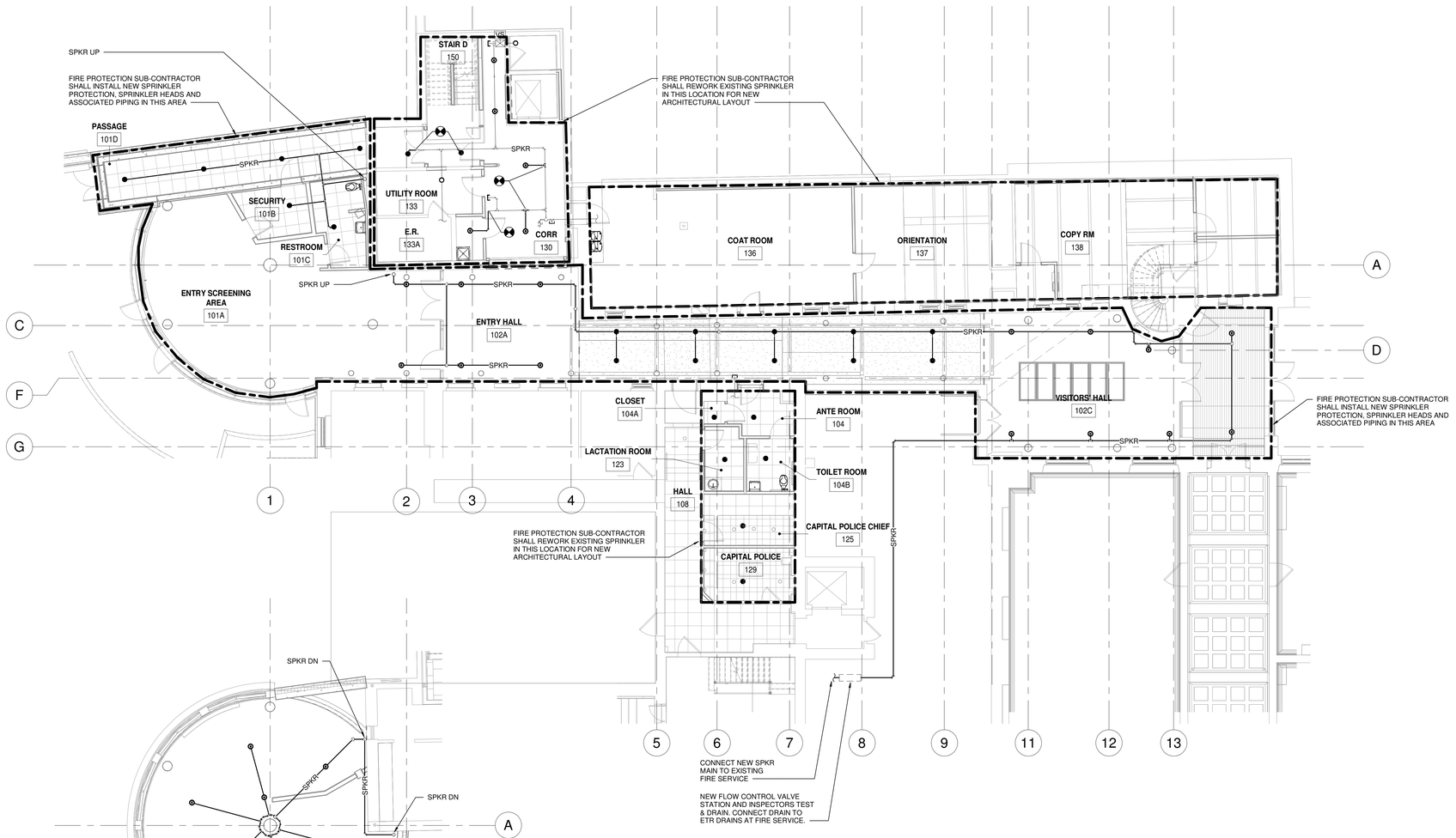
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FIRE PROTECTION DEMOLITION PLAN

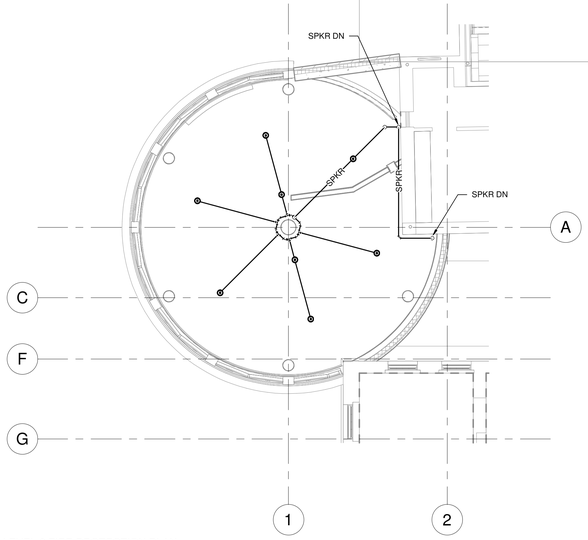
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1 LEVEL 1 FIRE PROTECTION PLAN
1/8" = 1'-0"



2 LEVEL 2 FIRE PROTECTION PLAN
1/8" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
10/23/26	1/8" = 1'-0"
DRAWN BY: APS	CHECKED BY: APS

ISSUE LOG:

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50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

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FIRE PROTECTION PLANS

SHEET NO:

FP121

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PLUMBING LEGEND

- (NAME) — NEW PIPING (BOLD)
- (NAME) — EXISTING PIPING (LIGHT)
- COLD WATER
- CW — COLD WATER - BELOW GRADE
- HW — HOT WATER - BELOW GRADE
- HOT WATER (TEMP=110 DEG.-130DEG. F)
- HOT WATER RETURN (TEMP=110 DEG.-130DEG. F)
- X — SANITARY DRAINAGE - ABOVE GRADE
- X — SANITARY DRAINAGE - BELOW GRADE
- XX — STORM DRAINAGE - ABOVE GRADE
- XX — STORM DRAINAGE - BELOW GRADE
- PD — PUMPED DISCHARGE
- V — VENT PIPING
- G — NATURAL GAS PIPING - ABOVE GRADE
- G — NATURAL GAS PIPING - BELOW GRADE
- BALL VALVE
- BRANCH OUT OF TOP OF MAIN
- BRANCH OUT OF BOTTOM OF MAIN
- CAP
- CHECK VALVE
- CONCENTRIC REDUCER
- CO — CLEANOUT
- FCO — FLOOR CLEANOUT
- GCO — GRADE CLEANOUT
- FLOOR DRAINS
- GATE VALVE
- GAS PLUG VALVE
- METERING BALANCING VALVE
- NON-FREEZE WALL HYDRANT OR HOSE BIBB
- PIPE CONTINUES
- PIPE RISING
- PIPE TEE TURNED DOWN
- PIPE TEE TURNED UP
- PIPE TEE TURNING DOWN
- PRESSURE REDUCING VALVE
- PRESSURE GAUGE
- THERMOMETER
- CONTROL VALVE
- REDUCED PRESSURE BACKFLOW PREVENTER
- DOUBLE CHECK BACKFLOW PREVENTER
- STRAINER
- THERMOSTATIC MIXING VALVE
- TEMPERATURE & PRESSURE RELIEF VALVE
- UNION
- RISER DRAIN
- WCO — WALL CLEANOUT
- WATER HAMMER ARRESTER
- CONNECT TO EXISTING
- LIMIT OF WORK
- ROOF DRAIN
- P — PUMP
- M — METER
- XX / XX — DESIGNATES EQUIPMENT WITH POWER
- XX / XX — DESIGNATES EQUIPMENT WITHOUT POWER
- CP — CONTROL PANEL
- EXPANSION JOINT
- PIPING AND DEVICES TO BE REMOVED
- EQUIPMENT/FIXTURES TO BE REMOVED

PLUMBING ABBREVIATIONS

A	COMPRESSED AIR
AAV	AIR ADMITANCE VALVE
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AP	ACCESS PANEL
AV	ACID VENT
AVTR	ACID VENT THROUGH ROOF
AW	ACID WASTE
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
CFI	CONTRACTOR FURNISHED AND INSTALLED
CO	CLEANOUT
CO'	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COMP'D	COMPRESSED
CONN	CONNECTION
CONTR	CONTRACTOR
CW	COLD WATER
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
DF	DRINKING FOUNTAIN
DI	DEIONIZED WATER
DN	DOWN
DS	DOWN SPOUT
DWG	DRAWING
DWH	DOMESTIC WATER HEATER
EA	EACH
ELEV	ELEVATIONS
ES	EMERGENCY SHOWER
ETBR	EXISTING TO BE REMOVED
ETR	EXISTING TO REMAIN
ETP	ELECTRONIC TRAP PRIMER
E.W.	EACH WAY
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
F.F.	FINISH FLOOR
FPHB	FROST PROOF HOSE BIBB
FS	FLOOR SINK
FT	FEET
FW	FINSHED WALL
G	GAS
GC	GENERAL CONTRACTOR
GCO	GRADE CLEANOUT
GPM	GALLONS PER MINUTE
GW	GREASE WASTE
HB	HOSE BIBB
He	HELIUM
HP	HORSEPOWER
HW	HOT WATER
HWR	HOT WATER RETURN
INV	INVERT
IW	INDIRECT WASTE
KC	KITCHEN CONSULTANT
LAV	LAVATORY
LCW	LAB COLD WATER
LHW	LAB HOT WATER
LP	LIQUIFIED PROPANE GAS
LV	LAB VENT
LW	LAB WASTE
MA	MEDICAL AIR
MECH	MECHANICAL
MED	MEDICAL
MFGR	MANUFACTURER
MTG HT	MOUNTING HEIGHT
MV	MEDICAL VACUUM
N	NITROGEN
N2	HIGH PURITY NITROGEN
N20	NITROUS OXIDE
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
O.C.	ON CENTER
OD	OVERFLOW DRAIN
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFI	OWNER FURNISHED AND INSTALLED
OR	OPERATING ROOM
ORL	OVERFLOW RAIN LEADER (INTERIOR STORM PIPING)
OX	OXYGEN
PART.	PARTIAL
PD	PUMPED DISCHARGE
PDI	PLUMBING DRAINAGE INSTITUTE
PF	PLUMBING FIXTURE
PW	PUMPED WASTE
RD	ROOF DRAIN
RL	RAIN LEADER (INTERIOR STORM PIPING)
RPM	REVOLUTIONS PER MINUTE
SAN	SANITARY
SCH	SCHEDULE
S.S.	STAINLESS STEEL
ST	STORM
TEMP	TEMPERATURE
THRU	THROUGH
TMV	THERMOSTATIC MIXING VALVE
TP	TRAP PRIMER
TPD	TEPID WATER
TW	TEMPERED WATER
TX	TRANSFORMER
TYP	TYPICAL
T&P	TEMPERATURE AND PRESSURE
UR	URINAL
V	VENT
VIF	VERIFY IN FIELD
VTR	VENT THROUGH ROOF
W	WASTE
W/	WITH
WC	WATER CLOSET
WCO	WALL CLEANOUT
WH	WATER HAMMER ARRESTER
WS	WASTE STACK

PLUMBING TRADE NOTES

P-1 COORDINATE LOCATION OF ALL PLUMBING EQUIPMENT WITH ALL OTHER TRADES.

P-2 MAINTAIN MINIMUM REQUIRED WORKING CLEARANCES ADJACENT TO ELECTRICAL EQUIPMENT PER LATEST EDITION OF ELECTRIC CODE.

P-3 PROVIDE PIPE SLEEVES WHEREVER PIPING PENETRATES ANY WALL, FLOOR, OR CEILING.

P-4 INSTALL ALL PIPING AND WIRING NEATLY AND SQUARE WITH BUILDING FEATURES.

P-5 ALL PENETRATIONS THROUGH NEW OR EXISTING WALLS, CEILINGS AND FLOORS SHALL BE EITHER CORE DRILLED OR SAW CUT. CHISELED OR HAMMERED PENETRATIONS ARE NOT ALLOWED.

P-6 WHERE PIPING PENETRATES A FIRE-RATED WALL, FLOOR, OR CEILING, FIRE STOPPING INSULATION SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR.

P-7 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACCESS PANELS IN AREAS TO BE FINISHED BY GENERAL CONTRACTOR. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL OTHER ACCESS DOORS. COORDINATE AS REQUIRED.

P-8 ALL PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE, UNLESS OTHERWISE INDICATED.

PLUMBING DEMOLITION NOTES

D-1 EXCEPT WHERE NOTED OTHERWISE ON THE ARCHITECTURAL AND/OR PLUMBING PLANS, AND/OR IN THE PROJECT SPECIFICATIONS, ALL EXISTING PLUMBING SYSTEMS, EQUIPMENT AND APPURTENANCES LOCATED IN THE EXISTING FACILITY ARE TO BE REMOVED. THE OWNER MAY WISH TO SALVAGE CERTAIN ITEMS; CONSULT OWNER FOR FURTHER INSTRUCTIONS. ITEMS IDENTIFIED TO BE SALVAGED ARE TO BE CAREFULLY DISASSEMBLED AND REMOVED, AND TURNED OVER TO THE OWNER AS DIRECTED.

D-2 WORK SHALL INCLUDE, BUT IS NOT LIMITED TO, THE REMOVAL OF ALL PLUMBING PIPING SYSTEMS, PLUMBING FIXTURES, DOMESTIC WATER HEATERS, TANKS, TRAPS, VALVES, SPECIALTIES, APPURTENANCES, HANGERS, SUPPORTS, ETC.

D-3 NO EXISTING PLUMBING EQUIPMENT, SYSTEMS, OR APPURTENANCES SHALL BE ABANDONED IN PLACE. (NOTE: UNDERSLAB SANITARY AND STORM DRAINAGE PIPING WITHIN THE EXISTING BUILDING'S PERIMETER MAY BE ABANDONED IN PLACE PROVIDED IT WILL SERVE NO PURPOSE IN THE NEW CONSTRUCTION, IT IS FULLY DISCONNECTED FROM ANY SYSTEM INSIDE AND/OR OUTSIDE OF THE BUILDING, AND IT IS CAPPED AND FILLED WITH CONCRETE AS COMPLETELY AS POSSIBLE.) LEAVE NO DEAD ENDS.

D-4 WHERE EQUIPMENT OR APPURTENANCES ARE REMOVED WHICH WERE BUILT-IN TO EXISTING CONSTRUCTION, COORDINATE WITH THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR TO PATCH AND/OR REPAIR ALL SUCH AREAS IN ACCORDANCE WITH APPROVED CONSTRUCTION METHODS AND FINISHES, AS DIRECTED BY THE CONTRACT DRAWINGS, SPECIFICATIONS, AND/OR THE ARCHITECT/ENGINEER.

D-5 COORDINATE WITH THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR AND ALL OTHER SUB-CONTRACTORS IN ORDER TO DETERMINE OVERALL PROJECT PHASING AND DEMOLITION WORK SEQUENCING. COORDINATE REQUIRED DEMOLITION BY OTHER TRADES RESULTING FROM PLUMBING SYSTEMS DEMOLITION.

D-6 REFER TO THE ARCHITECT'S DEMOLITION NOTES AND PROJECT SPECIFICATIONS FOR ADDITIONAL DEMOLITION INFORMATION AND REQUIREMENTS.

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY TO ALL RIST-FROST-SHUMWAY ENGINEERING, INC., DRAWINGS AND TRADES ASSOCIATED WITH THOSE DRAWINGS INVOLVED ON THIS PROJECT:

G-1 RIST-FROST-SHUMWAY ENGINEERING, INC., WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS, AND/OR THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE GUIDANCE OF RIST-FROST-SHUMWAY ENGINEERING, INC., GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES, OR CONFLICTS WHICH ARE DISCOVERED OR ALLEGED.

G-2 ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS INCLUDING, BUT NOT LIMITED TO, IBC 2018, IMC 2018, IPC 2018, NFPA, UL, ANSI, OSHA AND NEC.

G-3 CONTRACTOR AND ALL SUBCONTRACTORS SHALL PROTECT THE WORK SITE, SURROUNDING AREAS AND OCCUPANTS FROM DAMAGE AND INJURY.

G-4 CONTRACTOR AND ALL SUBCONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE CONTRACT DOCUMENTS. ALL DRAWINGS OF ANY PARTICULAR TRADE SHALL BE USED IN CONJUNCTION WITH DRAWINGS OF ALL OTHER TRADES TO COORDINATE ALL CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED WORK. ANY PROPOSED CHANGES, VARIATIONS, OR SUBSTITUTIONS MUST BE REVIEWED AND ACCEPTED BY THE ENGINEER PRIOR TO IMPLEMENTATION.

G-5 ALL DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN INTENT AND EXTENT OF THE WORK. THEY SHALL BE CONSIDERED PARTLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR ROUGHING-IN MEASUREMENTS OR TO SERVE AS SHOP DRAWINGS.

G-6 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS (AS-BUILT OR OTHERWISE) BEFORE COMMENCING FABRICATION, AND/OR ORDERING MATERIALS.

G-7 DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS OTHERWISE INDICATED.

G-8 IN THE EVENT THE CONTRACTOR ENCOUNTERS MATERIAL REASONABLY BELIEVED TO BE HAZARDOUS WHICH HAS NOT BEEN RENDERED HARMLESS, THE CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO THE OWNER AND ARCHITECT/ENGINEER IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED UNTIL WRITTEN VERIFICATION BY THE OWNER THAT THE MATERIAL HAS BEEN REMOVED OR OTHERWISE RENDERED HARMLESS.

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FF PROJECT NO: **2248**

ORIGINATION DATE: **10/23/26**

SCALE: **1 1/2" = 1'-0"**

DRAWN BY: **APS**

CHECKED BY: **APS**

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

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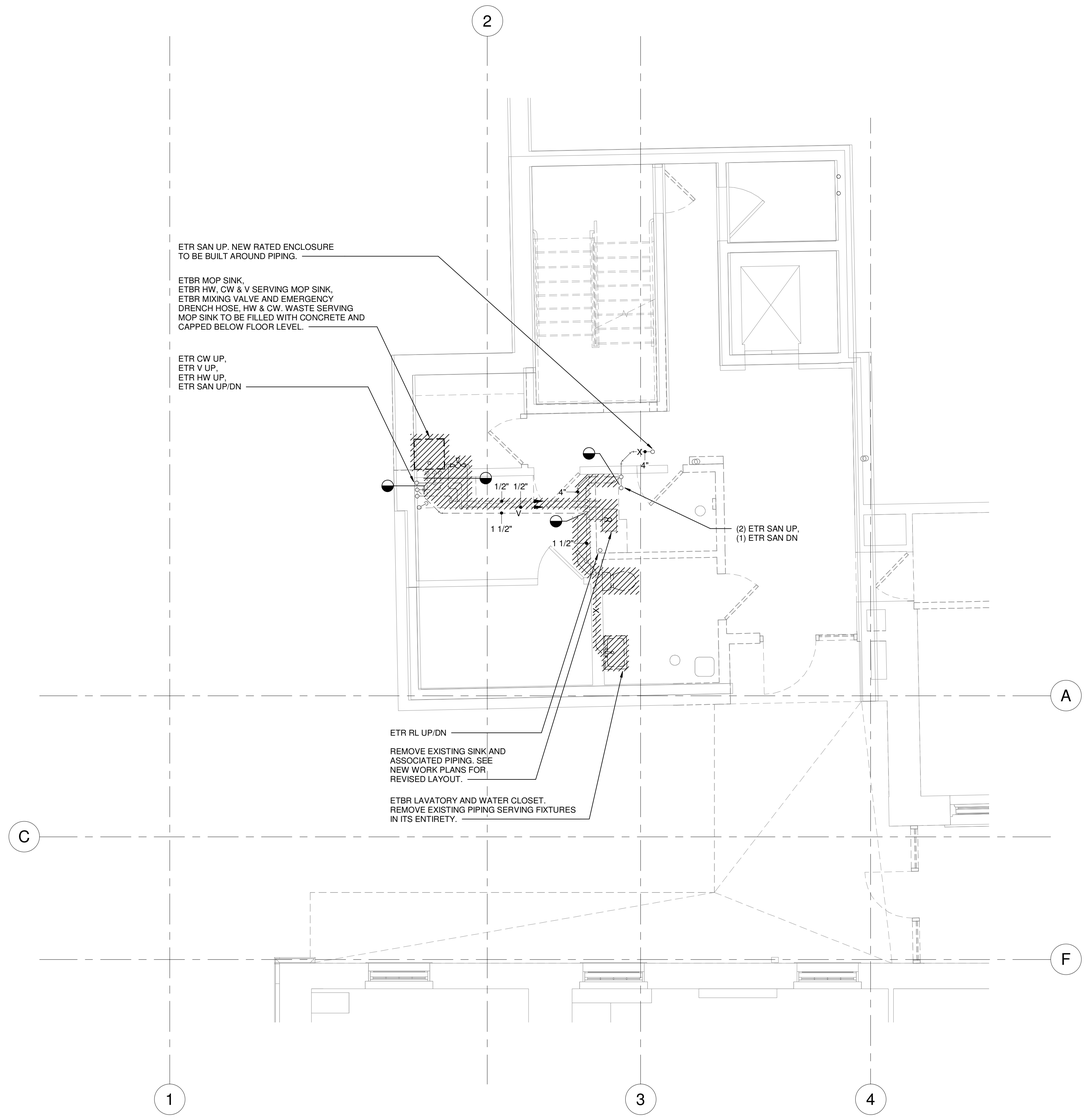
PLUMBING LEGEND, NOTES & ABBREVIATIONS

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P001

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE:	SCALE:
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APS	APS

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100% DD SET	10/23/2026

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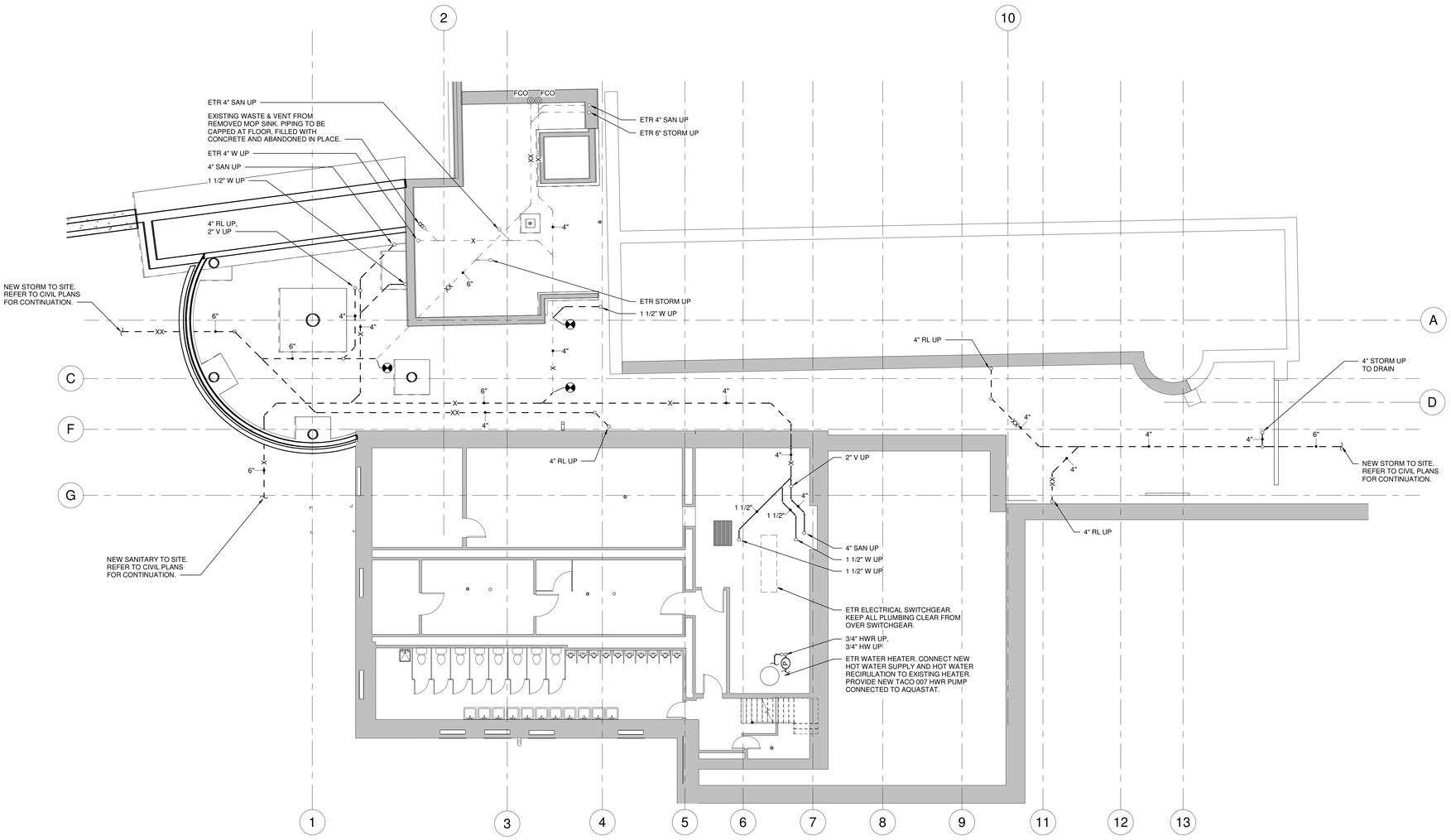
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DRAWING NOTES

1. ALL EXISTING UNDERSLAB PIPING SHALL BE VERIFIED PRIOR TO CONSTRUCTION FOR COORDINATION WITH NEW UNDERSLAB PLUMBING, CONNECTION TO SITE UTILITIES, AND COORDINATION WITH NEW STRUCTURAL FOOTINGS.

2. NEW PIPING INSTALLED IN BASEMENT SHALL BE COORDINATED WITH EXISTING MEP SYSTEMS AND PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE TO MAINTAIN AS MUCH CLEARANCE BELOW PIPING AS POSSIBLE.



1 BASEMENT PLUMBING PLAN
1/8" = 1'-0"

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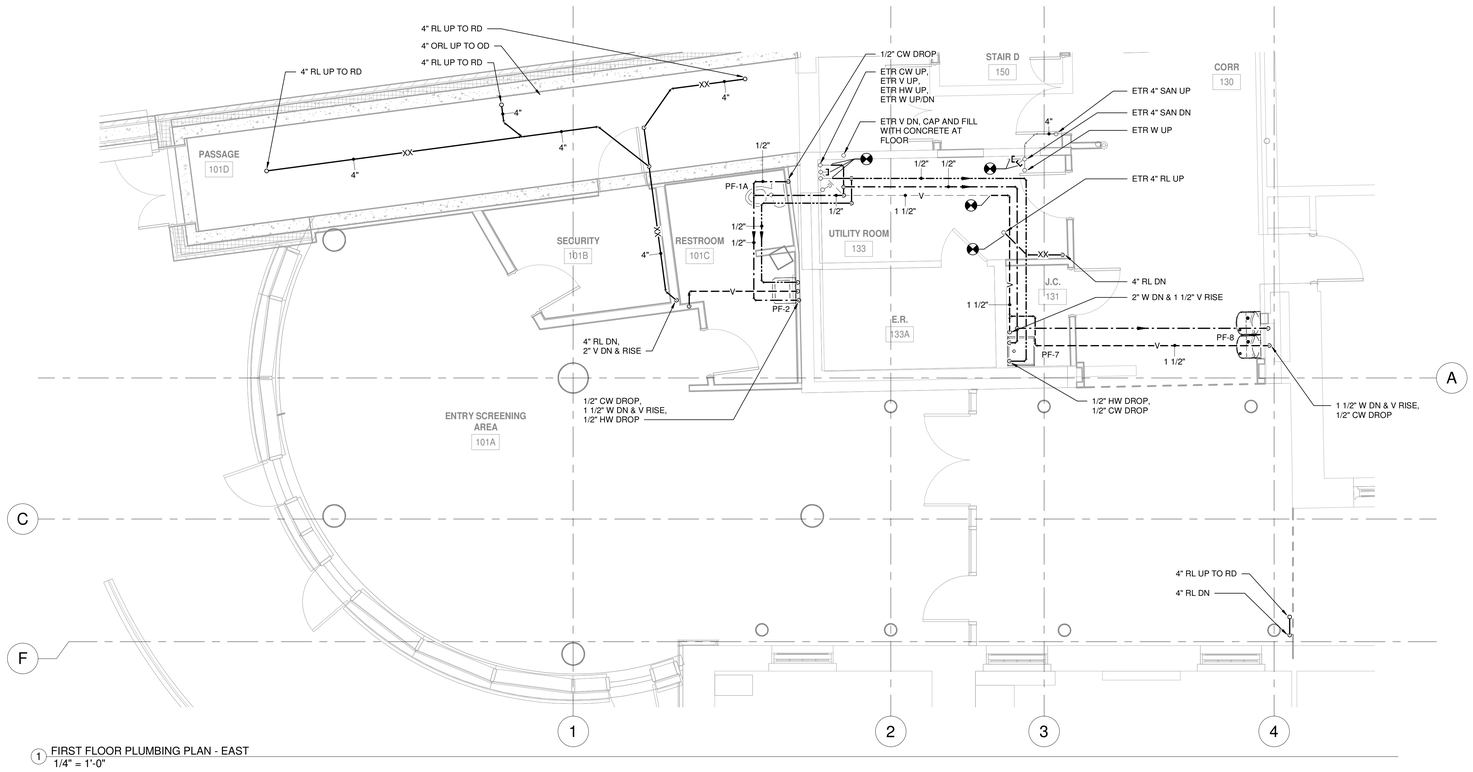
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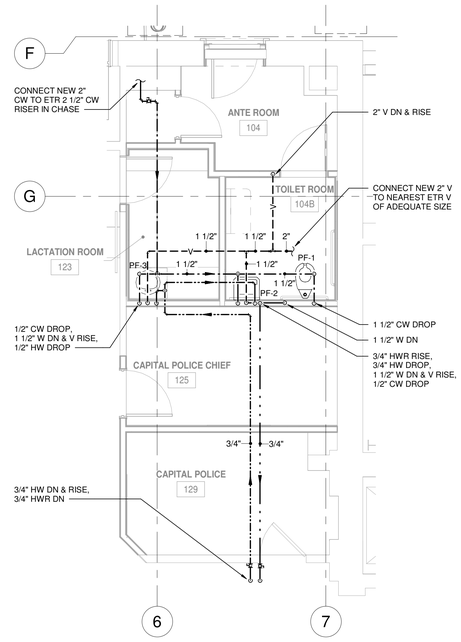
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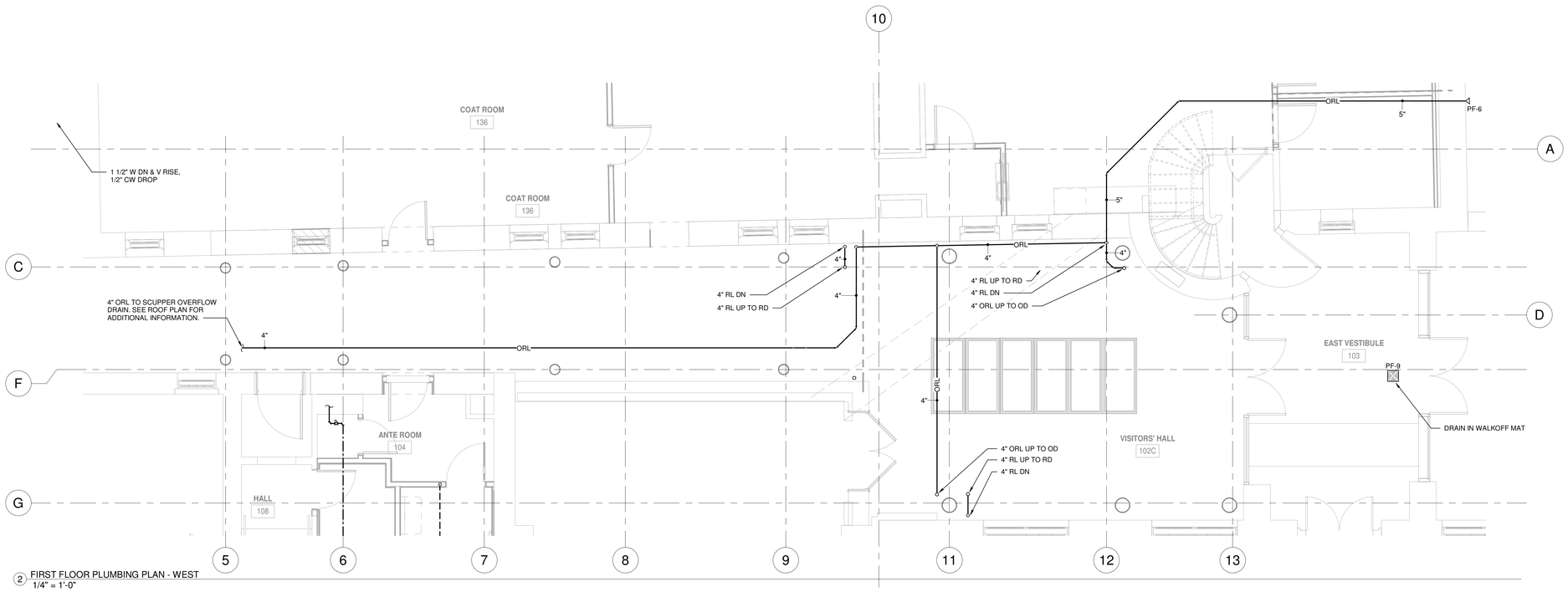
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1 FIRST FLOOR PLUMBING PLAN - EAST
1/4" = 1'-0"



3 FIRST FLOOR PLUMBING PLAN - SOUTH
1/4" = 1'-0"



2 FIRST FLOOR PLUMBING PLAN - WEST
1/4" = 1'-0"

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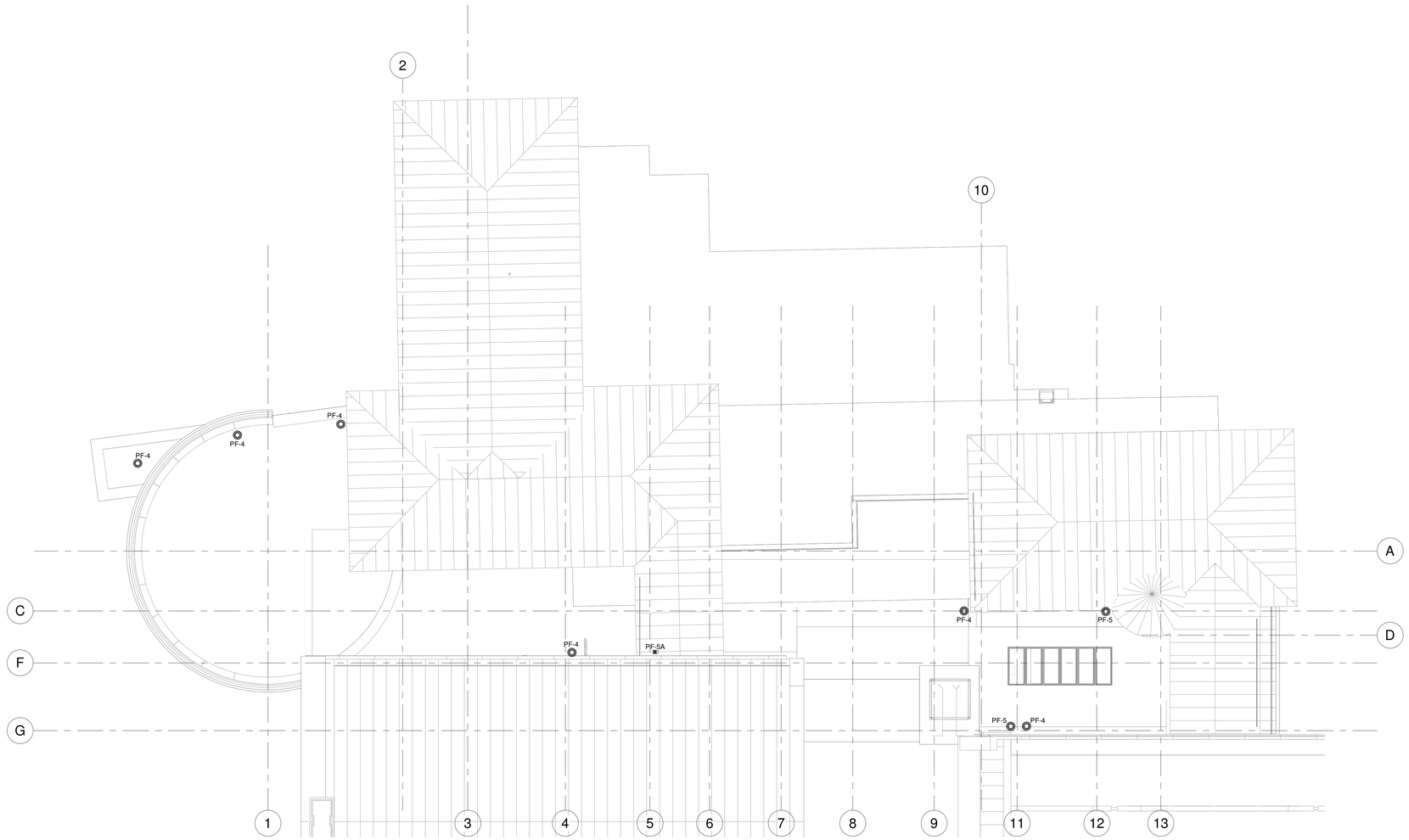
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LEVEL 1 PLUMBING PLAN

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

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ROOF PLUMBING PLAN

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PLUMBING FIXTURE SCHEDULE

NO.	FIXTURE	WASTE	VENT	HW	CW	MTG HT AFF	DESCRIPTION
PF-1	FLOOR MOUNT WATER CLOSET - ADA	4"	2"		1 1/2"	FLOOR	AMERICAN STANDARD FLOOR MOUNT ELONGATED WATER CLOSET MODEL 3641.001, VITREOUS CHINA, HIGH EFFICIENCY 1.28GPF, ELONGATED OPEN FRONT SEAT LESS LID, ADA COMPLIANT, 1.28GPF TOP MOUNT SENSOR OPERATED FLUSHOMETER.
PF-1A	FLOOR MOUNTED TANK TYPE WATER CLOSET	4"	2"		1/2"	FLOOR	AMERICAN STANDARD FLOOR MOUNT ELONGATED WATER CLOSET MODEL 2467.100, VITREOUS CHINA, HIGH EFFICIENCY 1.1 GPF, CHURCH MODEL 295CT-000 ELONGATED OPEN FRONT SEAT LESS LID, ADA COMPLIANT.
PF-2	WALL MOUNTED LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	COUNTER	AMERICAN STANDARD DECORUM WALL-HUNG LAVATORY MODEL 9024.00 . PROVIDE WITH MOEN MODEL #8413F05 MANUAL FAUCET, CHROME FINISH, WITHOUT DRAIN, 0.5GPM AERATOR.
PF-3	SS SINK	1 1/2"	1 1/2"	1/2"	1/2"	COUNTER	ELKAY LUSTERTONE MODEL LRAD221960, STAINLESS STEEL, DROP-IN ADA COMPLIANT, 22"X19.5"X6" DEEP. PROVIDE WITH MOEN MODEL 7594 FAUCET, SPOT RESIST STAINLESS FINISH, SINGLE HANDLE, HIGH ARCH SPOUT WITH PULLDOWN SPRAYER, 1.5 GPM.
PF-4	ROOF DRAIN	MATCH RL PIPING				ROOF	ZURN MODEL Z-100-C-VP, 15" DIAMETER ROOF DRAIN, DURA-COATED CAST IRON BODY, COMBINATION MEMBRANE FLASHING CLAMP, UNDERDECK CLAMP, LOW SILHOUETTE CAST IRON DOME, VANDAL PROOF SECURED TOP.
PF-5	OVERFLOW ROOF DRAIN	MATCH ORL PIPING				ROOF	ZURN MODEL Z-100-C-VP-W2, 15" DIAMETER OVERFLOW ROOF DRAIN, DURA-COATED CAST IRON BODY, COMBINATION MEMBRANE FLASHING CLAMP, UNDERDECK CLAMP, LOW SILHOUETTE CAST IRON DOME, VANDAL PROOF SECURED TOP, 2" HIGH INTERNAL WATER DAM.
PF-5A	OVERFLOW SCUPPER ROOF DRAIN	MATCH ORL PIPING				ROOF	ZURN MODEL Z187 OBLIQUE SCUPPER DRAIN, DURA-COATED CAST IRON BODY, BACK OUTLET, ALUMINUM GRATE AND MEMBRANE FLASHING CLAMP. SCUPPER DRAIN TO BE MOUNTED 2" HIGHER THAN PRIMARY ROOF DRAIN OUTLET.
PF-6	OVERFLOW DOWNSPOUT	MATCH ORL PIPING				24" AFG	ZURN MODEL ZANB-199-SS DOWNSPOUT NOZZLE, NICKEL BRONZE BODY, THREADED INLET, STAINLESS STEEL REMOVEABLE SCREEN.
PF-7	MOP SINK	1 1/2"	1 1/2"	1/2"	1/2"	FLOOR	FIAT MODEL #MSB-24X24 MOLDED STONE MOP SERVICE BASIN. PROVIDE WITH FIAT MODEL #830AA SERVICE FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS, PAIL HOOK AND ¾" HOSE THREAD CONNECTION. PROVIDE WITH FIAT MODEAL 832AA HOSE & BRACKET, MODEL #MSG2424 STAINLESS STEEL WALL GUARD, MODEL #E88-AA STAINLESS STEEL BUMPER GUARD, AND MODEL #833AA SILICONE SEALANT.
PF-8	BI-LEVEL WATER COOLER	1 1/2"	1 1/2"		1/2"		ELKAY BI-LEVEL ADA COOLER MODEL #LZSTL8WSSK, ADA COMPLIANT, REFRIGERATED, QUICK FILTER CHANGE, AND BOTTLE FILLER WITH SENSOR ACTIVATION.
PF-9	AREAWAY DRAIN	MATCH RL PIPING				FLOOR	ZURN MODEL Z610-AR-V AREAWAY DRAIN, SQUARE TOP, ACID RESISTANT EPOXY COATED CAST IRON, SEEPAGE PAN AND COMBINATION MEMBRANE FLAHSING CLAMP AND FRAME, SUSPENDED POLYPROPYLENE SEDIMENT BUCKET AND MODEL Z1099 BACKWATER VALVE.

1 ALL FIXTURES SHALL BE COMPLETE WITH APPROPRIATE SUPPLIES WITH STOPS, P-TRAPS AND ACCESSORIES.
2 ALL TRIM TO BE OF VANDAL-PROOF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO AERATORS, HANDLES, SHOWER, HEADS, ETC.
3 PROVIDE OFFSET DRAIN AND WASTE, HW & CW INSULATION FOR BARRIER FREE INSTALLATION.
4 FIXTURES SHALL BE PROVIDED WITH APPROPRIATE FLOOR MOUNTED WALL CARRIERS.
5 PROVIDE GRID STRAINERS ON ALL LAVATORY AND SINK DRAIN ASSEMBLIES.
** CONFIRM ALL FIXTURE MOUNTING HEIGHTS WITH ARCHITECTURAL DRAWINGS AND MANUFACTURERS INSTALLATION INSTRUCTIONS.
** CONFIRM ALL SINK DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND CABINETRY/COUNTER DETAILS.

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Project #: 9971.001

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE:
10/23/26

SCALE:

DRAWN BY:
APS

CHECKED BY:
APS

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:
PLUMBING SCHEDULES

SHEET NO:
P200

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10/22/2026 3:56:09 PM

MECHANICAL LEGEND

NAME	PIPING SERVICE, NEW
(E)NAME	PIPING SERVICE, EXISTING
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
GHWS	GLYCOL HOT WATER SUPPLY
GHWR	GLYCOL HOT WATER RETURN
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
GCHS	GLYCOL CHILLED WATER SUPPLY
GCHR	GLYCOL CHILLED WATER RETURN
H/C S	DUAL TEMPERATURE SUPPLY
H/C R	DUAL TEMPERATURE RETURN
GH/C S	GLYCOL DUAL TEMPERATURE SUPPLY
GH/C R	GLYCOL DUAL TEMPERATURE RETURN
CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
GCWS	GLYCOL CONDENSING WATER SUPPLY
GCWR	GLYCOL CONDENSING WATER RETURN
GS	GLYCOL SUPPLY
GR	GLYCOL RETURN
CTWS	COOLING TOWER WATER SUPPLY
CTWR	COOLING TOWER WATER RETURN
LPS	LOW PRESSURE STEAM < 15 PSIG
LPC	LOW PRESSURE CONDENSATE < 15 PSIG
MPS	MEDIUM PRESSURE STEAM
MPC	MEDIUM PRESSURE CONDENSATE
HPS	HIGH PRESSURE STEAM
HPC	HIGH PRESSURE CONDENSATE
PC	PUMPED CONDENSATE
BBD	BOILER BLOW DOWN
BFW	BOILER FEED WATER
FOS	FUEL OIL SUPPLY
FOR	FUEL OIL RETURN
FOF	FUEL OIL FILL
FOV	FUEL OIL VENT
RL	REFRIGERANT LIQUID
RG	REFRIGERANT GAS
RS	REFRIGERANT SUCTION
C	CONDENSATE DRAIN
	PRESSURE RELIEF VALVE
	BRANCH OUT OF TOP OF MAIN
	BRANCH OUT OF BOTTOM OF MAIN
	COMBINATION PRESSURE/ TEMPERATURE
	FLANGED CONNECTION
	UNION CONNECTION
	PIPING FLOW DIRECTION
	PIPE RISING
	PIPE TURNING DOWN
	TEE TURNED DOWN
	TEE TURNED UP
	CAP
CO	CLEANOUT
	CALIBRATED BALANCING/SHUTOFF VALVE
	BALL VALVE

	BUTTERFLY VALVE
	CHECK VALVE
	CONTROL VALVE, 2-WAY
	CONTROL VALVE, 3-WAY
	BALL VALVE W/ CAPPED HOSE BIBB
	GATE VALVE
	GLOBE VALVE
	THREE-WAY VALVE
	SHUTOFF COCK
IB	INVERTED BUCKET STEAM TRAP
F&T	FLOAT & THERMOSTATIC STEAM TRAP
T	THERMOSTATIC STEAM TRAP, BIMETALLIC AND BELLOWS
TD	THERMODYNAMIC (DISK) STEAM TRAP
	SIGHT GLASS, FLOW
	FLEXIBLE PIPE CONNECTION
	PRESSURE REDUCING VALVE
	STRAINER W/ BLOW DOWN VALVE & CAPPED HOSE BIBB
	STRAINER
	AIR VENT - MANUAL
	AIR VENT - AUTOMATIC
	THERMOMETER
	PRESSURE GAUGE W/ SHUT OFF COCK
PS PT	PRESSURE SWITCH OR TRANSMITTER
DPS DPT	DIFFERENTIAL PRESSURE SWITCH OR TRANSMITTER
TE	TEMPERATURE ELEMENT WITH IMMERSION WELL
T OR S	ROOM THERMOSTAT OR SENSOR
	DESIGNATES ITEMS TO BE REMOVED
	LIMIT OF REMOVAL
	CONNECT TO EXISTING
	PUMP
DN	DROP IN DUCT (IN DIRECTION OF AIRFLOW)
UP	RISE IN DUCT (IN DIRECTION OF AIRFLOW)
FC	DUCT FLEX CONNECTION
	RETURN AIR DUCT DOWN
	RETURN AIR DUCT UP
R D	RISE/DROP IN DUCT (IN DIRECTION OF AIRFLOW)
	SUPPLY AIR DUCT DOWN

	SUPPLY AIR DUCT UP
S	SMOKE DAMPER W/ ACCESS DOOR
	FIRE DAMPER W/ ACCESS DOOR
S	COMBINATION FIRE/ SMOKE DAMPER W/ ACCESS DOOR
S	SMOKE DETECTOR (DUCT MOUNTED) W/ ACCESS DOOR
	VOLUME CONTROL DAMPER
X" Ø	ROUND DUCT ("X" INDICATES DIAMETER)
ACD	AUTOMATIC CONTROL DAMPER
MD	MOTORIZED DAMPER
	TURNING VANES
	FULL SPLITTER VANES
	DESIGNATES EQUIPMENT WITH POWER
OR	DESIGNATES EQUIPMENT WITHOUT POWER

DUCTWORK DWGS.:

VV#	BOX DESIGNATION
CFM	MAX CFM
CFM	MIN CFM

PIPING DWGS.:

VV#	BOX DESIGNATION
MBH	CAPACITY
GPM	FLOW RATE
FT#	FINTUBE TYPE
FEET	ACTIVE LENGTH
GPM	FLOW RATE

DIFFUSER/REGISTER/GRILLE AIR PATTERNS
(SHADING INDICATES QUADRANT WITHOUT AIR)

	4 WAY
	3 WAY
	2 WAY
	2 WAY CORNER
	1 WAY
	REGISTER/GRILLE
	LINEAR DIFFUSER
	DOUBLE WALL DUCTWORK
	LINED DUCTWORK

MECHANICAL ABBREVIATIONS

AC	AIR CONDITIONING
ACC	AIR COOLED CONDENSER
ACCU	AIR COOLED CONDENSING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
APG	ABOVE FINISHED GRADE
APPROX	APPROXIMATE
AHU	AIR HANDLING UNIT
AS	AIR SEPARATOR
AVG	AVERAGE
B	BOILER
BAS	BUILDING AUTOMATION SYSTEM
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BTUH	BRITISH THERMAL UNITS PER HOUR
BP	BOILER PUMP
C	CONDENSATE
CAP	CAPACITY
CO	CLEAN OUT OR CARBON MONOXIDE
CO_2	CARBON DIOXIDE
CFM	CUBIC FEET PER MINUTE
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
COND	CONDENSER OR CONDENSATE
CONN	CONNECTION
COP	COEFFICIENT OF PERFORMANCE
CP	CIRCULATING PUMP
CUH	CABINET UNIT HEATER
CV	CONSTANT VOLUME
D	DEPTH
DB	DRY BULB
DBF	DRYER BOOSTER FAN
DC	DUST COLLECTOR
DEF	DISHWASHER EXHAUST FAN
°F	DEGREES FAHRENHEIT
DF	DESTRATIFICATION FAN
DIA	DIAMETER
DN	DOWN
DPS	DIFFERENTIAL PRESSURE SENSOR OR SWITCH
DPT	DIFFERENTIAL PRESSURE TRANSMITTER
DWG	DRAWING
DWH	DOMESTIC WATER HEATER
EA	EXHAUST AIR OR EACH
EAT	ENTERING AIR TEMPERATURE
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EFF	EFFICIENCY
EG	EXHAUST GRILLE
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATION OR ELEVATOR
ERU	ENERGY RECOVERY UNIT
ET	EXPANSION TANK
ETR	EXISTING TO REMAIN
ETBR	EXISTING TO BE REMOVED
ESP	EXTERNAL STATIC PRESSURE
EV	EXHAUST VALVE
EWT	ENTERING WATER TEMPERATURE
FC	FLEXIBLE CONNECTOR
FD	FLOOR DRAIN
FLA	FULL LOAD AMPS
FOT	FLAT ON TOP
FPM	FEET PER MINUTE
FT	FEET
FTR	FINTUBE RADIATION
FV	FACE VELOCITY
GA	GAUGE
GAL	GALLON
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
H	HEIGHT, HIGH
HC	HEATING COIL
HD	HEAD
HGT	HEIGHT
HP	HORSEPOWER
HR	HOUR
HTG	HEATING
HVLS	HIGH VOLUME LOW SPEED
HWP	HOT WATER PUMP
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HZ	HERTZ
IN	INCHES
KEF	KITCHEN EXHAUST FAN
KW	KILOWATT
L	LENGTH, LOUVER
LAT	LEAVING AIR TEMPERATURE
LD	LINEAR DIFFUSER
LEF	LAB EXHAUST FAN
LF	LINEAR FOOT
LR	LINEAR RETURN
LRA	LOCKED ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	1000 BTUH
MCA	MINIMUM CIRCUIT AMPERES
MECH	MECHANICAL
MFS	MAXIMUM FUSE SIZE
MIN	MINIMUM
MFS	MAXIMUM FUSE SIZE
MOP	MAXIMUM OVERCURRENT PROTECTION
MTG	MOUNTING
MTR	MOTOR
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED OR NOISE CRITERIA
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE
OED	OPEN END DUCT
OC	ON CENTER
PD	PRESSURE DROP OR PUMPED DISCHARGE
PH	PHASE
PRV	PRESSURE REDUCING VALVE
PS	PRESSURE SENSOR OR SWITCH
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PUH	PROPELLER UNIT HEATER
QTY	QUANTITY
RA	RETURN AIR
REF	REFRIGERANT
REQ'D	REQUIRED
RG	RETURN GRILLE OR REFRIGERANT GAS
RH	RELATIVE HUMIDITY
RL	REFRIGERANT LIQUID
RLA	RUNNING LOAD AMPS
RP	RADIANT PANEL
RPM	REVOLUTIONS PER MINUTE
RS	REFRIGERANT SUCTION
SA	SUPPLY AIR OR SOUND ATTENUATOR
SCCR	SHORT CIRCUIT CURRENT RATING
SCH	SCHEDULE
SD	SUPPLY DIFFUSER
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SENS	SENSIBLE
SF	SQUARE FEET
SP	STATIC PRESSURE
SS	STAINLESS STEEL
ST	STORM
SV	SUPPLY VALVE
TEMP	TEMPERATURE
THRU	THROUGH
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VLT	VOLTS
VOL	VOLUME
VV	VARIABLE VOLUME
W	WIDTH
W/	WITH
WB	WET BULB
WC	WATER COLUMN
WG	WATER GAUGE
WMS	WIRE MESH SCREEN
WPD	WATER PRESSURE DROP
XFMER	TRANSFORMER

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY TO ALL RIST-FROST-SHUMWAY ENGINEERING, INC., DRAWINGS AND TRADES ASSOCIATED WITH THOSE DRAWINGS INVOLVED ON THIS PROJECT:

G-1 RIST-FROST-SHUMWAY ENGINEERING, INC., WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS, AND/OR THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE GUIDANCE OF RIST-FROST-SHUMWAY ENGINEERING, INC., WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES, OR CONFLICTS WHICH ARE DISCOVERED OR ALLEGED.

G-2 ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS INCLUDING, BUT NOT LIMITED TO: NFPA, ICC, UL, SMACNA, OSHA, AND NEC.

G-3 THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL PROTECT THE WORK SITE, SURROUNDING AREAS AND OCCUPANTS FROM DAMAGE AND INJURY.

G-4 THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE CONTRACT DOCUMENTS. ALL DRAWINGS OF ANY PARTICULAR TRADE SHALL BE USED IN CONJUNCTION WITH DRAWINGS OF ALL OTHER TRADES TO COORDINATE ALL CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED WORK. ANY PROPOSED CHANGES, VARIATIONS, OR SUBSTITUTIONS MUST BE REVIEWED AND ACCEPTED BY THE ENGINEER PRIOR TO IMPLEMENTATION.

G-5 ALL DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN INTENT AND EXTENT OF THE WORK. THEY SHALL BE CONSIDERED PARTLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR ROUGHING-IN MEASUREMENTS OR TO SERVE AS SHOP DRAWINGS.

G-6 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS (AS-BUILT OR OTHERWISE) BEFORE COMMENCING FABRICATION, AND/OR ORDERING MATERIALS.

G-7 DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS OTHERWISE INDICATED.

G-8 IN THE EVENT THE CONTRACTOR ENCOUNTERS MATERIAL REASONABLY BELIEVED TO BE HAZARDOUS WHICH HAS NOT BEEN RENDERED HARMLESS, THE CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO THE OWNER AND ARCHITECT/ ENGINEER IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED UNTIL WRITTEN VERIFICATION BY THE OWNER THAT THE MATERIAL HAS BEEN REMOVED OR OTHERWISE BEEN RENDERED HARMLESS.

G-9 INFORMATION ON THESE DRAWINGS PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM OTHER DOCUMENTATION OR BY FIELD INVESTIGATION. THIS INFORMATION IS PROVIDED FOR THE CONTRACTOR'S BENEFIT IN PERFORMANCE OF THE WORK. NOTE THAT THE EXISTING CONDITIONS INDICATED ON DRAWINGS MAY NOT REPRESENT ACTUAL "AS-BUILT" CONDITIONS AND THAT THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS AND LOCATIONS BEFORE COMMENCING WORK AND/OR ORDERING MATERIALS.

MECHANICAL DEMOLITION NOTES

D-1 UNLESS OTHERWISE NOTED, DEMOLITION WASTE BECOMES PROPERTY OF CONTRACTOR AND SHALL BE PROPERLY DISPOSED/RECYCLED.

D-2 ITEMS OF INTEREST/VALUE TO OWNER THAT ARE IDENTIFIED PRIOR TO OR DURING DEMOLITION SHALL REMAIN THE PROPERTY OF OWNER. CAREFULLY SALVAGE SUCH ITEMS IN A MANNER TO PREVENT DAMAGE AND PROMPTLY RETURN TO OWNER.

D-3 UNLESS OTHERWISE NOTED, REMOVE ALL EXISTING HVAC SYSTEMS, EQUIPMENT, AND COMPONENTS WITHIN DEMOLITION AREA.

D-4 UNLESS OTHERWISE NOTED, NO EXISTING HVAC SYSTEMS, EQUIPMENT, SYSTEMS OR APPURTENANCES SHALL BE ABANDONED IN PLACE.

D-5 OWNER MAY OCCUPY PORTIONS OF BUILDING IMMEDIATELY ADJACENT TO DEMOLITION AREA. SEQUENCE WORK AND CONDUCT SELECTIVE DEMOLITION TO PREVENT DISRUPTION OF OWNER OPERATIONS.

D-6 HAZARDOUS MATERIALS WILL BE REMOVED BY OTHERS UNDER A SEPARATE CONTRACT, AS APPLICABLE, BEFORE START OF WORK. IF SUSPECTED HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY ARCHITECT/ENGINEER AND OWNER. WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED UNTIL WRITTEN VERIFICATION IS RECEIVED BY OWNER THAT SUSPECTED HAZARDOUS MATERIAL HAS BEEN REMOVED AND/OR OTHERWISE RENDERED HARMLESS.

D-7 COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE BEGINNING SELECTIVE DEMOLITION OPERATIONS. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.

D-8 BEFORE STARTING SELECTIVE DEMOLITION, REMOVE REFRIGERANT FROM MECHANICAL EQUIPMENT IN ACCORDANCE WITH 40 CFR 82 AND REGULATIONS OF AUTHORITIES HAVING JURISDICTION. REFRIGERANT RECOVERY TECHNICIAN SHALL BE CERTIFIED BY AN EPA APPROVED CERTIFICATION PROGRAM.

D-9 PROTECT CONSTRUCTION TO REMAIN AGAINST DAMAGE AND SOILING DURING SELECTIVE DEMOLITION OPERATIONS.

D-10 EXISTING SERVICES/SYSTEMS TO REMAIN: MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS.

D-11 EXISTING SERVICES/SYSTEMS TO BE REMOVED; LOCATE, IDENTIFY, DISCONNECT, AND SEAL/CAP MECHANICAL SYSTEMS SERVING AREAS TO BE SELECTIVELY DEMOLISHED. OWNER WILL ARRANGE TO SHUTOFF INDICATED SERVICES/SYSTEMS WHEN REQUESTED BY CONTRACTOR. IF SERVICES ARE REQUIRED TO BE REMOVED OR RELOCATED, PROVIDE TEMPORARY SERVICES/SYSTEMS THAT BYPASS AREA OF SELECTIVE DEMOLITION AND THAT MAINTAIN CONTINUITY OF SERVICES/SYSTEMS TO OTHER PARTS OF THE BUILDING.

D-12 PIPING TO BE REMOVED: DRAIN AND REMOVE PORTION OF PIPING INDICATED TO BE REMOVED AND CAP REMAINING PIPING WITH SAME OR COMPATIBLE PIPING MATERIAL.

D-13 DUCTS TO BE REMOVED: REMOVE PORTION OF DUCTS INDICATED TO BE REMOVED AND CAP/SEAL REMAINING DUCTS WITH SAME DUCTWORK MATERIAL.

D-14 EQUIPMENT TO BE REMOVED: DISCONNECT AND CAP SERVICES AND REMOVE EQUIPMENT.

D-15 EQUIPMENT TO BE REMOVED AND REINSTALLED: DISCONNECT AND CAP SERVICES, REMOVE, CLEAN, AND STORE EQUIPMENT. WHEN APPROPRIATE, REINSTALL, RECONNECT, AND MAKE EQUIPMENT OPERATIONAL.

D-16 EQUIPMENT TO BE REMOVED AND SALVAGED: DISCONNECT AND CAP SERVICES, REMOVE EQUIPMENT AND DELIVER TO OWNER. CLEAN, PACK, LABEL, AND TRANSPORT SALVAGED ITEMS TO OWNER'S DESIGNATED ON-SITE STORAGE AREA. PROTECT ITEMS FROM DAMAGE DURING TRANSPORT AND STORAGE.

D-17 COORDINATE OVERALL PROJECT PHASING AND DEMOLITION WORK SEQUENCING WITH THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR. COORDINATE REMOVALS REQUIRED BY OTHER TRADES RESULTING FROM REMOVALS OF HVAC SYSTEMS, EQUIPMENT, AND COMPONENTS.

D-18 REFER TO THE ARCHITECTURAL DEMOLITION DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

MECHANICAL TRADE NOTES

M-1 COORDINATE LOCATION OF ALL MECHANICAL EQUIPMENT AND SYSTEMS WITH ALL OTHER TRADES.

M-2 MAINTAIN MINIMUM REQUIRED WORKING CLEARANCES ADJACENT TO ELECTRICAL EQUIPMENT PER LATEST EDITION OF NATIONAL ELECTRICAL CODE.

M-3 PROVIDE SLEEVES WHEREVER PIPING OR DUCTWORK PENETRATES ANY WALL, FLOOR, CEILING OR ROOF.

M-4 INSTALL ALL PIPING, DUCTWORK, AND WIRING NEATLY AND SQUARE WITH ALL BUILDING FEATURES.

M-5 ALL PENETRATIONS THROUGH WALLS, FLOORS, CEILINGS OR ROOFS SHALL BE EITHER CORE DRILLED OR SAW CUT. CHISELED OR HAMMERED PENETRATIONS ARE NOT ALLOWED.

M-6 ALL DUCTWORK AND PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE. CAREFUL LAYOUT, COORDINATION AND INSTALLATION OF MECHANICAL SYSTEMS IS ESSENTIAL. COORDINATION WITH ELECTRICAL SYSTEMS AND ARCHITECTURAL FEATURES IS REQUIRED TO ACHIEVE A NEAT AND ORDERLY INSTALLATION.

M-7 COORDINATE CEILING AIR OUTLET AND INLET LOCATIONS WITH THE ARCHITECT'S CEILING PLANS, LIGHTING LAYOUT, AND OTHER CEILING MOUNTED FEATURES. MAINTAIN REQUIRED CLEARANCES BETWEEN AIR OUTLETS AND SMOKE DETECTORS.

M-8 WHERE PIPING OR DUCTWORK PENETRATES A FIRE-RATED WALL, FLOOR, OR CEILING, SUITABLE AND APPROVED FIRE-STOPPING SYSTEMS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.

M-9 FIRE-STOPPING REQUIREMENTS:
FIRE-RATED ASSEMBLIES INCLUDE SELECT WALLS, ALL FLOORS ABOVE GROUND LEVEL, AND SELECT ROOF AREAS. WHERE THE INSTALLATION OF MECHANICAL SYSTEMS, DUCTWORK, PIPING, EQUIPMENT, AND APPURTENANCES PENETRATE OR OTHERWISE DISTURB THE INTEGRITY OF FIRE-RATED ASSEMBLIES, ALL REQUIRED FIRE-STOPPING (INCLUDING SLEEVES, DAMPERS, CAULK, PACKING, ETC. AS APPROPRIATE), SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR. FIRE STOPPING SHALL BE PERFORMED IN STRICT ACCORDANCE WITH DIVISION 07 SPECIFICATION REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR INDICATION OF FIRE-RATED ASSEMBLIES. COORDINATE THE SEQUENCING OF ALL FIRE-STOPPING ACTIVITIES WITH THE GENERAL CONTRACTOR.

M-10 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ACCESS DOORS OR PANELS WHERE REQUIRED IN WALLS, CEILING AND FLOORS TO PROVIDE READY ACCESS TO ALL VALVES, VOLUME CONTROL DAMPERS, CLEANOUTS, AND OTHER DEVICES OR EQUIPMENT. COORDINATE WITH THE GENERAL CONTRACTOR AS REQUIRED.

M-11 DUCT SIZES SHOWN ON DRAWINGS ARE NET CLEAR INSIDE DIMENSIONS.

M-12 NOTE THAT EXPOSED DUCTWORK AND PIPING HAS BEEN LAID OUT TO ACHIEVE A SPECIFIC VISUAL APPEARANCE; ALTERATIONS TO THE GENERAL LAYOUT REQUIRE ARCHITECT/ENGINEER APPROVAL.

M-13 THE MINIMUM PIPE SIZE SHALL BE 3/4" UNLESS OTHERWISE NOTED. RUN-OUT PIPING NOT IDENTIFIED ON THE DRAWINGS SHALL BE 3/4".

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10/23/26	NO SCALE
DRAWN BY:	CHECKED BY:
LJP	AJM

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SHEET CONTENTS:
MECHANICAL LEGENDS, NOTES, & ABBREVIATIONS

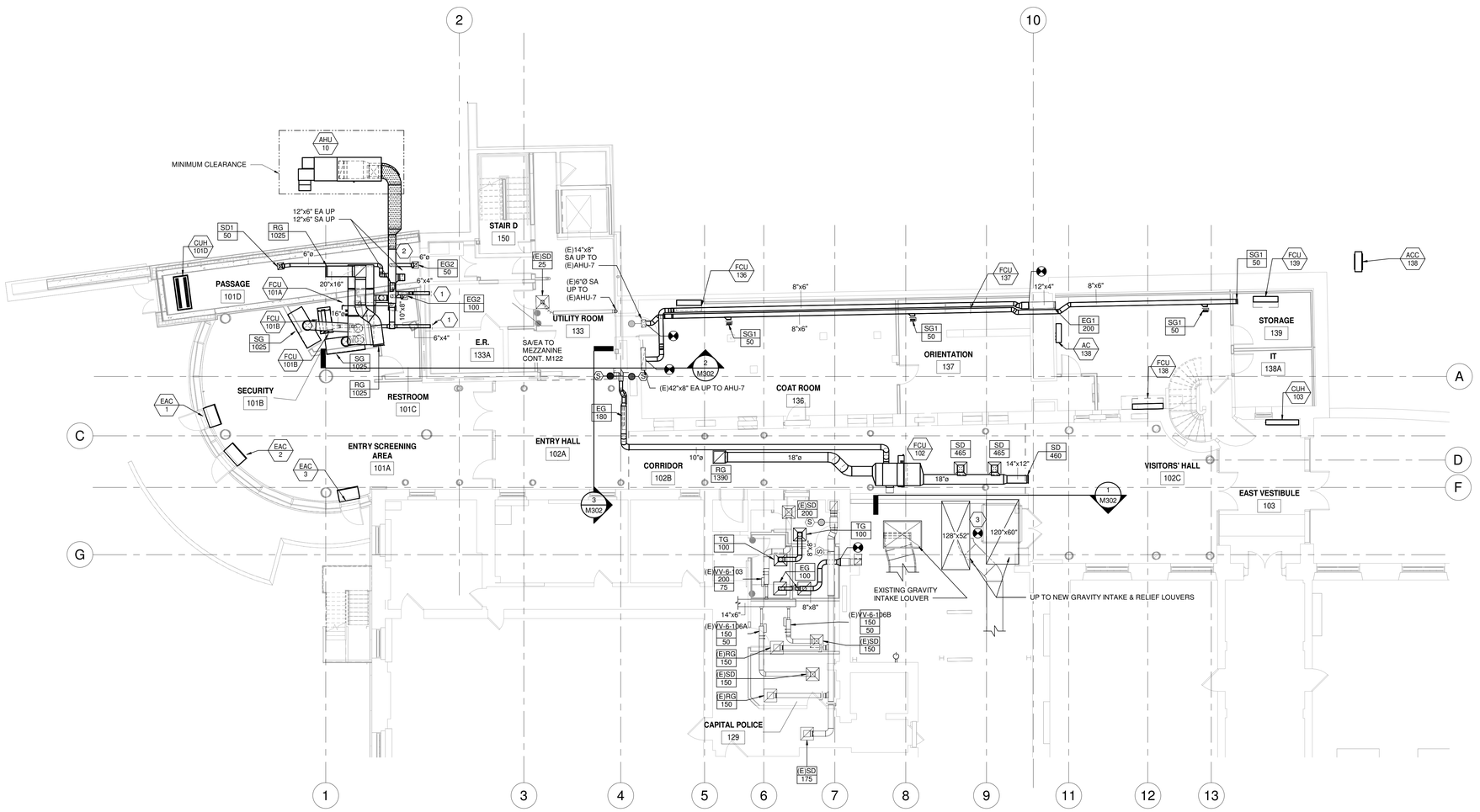
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DRAWING NOTES

1. BALANCE OED WITH WIRE MESH SCREEN TO 50CFM.
2. 14"x14" SUPPLY AIR ABOVE, 14" x 14" EXHAUST AIR BELOW.
3. CONNECTION TO EXISTING DUCT AND REWORK WITHIN THE MECHANICAL ROOM TO BE COORDINATED.



1 LEVEL 1 DUCTWORK PLAN
1/8" = 1'-0"

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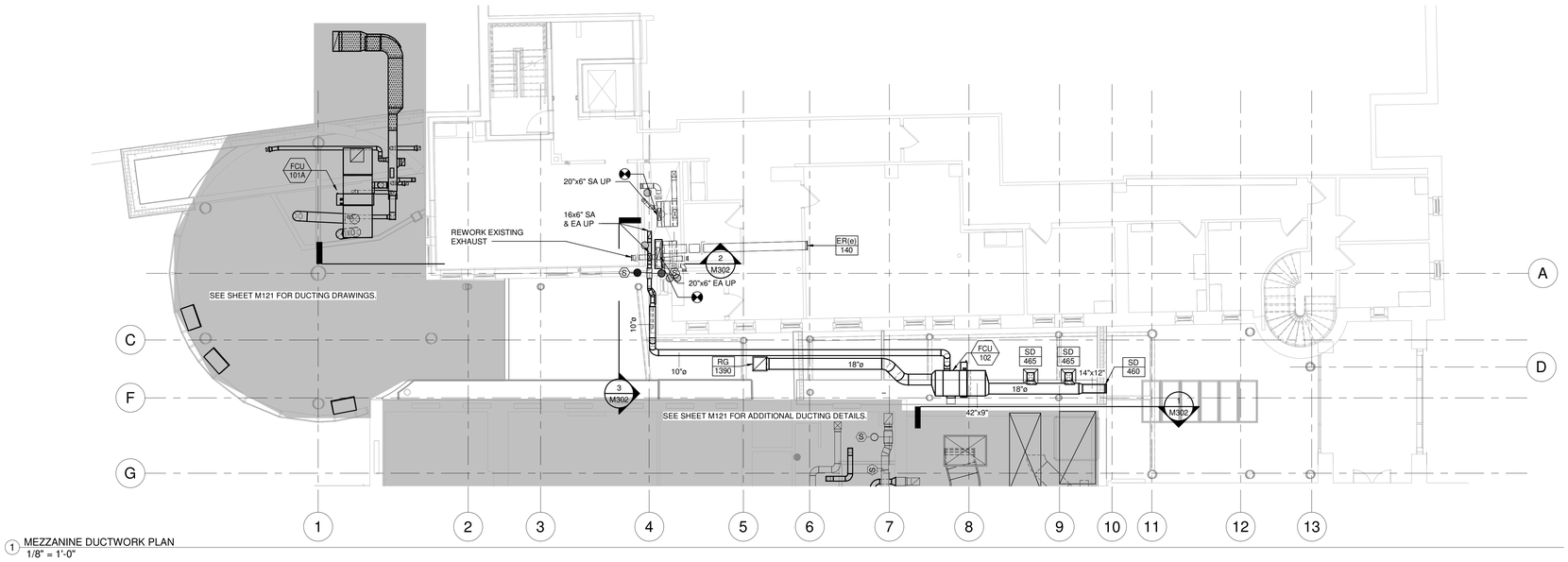
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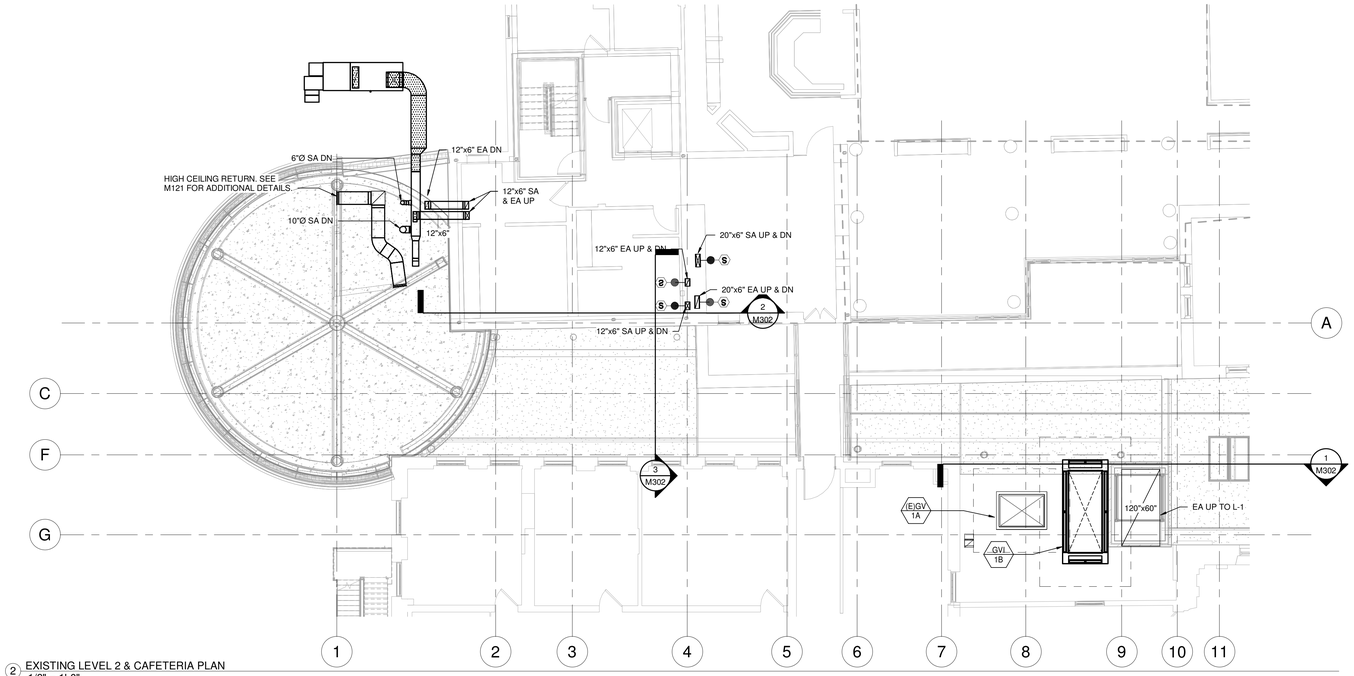
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1 MEZZANINE DUCTWORK PLAN
1/8" = 1'-0"



2 EXISTING LEVEL 2 & CAFETERIA PLAN
1/8" = 1'-0"

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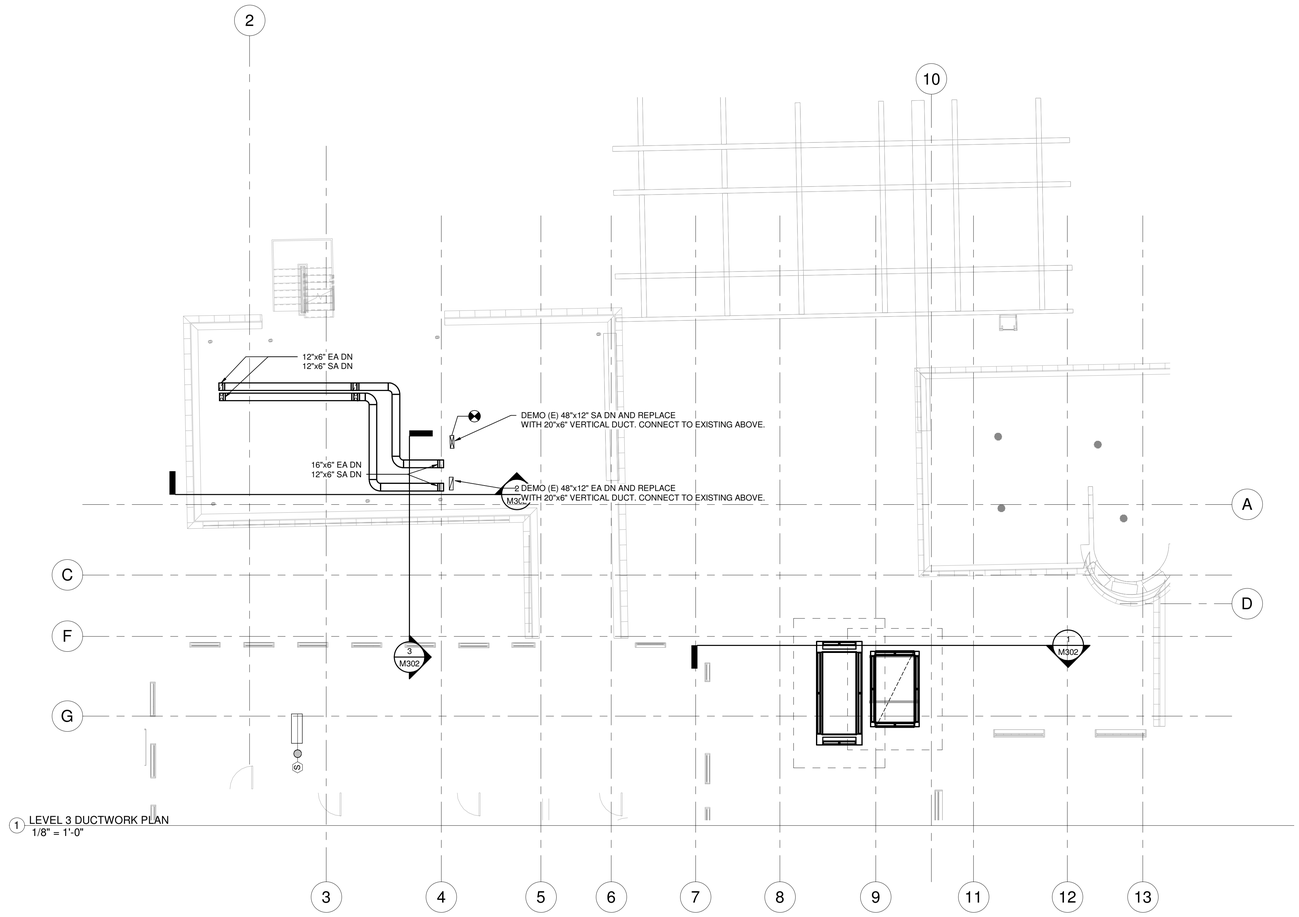
SHEET CONTENTS:

DUCTWORK PLAN - MEZZ & L2

SHEET NO:

M122

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1 LEVEL 3 DUCTWORK PLAN
1/8" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE:	SCALE:
10/23/26	1/8" = 1'-0"
DRAWN BY:	CHECKED BY:
LJP	AJM

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:

DUCTWORK PLAN - LEVEL 3

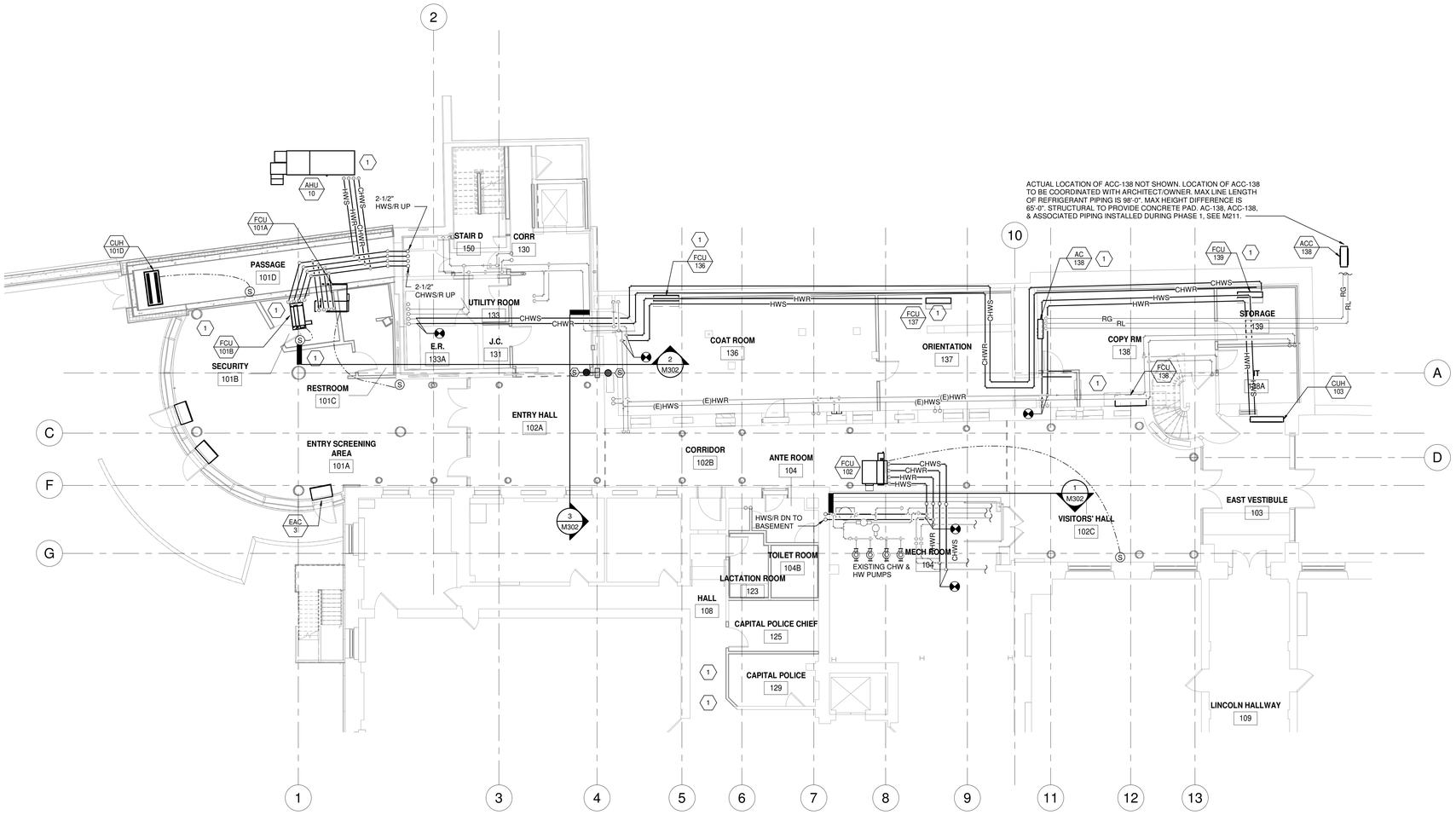
SHEET NO:

M123

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DRAWING NOTES

1. ROUTE UNIT CONDENSATE TO NEAREST DRAIN LOCATION. SLOPE DOWN 1/8" PER FOOT. ADDITIONAL CONDENSATE PUMPS MAY BE REQUIRED TO TERMINATE IN NEAREST DRAIN.



1 LEVEL 1 PIPING PLAN
1/8" = 1'-0"

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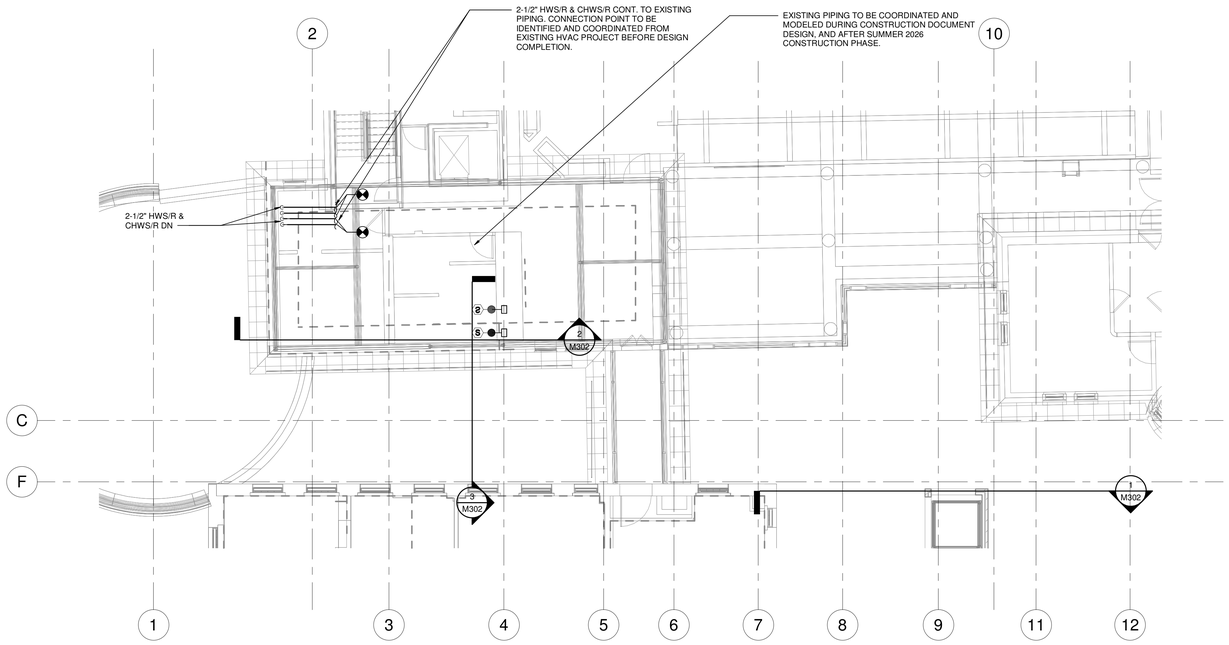
LEVEL 1 PIPING PLAN

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1 LEVEL 3 PIPING PLAN
1/8" = 1'-0"

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LJP	AJM

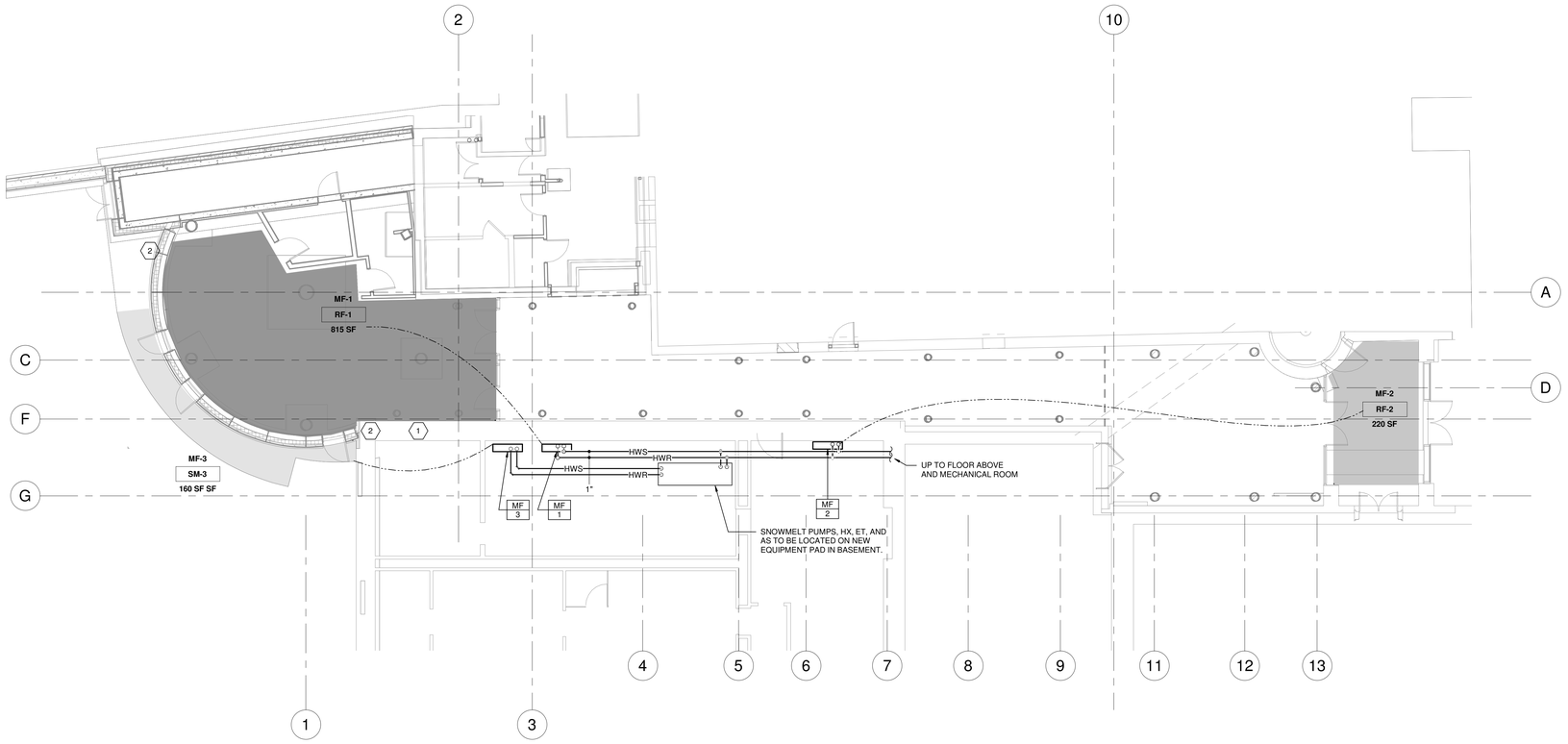
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75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:
PIPING PLAN - LEVEL 3

SHEET NO:
M223

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1 SHEET - BASEMENT - MECH - PIPE
1/8" = 1'-0"

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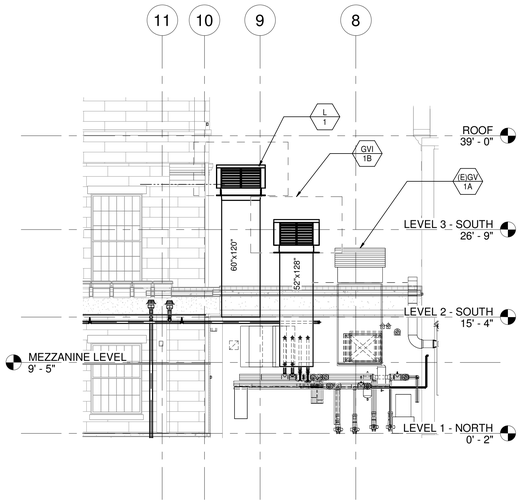
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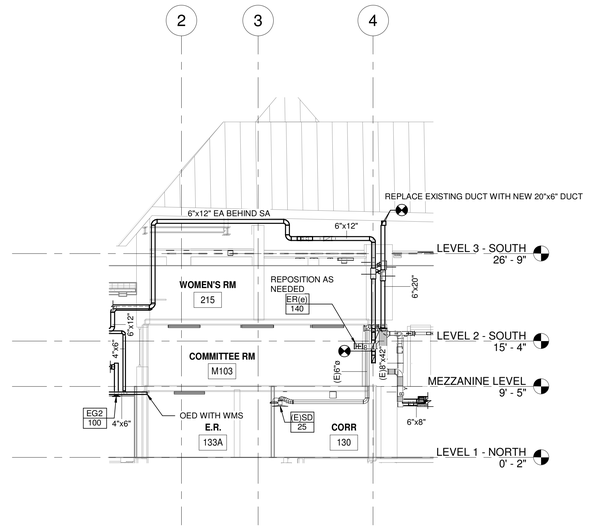
RADIANT FLOOR PLAN

SHEET NO:
M301

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1 MECHANICAL ROOM SECTION VIEW
1/8" = 1'-0"



2 MECHANICAL SECTION DUCTWORK RISER THROUGH ATTIC
1/8" = 1'-0"

3 MEZZ TRANSITION
1/8" = 1'-0"

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SHEET CONTENTS:
MECHANICAL SECTIONS

SHEET NO:
M302

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DEDICATED OUTDOOR AIR SYSTEM SCHEDULE - DOAS

						SUPPLY FAN DATA							EXHAUST FAN DATA							ENERGY RECOVERY DATA										ELECTRICAL DATA			
																				WINTER PERFORMANCE					SUMMER PERFORMANCE								
TAG	NUMBER	LOCATION	SERVES	SUPPLY AIRFLOW (CFM)	O.A. MAX/MIN (CFM)	TSP (W.C.)	ESP (W.C.)	FAN TYPE	FAN (QTY)	FAN RPM	MOTOR kW (HP)	FAN BHP	CFM	TSP (W.C.)	ESP (W.C.)	FAN TYPE	FAN (QTY)	FAN RPM	MOTOR kW (HP)	FAN BHP	OA TEMP DB (F)	EA TEMP DB (F)	RA TEMP DB (F)	SA TEMP DB (F)	WINTER EFF.	OA TEMP DB/WB (F)	EA TEMP DB/WB (F)	RA TEMP DB (F)/RH	SA TEMP DB/WB (F)	SUMMER EFF.	EXCHANGER TYPE	VOLT	PHASE	MCA	MOP
AHU	10	OUTDOORS	ADDITION	700	700	1.6	1.0	DD PLENUM	1	1472	(1/2)	0.32	700	1.2	1.0	DD PLENUM	1	1347	(1/2)	0.32	-10.0	5.8	70.0	55.0	80.8	84.0/69.0	82.3/67.8	75.0/50	76.5/63.9	79.1	ENTHALPY WHEEL	208	3	19.4	20

DEDICATED OUTDOOR AIR SYSTEM SCHEDULE - DOAS CONT.

		HEATING COIL DATA							COOLING COIL DATA						FILTERS		
TAG	NUMBER	MAX APD (IN W.C.)	WPD (FT W.C.)	EAT (F)	LAT (F)	GPM	EWT (F)	LWT (F)	MBH	APD (IN W.C.)	WPD (FT W.C.)	EAT DB/WB (F)	LAT DB/WB (F)	EWT (F)	LWT (F)	SENS CAP/TOTAL CAP, MBH	EFF.	MAX F.V. (FPM)	REMARKS
AHU	10	0.06	0.6	55.0	100.9	3.7	130.0	110.0	34.8	0.15	0.7	76.5/63.9	53.0/52.9	44.0	54.0	18.1 / 22.6	MERV-13	400	1, 2, 3, 4, 5, 6, 7, 8

1. SELECTION BASED ON VALENT.
2. PROVIDE WITH 2" DOUBLE WALL CONSTRUCTION, SINGLE POINT POWER, AND WEATHER PROOF FUSED DISCONNECTS.
3. PROVIDE WITH FAN EC MOTORS AND HIGH EFFICIENCY ENERGY RECOVERY THAT MEETS CURRENT COMCHECK COMPLIANCE.
4. PROVIDE WITH 36" MINIMUM CURB.
5. PROVIDE ALL MOTORS WITH VFD MOUNTED ON THE UNIT.
6. PROVIDE WITH STAINLESS STEEL DRAIN PANS.
7. PROVIDE WITH 65 kA SCCR.
8. PROVIDE HOT AND CHILLED WATER COIL SELECTIONS WITH 30% PG.

FAN COIL UNIT SCHEDULE - FCU

						COIL DATA												MOTOR DATA				
						COOLING DATA						HEATING DATA										
TAG	NUMBER	LOCATION	SERVES	TOTAL UNIT AIRFLOW (CFM)	ESP IN WG	EAT DB/WB (F)	EWT (F)	LWT (F)	TOTAL CAP. MBH	SENS. CAP. MBH	GPM	MAX PD (FT WC)	EAT (F)	EWT (F)	LWT (F)	MBH	GPM	MAX PD (FT WC)	FLA/MCA	HP (WATTS)	VOLT	PH	REMARKS
FCU	101A	101B SECURITY	101A ENTRY SCREENING AREA	2485	0.3	75.0 / 63.0	44.0	55.8	72.71	52.0	12.3	3.8	70.0	130.0	110.0	42.5	4.3	0.47	23.0	2 @ 1	115	1	2, 3, 4, 5, 6, 7, MODEL BCH SIZE 40
FCU	101B	101B SECURITY	101B SECURITY	350	-	80.0 / 67.0	44.0	51.7	13.2	8.0	3.4	5.3	70.0	130.0	110.9	14.1	1.5	0.69	1.2	1/4	115	1	2, 3, 4, 5, 6, 7, MODEL FCHO SIZE 04
FCU	102	102B CORRIDOR	102C GREAT HALL	1390	0.1	75.0 / 63.0	44.0	55.0	30.2	24.8	5.5	2.9	70.0	130.0	110.2	20.0	2.05	0.21	9.6	2 @ 1/2	115	1	2, 3, 4, 5, 6, 7, MODEL FCHG SIZE 50
FCU	136	136 LEG COAT ROOM	136 LEG COAT ROOM	412	0.1	80.0	44.0	48.8	10.3	9.0	4.5	8.24	70.0	130.0	110.0	7.3	0.8	1.73	-	1/4	115	1	1, 2, 3, 4, 5
FCU	137	137 ORIENTATION	137 ORIENTATION	412	0.1	80.0	44.0	48.8	10.3	9.0	4.5	8.24	70.0	130.0	110.0	7.3	0.8	1.73	-	1/4	115	1	1, 2, 3, 4, 5
FCU	138	138 COPY	138 COPY	1235	0.1	80.0	44.0	53.2	24.3	22.3	5.5	11.87	70.0	130.0	105.0	21.2	1.8	15.0	-	2 @ 1/4	115	1	1, 2, 3, 4, 5
FCU	139	139 IT	139 IT	412	0.1	80.0	44.0	48.8	10.3	9.0	4.5	8.24	70.0	130.0	110.0	7.3	0.8	1.73	-	1/4	115	1	1, 2, 3, 4, 5

1. SELECTION BASED ON DAIKIN.
2. PROVIDE WITH INTEGRAL CONDENSATE PUMP, OR PROVIDE WITH CONDENSATE PUMP.
3. PROVIDE WITH CONDENSATE PAN OVERFLOW SENSOR.
4. PROVIDE WITH UNIT MOUNTED DISCONNECT SWITCH, FILTERS, CHILLED WATER COIL, HOT WATER COIL, S.S. DRAIN PAN, AND 30% PG.
5. PROVIDE WITH EC MOTOR.
6. SELECTION BASED ON PRICE INDUSTRIES.
7. PROVIDE WITH INTEGRAL FRESH AIR INTAKE.

ENTRY AIR CURTAIN SCHEDULE - EAC

			AIR SIDE / WATER SIDE				ELECTRICAL DATA				
TAG	NUMBER	LOCATION	CFM	MHT HGT (MAX)	THROW (MAX)	MBH	FAN HP	FLA	VOLT	PH	REMARKS
EAC	1	100A ENTRY SCREENING AREA	869	8'		20.0	1/5		120	1	1, MODEL AE08-F-1036W
EAC	2	100A ENTRY SCREENING AREA	869	8'		20.0	1/5		120	1	1, MODEL AE08-F-1036W
EAC	3	100A ENTRY SCREENING AREA	869	8'		20.0	1/5		120	1	1, MODEL AE08-F-1036W

1. SELECTION BASED ON BERNER AIR CURTAINS

MINI-SPLIT AIR CONDITIONING AND HEAT PUMP UNIT SCHEDULE - OUTDOOR UNIT SCHEDULE - ACC

			RATED OUTDOOR AIR CONDITIONS (COOLING)		RATED OUTDOOR AIR CONDITIONS (HEATING)				ELECTRICAL DATA				
TAG	NUMBER	ASSOCIATED INDOOR UNIT	DB (F)	WB (F)	DB (F) / WB (F)	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	EFFICIENCY EER	EFFICIENCY SEER	MCA	MOP	VOLT	PH	REMARKS
ACC	138	AC-138	95.0	75.0	-	18.0	-	12.5	18.5	16.4	20	208	1	1

1. SELECTION BASED ON DAIKIN.

CABINET UNIT HEATER SCHEDULE - CUH

			AIR SIDE			WATER SIDE			MOTOR DATA			
TAG	NUMBER	LOCATION	CFM	EAT (F)	MBH	GPM	PD (FT WC)	EWT (F)	LWT (F)	HP	VOLT	PH	REMARKS
CUH	101D	FIRE EXIT & SERV ENTR 101D	860	60	41.1	4.1	3.1	130	110	1/10	115	1	1, 2, 3, 4, 5, 6, MODEL RC-1200-08
CUH	103	EAST VESTIBULE 103	860	60	41.1	4.1	3.1	130	110	1/10	115	1	1, 2, 3, 4, 5, 6, MODEL W-1080-08

1. SELECTION BASED ON VULCAN.
2. SELECTION BASED ON HIGH CAPACITY 2 ROW COIL UNITS, 30% PG.
3. PROVIDE WITH DISCONNECT SWITCH, THERMAL OVERLOAD PROTECTION, MANUAL STARTER, AND OPTIONAL ECM MOTOR.
4. COLOR AND FINISH BY ARCHITECT.
5. MECHANICAL CONTRACTOR SHALL COORDINATE MOUNTING TYPE (SURFACE/RECESS) WITH ARCHITECT PRIOR TO PURCHASING APPROVED UNITS.
6. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE WITH APPROPRIATE MOUNTING HARDWARE FOR CLEAN FINISHED INSTALLATION.

MINI-SPLIT AIR CONDITIONING AND HEAT PUMP UNIT SCHEDULE - INDOOR UNIT SCHEDULE - AC, HP

			INDOOR AIR CONDITIONS (COOLING)		RATED INDOOR AIR CONDITIONS (HEATING)				UNIT ELECTRICAL DATA			
TAG	NUMBER	SERVES	DB (F)	WB (F)	DB (F)	WB (F)	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	WATTS	VOLT	PH	REMARKS
AC	138	138 COPY	75.0	62.5	-	-	18.0	-	40	208	1	1

1. SELECTION BASED ON DAIKIN.

RADIANT FLOOR & SNOWMELT SCHEDULE - RF, SM

							HEATING						
TAG	NUMBER	SERVES	ASSOCIATED MANIFOLD	AREA (SF)	MANIFOLD TYPE	TUBE SPACING (IN)	AMBIENT TEMPERATURE (DB) (F)	SLAB SURFACE TEMPERATURE (DB) (F)	EWT (F)	LWT (F)	FLOW (GPM)	CAPACITY (MBH)	HEAD LOSS (FT WC)	REMARKS
RF	1	ENTRY SCREENING AREA 101A	MF-1	815	STAINLESS STEEL		70	82	130	110	2.7	27.0	5.6	1
RF	2	EAST VESTIBULE 103	MF-2	220	STAINLESS STEEL		70	82	130	110	1.0	10.0	3.8	1
SM	3	ENTRY SCREENING AREA 101A	MF-3	160	STAINLESS STEEL	6	-10	35	130	110	2.7	27.52		1

1. SELECTION BASED ON VIEGA.

DIFFUSER, REGISTER, & GRILLE SCHEDULE - DD, EG, LD, RG, SD, TG

TAG	NUMBER	UNIT SIZE W x H	NECK SIZE W x H	CFM RANGE	MODEL	BLOW PATTERN	MOUNTING TYPE	REMARKS
SG	1	8" x 6"	8" x 6"	50 - 150	610	45°	SIDEWALL	1, 2, 3
SD	1	12" x 12"	6" x 6"	50	SCD	4-WAY	LAY - IN	1, 2, 3
EG	2	12" x 12"	6" x 6"	50	630	-	LAY - IN	1, 2, 3

1. SELECTION BASED ON PRICE.
2. COLOR/FINISH SELECTED BY ARCHITECT.
3. COORDINATE ALL MOUNTING TYPES, LOCATIONS, AND CEILING ASSEMBLY REQUIREMENTS WITH ARCHITECTURAL PLANS.

LOUVER SCHEDULE - L

TAG	NUMBER	SERVES	CFM	DIMENSIONS (W x H) (IN)	VELOCITY (FPM)	MAX PD IN WC	FREE AREA (SF)	REMARKS
L	1	AHU-5 & AHU-6 MECHANICAL ROOM	30750	60 x 120	400	0.05	45	1, 2

1. SELECTION BASED ON GREENHECK. UNIT TO BE FULLY CUSTOM TO FIT. SIZING PROVIDED IS MINIMUM REQUIRED AND MAY NEED REVISED BASED ON CUSTOM UNIT COORDINATION.
2. CUSTOM COLOR SELECTED BY ARCHITECT.

GRAVITY VENTILATOR SCHEDULE - GVI

SYMBOL	EQUIPMENT	SERVES	MAX CFM	MAX PD IN WC	THROAT SIZE (IN x IN)	Throat Area	FREE AREA VELOCITY (FPM)	REMARKS
GVI	1B	AHU-5 AND AHU-6 INTAKE	15500	0.05	60 x 93	48.56 SF	400	1, 2, 3, 4, 5

1. SELECTION BASED ON GREENHECK. UNIT TO BE FULLY CUSTOM TO FIT. SIZING PROVIDED IS MINIMUM REQUIRED AND MAY NEED REVISED BASED ON CUSTOM UNIT COORDINATION.
2. CUSTOM COLOR SELECTED BY ARCHITECT.
3. WITH 1/2"x1/2" EXPANDED ALUMINUM BIRD SCREEN.
4. WITH 24 VDC ACTUATOR.
5. WITH MANUFACTURER'S WELDED 12 GA. COLD ROLLED STEEL ROOF CURB WITH MOUNTING FLANGE.

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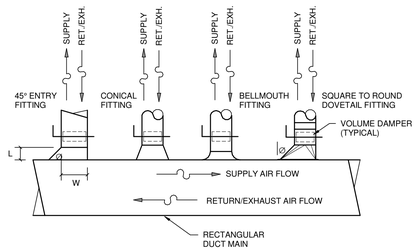
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SHEET CONTENTS:
MECHANICAL SCHEDULES

SHEET NO:
M421

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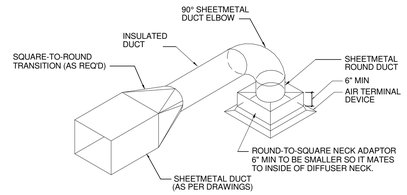
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NOTES:

1. "SPIN-IN" TAKE-OFF FITTINGS, EXTRACTORS, SCOOPS, OR SPLITTER DAMPERS ARE NOT ACCEPTABLE.
2. ACCOUNT FOR DUCT HEIGHT WHEN SELECTING CONICAL OR BELLMOUTH BRANCH TAKE-OFF FITTINGS.
3. PROVIDE AIR BALANCING VOLUME DAMPER, W/ LOCKING QUADRANT & SHAFT SEALS, AT EACH BRANCH TAKE-OFF.
4. L = W/4; L = 4" MINIMUM. ∅ = 45°.
5. BELLMOUTH FITTINGS MAY BE ROUND, FLAT OVAL, OR RECTANGULAR.

1 TYPICAL DUCT BRANCH TAKE-OFFS
NOT TO SCALE

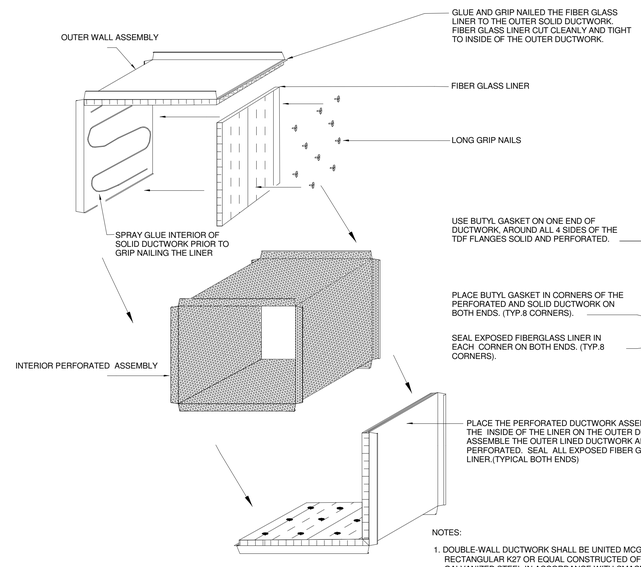


ROUND DUCT SIZE SCHEDULE			
DUCT SIZE	CFM RANGE	DUCT SIZE	CFM RANGE
6" DIA	0-125	16" DIA	701-900
8" DIA	126-225	18" DIA	901-1100
10" DIA	226-350	20" DIA	1101-1400
12" DIA	351-500	22" DIA	1401-1600
14" DIA	501-700	24" DIA	1601-1900

NOTES:

1. FLEX DUCT IS NOT ALLOWED WHERE DUCT SYSTEM PENETRATES A FIRE PARTITION
2. SUPPORT AIR TERMINAL DEVICE INDEPENDENT OF CEILING. PROVIDE AIR TERMINAL WITH APPROPRIATE FRAME TYPE(S) FOR CEILING(S). COORDINATE AIR TERMINALS WITH ARCHITECTURAL CEILING PLAN, AND/OR CEILING CONTRACTOR.
3. DIRECT FLEXIBLE DUCT TO DIFFUSER CONNECTIONS SHALL NOT BE PERMITTED. 90° FLEX DUCT ELBOWS SHALL NOT BE PERMITTED. MOUNTING & SUPPORT HARDWARE.
4. INSTALL AIR TERMINAL DEVICES FLUSH TO CEILING W/ CONCEALED MOUNTING AND SUPPORT HARDWARE.

3 TYPICAL AIR TERMINAL CONNECTION
12" = 1'-0"



NOTES:

1. DOUBLE-WALL DUCTWORK SHALL BE UNITED MCGILL RECTANGULAR K27 OR EQUAL CONSTRUCTED OF G-90 GALVANIZED STEEL IN ACCORDANCE WITH SMACNA STANDARDS WITH SOLID OUTER SHELL AND PERFORATED INNER SHELL.
2. FIBERGLASS DUCT LINER SHALL BE JOHNS MANVILLE LINACOUSTIC RC OR EQUAL WITH REINFORCED COATING SYSTEM. LINER SHALL BE 1-1/2 THICK (R-6 MIN.) WHERE LOCATED INDOORS AND 3" THICK (R-12 MIN.) WHERE LOCATED OUTDOORS.

2 DOUBLE WALL DUCTWORK
NOT TO SCALE

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 10/23/26
SCALE: As Indicated
DRAWN BY: LJP
CHECKED BY: AJM

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

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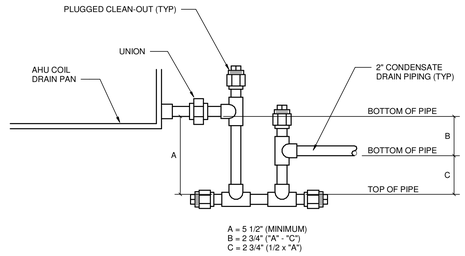
MECHANICAL DETAILS

SHEET NO:

M501

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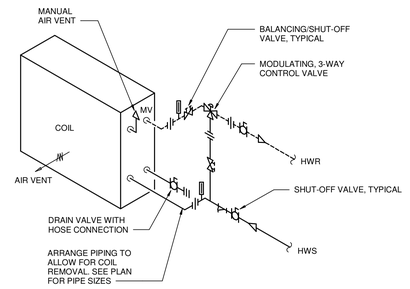
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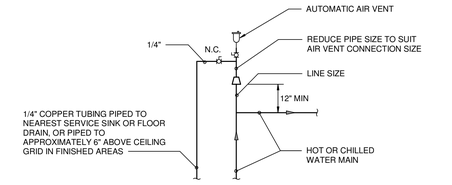
NOTES:

1. PITCH ALL CONDENSATE DRAIN PIPING DOWN TOWARDS ITS OUTLET AT 1/8" PER FOOT (MINIMUM).
2. PROVIDE PLUGGED CLEAN-OUTS AT EACH 90° CHANGE IN DIRECTION.
3. INSTALL DRAIN PIPING PER MANUFACTURER'S RECOMMENDATIONS.
4. PRIME CONDENSATE DRAIN TRAPS WITH WATER PRIOR TO START-UP.

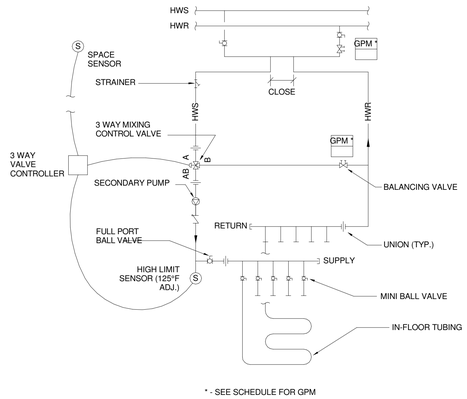
1 COOLING COIL DRAIN PAN TRAP DETAIL
NOT TO SCALE



2 HOT WATER COIL PIPING DETAIL WITH 3-WAY VALVE
NOT TO SCALE

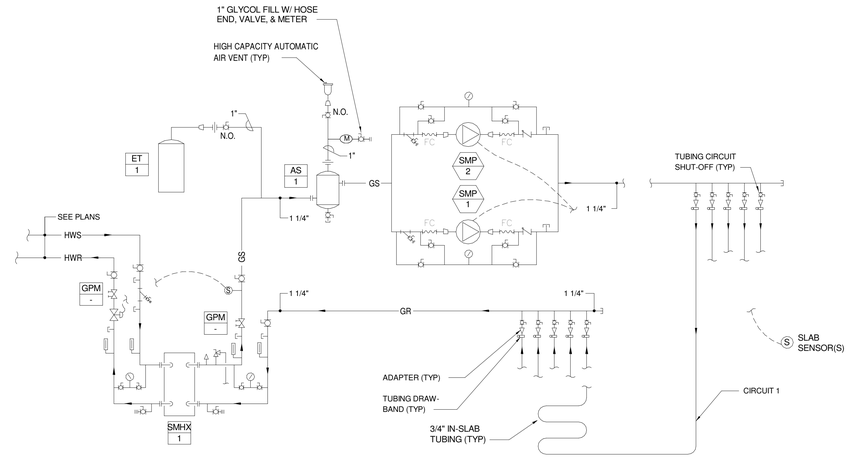


3 WATER SYSTEM HIGH POINT VENT DETAIL
NOT TO SCALE



* - SEE SCHEDULE FOR GPM

4 RADIANT FLOOR MANIFOLD
NOT TO SCALE



NOTES:

1. REFER TO FLOOR PLANS FOR PIPE ROUTING AND INSTALLATION INFORMATION NOT SHOWN HERE.
2. INSTALL SYSTEM COMPONENTS AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. SLAB HEATING SYSTEM PERFORMANCE REQUIREMENTS:
   156 BTU/HR-SF; -5F O.A. TEMP.; 10 MPH WIND SPEED; 18" PER DAY MAX. SNOW FALL;
   50% PROPYLENE GLYCOL; 250' MAX. TUBE LENGTH; 15' MAX. FPD.; 150/120°F GS TEMP.; 30°F FTD.
4. RADIANT HEATING SYSTEM MANUFACTURER SHALL DETERMINE THE REQUIRED NUMBER OF IN-SLAB HEATING TUBE CIRCUITS AND THE TUBE SPACING FOR THOSE CIRCUITS IN ORDER TO SATISFY THE SYSTEM PERFORMANCE INDICATED.
5. PROVIDE COPPER MANIFOLDS WITH SHUT-OFF AND BALANCING VALVES.
6. RADIANT HEATING SYSTEM MANUFACTURER SHALL PROVIDE EXPANSION TANK AND AIR SEPERATOR SELECTION.
7. MECHANICAL CONTRACTOR TO COORDINATE MANIFOLD LOCATIONS AND PROVIDE PROTECTIVE ENCLOSURES.
7. PIPE AND SYSTEM SIZING NOT FINAL. NUMBER OF CIRCUITS, GLYCOL PERCENTAGE, AND DESIGN CONDITIONS TO BE FINALIZED THROUGH CONSTRUCTION DESIGN PHASE.

5 SNOWMELT PIPING
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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE: **10/23/26**
SCALE: **As indicated**
DRAWN BY: **LJP**
CHECKED BY: **AJM**

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:
MECHANICAL DETAILS

SHEET NO:
M502

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	FAN
	PARALLEL BLADE DAMPER WITH MODULATING ELECTRIC ACTUATOR
	PARALLEL BLADE DAMPER WITH TWO-POSITION ELECTRIC ACTUATOR WITH END SWITCH
	OPPOSED BLADE DAMPER WITH MODULATING ELECTRIC ACTUATOR
	OPPOSED BLADE DAMPER WITH TWO-POSITION ELECTRIC ACTUATOR WITH END SWITCH
	SINGLE BLADE CONTROL DAMPER
FSD	FIRE SMOKE DAMPER WITH OPEN/CLOSE INDICATION
	TWO-WAY CONTROL VALVE WITH MODULATING ELECTRIC ACTUATOR
	TWO-WAY CONTROL VALVE WITH TWO-POSITION ELECTRIC ACTUATOR WITH END SWITCH
	THREE-WAY CONTROL VALVE WITH MODULATING ELECTRIC ACTUATOR
	THREE-WAY CONTROL VALVE WITH TWO-POSITION ELECTRIC ACTUATOR WITH END SWITCH
	FILTER

DX / HX	VRF/HEAT PUMP HEATING & COOLING COIL
H / C	HEATING COIL
C / C	COOLING COIL
	SENSOR/TRANSMITTER WITH AVERAGING ELEMENT
	SENSOR/TRANSMITTER WITH PROBE ELEMENT AND IMMERSION WELL FOR PIPING AS APPLICABLE
OR	DDC MONITORING/CONTROL HARDWARE AND WIRING BY BAS CONTRACTOR
	LOCAL MONITORING/CONTROL HARDWARE AND WIRING BY BAS CONTRACTOR
	MONITORING/CONTROL HARDWARE BY OTHER TRADES AND WIRING BY BAS CONTRACTOR
BAS	CONTROL PANEL BY BAS CONTRACTOR
COM	COMMUNICATION INTERFACE AND WIRING BY BAS CONTRACTOR
CP	CONTROL PANEL BY EQUIPMENT MANUFACTURER
VFD	VARIABLE FREQUENCY DRIVE
	MOTOR STARTER

BUILDING AUTOMATION SYSTEM LEGEND

AI	ANALOG INPUT
ALM	ALARM/FAULT
AMP	AMPERAGE (ANALOG INPUT)
AFS	AIRFLOW MEASUREMENT STATION
AO	ANALOG OUTPUT
AS	AQUASTAT
BAS	BUILDING AUTOMATION SYSTEM
BI	BINARY INPUT
BO	BINARY OUTPUT
CM	CONTROL MODULE (FIRE ALARM SYSTEM)
CO	CARBON MONOXIDE TRANSMITTER
CO2	CARBON DIOXIDE TRANSMITTER
COM	COMMUNICATION INTERFACE
CS	CURRENT SWITCH WITH ADJUSTABLE TRIP
CT	CURRENT TRANSDUCER (TRANSMITTER)
DA	DISCHARGE AIR
DEW	DEWPOINT TRANSMITTER
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT
DPS	DIFFERENTIAL PRESSURE SWITCH WITH ADJUSTABLE TRIP AND MANUAL RESET
DPT	DIFFERENTIAL PRESSURE TRANSDUCER (TRANSMITTER)
EA	EXHAUST AIR
ES	END SWITCH
FAS	FIRE ALARM SYSTEM
FS	FLOW SWITCH WITH ADJUSTABLE TRIP
HS	HAND SWITCH
LS	LEVEL SWITCH
LT	LEVEL TRANSMITTER
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTSIDE AIR
OCC	OCCUPANCY SENSOR
PC	POSITION CONTROL (ANALOG OUTPUT)
PI	POSITION INDICATION (ANALOG INPUT)
PUP	PICKUP PORT (PRESSURE)
RA	RETURN AIR
REF	REFRIGERANT DETECTOR
RF	RETURN FAN
RH	RELATIVE HUMIDITY TRANSMITTER
RLY	RELAY
RS	RUN STATUS (BINARY INPUT)
S	ROOM TEMPERATURE SENSOR
Ss	ROOM TEMPERATURE SENSOR (SECONDARY)
SA	SUPPLY AIR
SD	SMOKE DETECTOR
SF	SUPPLY FAN
SPC	SPEED CONTROL (ANALOG OUTPUT)
SPI	SPEED INDICATION (ANALOG INPUT)
SPT	STATIC PRESSURE TRANSDUCER (TRANSMITTER)
SPH	STATIC PRESSURE HIGH SWITCH WITH ADJUSTABLE TRIP AND MANUAL RESET
SPL	STATIC PRESSURE LOW SWITCH WITH ADJUSTABLE TRIP AND MANUAL RESET
SS	START/STOP (BINARY OUTPUT)
SSP	SPACE STATIC PRESSURE SENSOR
SUN	SUN SHIELD
SW	WINDOW SWITCH
T	THERMOSTAT
TE	TEMPERATURE ELEMENT (SENSOR)
TSH	TEMPERATURE SWITCH HIGH WITH ADJUSTABLE TRIP AND MANUAL RESET
TSL	TEMPERATURE SWITCH LOW WITH ADJUSTABLE TRIP AND MANUAL RESET
VFD	VARIABLE FREQUENCY DRIVE
WFS	WATERFLOW MEASUREMENT STATION
WS	WALL SWITCH

BUILDING AUTOMATION SYSTEM ABBREVIATIONS

1. SEQUENCES OUTLINED (UNLESS OTHERWISE SPECIFIED) SHALL BE PERFORMED BY DIRECT DIGITAL CONTROL FIELD PANELS (DDCFPS) OR LOCALLY MOUNTED DIRECT DIGITAL UNIT CONTROLLERS.

2. UNLESS OTHERWISE SPECIFIED, ALL SETPOINTS AND TIME DELAYS SHALL BE ADJUSTABLE BY THE OPERATOR THROUGH THE BAS AND THROUGH MENU ACCESS AT ALL DDCFPS WITHOUT ANY HARDWARE OR SOFTWARE REVISIONS.

3. ABILITY TO REVIEW ALL MEASURED DATA, CONTROL SETPOINTS AND FUNCTIONS SHALL BE PROVIDED AT BAS WORKSTATION AND DDCFPS.

4. PROVIDE MENU DRIVEN CAPABILITY TO OVERRIDE AUTOMATED START/STOP OR OPERATING MODES FOR EACH PIECE OF EQUIPMENT (INCLUDING PUMPS, ROOFTOP UNITS, TERMINAL BOXES, ETC...). IF A SEQUENCE IS DISABLED BY MANUAL INPUT AND THE BAS ATTEMPTS AN AUTOMATED CHANGE IN OPERATING MODE, AN ALARM SHALL BE INITIATED AT THE BAS STATING THAT THE SYSTEM WAS UNABLE TO CHANGE THE MODE DUE TO USER INPUT. WHERE APPLICABLE A MANUAL INPUT COMMAND WILL THEN BE REQUIRED FROM THE USER INSTRUCTING THE BAS TO START THE NEXT SEQUENTIAL PIECE OF EQUIPMENT.

5. THE DESIGN INTENT IS FOR THE BAS TO MONITOR PRESSURES, TEMPERATURES AND FLOWS AND TO CONTROL VALVES, VARIABLE FREQUENCY DRIVES (VFDS), RTUS, AHU'S, DOAS, MAU'S, PUMPS, ETC.... MONITORED DATA WILL BE USED TO ENERGIZE OR DE-ENERGIZE EQUIPMENT IN ACCORDANCE WITH THE SEQUENCES OUTLINED.

6. ALL EQUIPMENT CONTROLLED BY THE BAS SHALL BE CAPABLE OF MANUAL OPERATION THROUGH HAND-OFF-AUTOMATIC (HOA) SWITCHES LOCATED IN THE MOTOR STARTERS OR VFD'S. THE POSITIONING OF ALL VALVES CONTROLLED BY THE BAS SHALL BE CAPABLE OF MANUAL POSITIONING (OPEN, CLOSED, MODULATED, AUTO) VIA LABELED POTENTIOMETERS AND SWITCHES PROVIDED BY THE BAS CONTRACTOR. SAFETY DEVICES SHALL FUNCTION AND SHUT DOWN THE ASSOCIATED EQUIPMENT WHEN THE MANUAL SWITCHES ARE IN BOTH THE HAND AND AUTO POSITIONS.

7. COORDINATE ALL SENSOR INSTALLATION LOCATIONS WITH HVAC CONTRACTOR AND SUBMIT PROPOSED POSITIONS ON APPLICABLE PIPING AND DUCTWORK COORDINATION SUBMITTALS. COORDINATE AND INSURE MANUFACTURER'S RECOMMENDED UPSTREAM AND DOWNSTREAM PIPE OR DUCT DIAMETERS ARE PROVIDED. SPECIAL ATTENTION IS REQUIRED FOR FLOW ELEMENTS AND TRANSMITTERS. IN THE FOLLOWING SEQUENCES, THE SYMBOL FE REFERS TO FLOW ELEMENTS OF THE PITOT TUBE TYPE, PROVIDED BY THE HVAC CONTRACTOR. THE SYMBOL FT, WHEN ATTACHED TO AN FE, REFERS TO A FLOW TRANSMITTER PROVIDED BY THE BAS CONTRACTOR. THE SYMBOL FT ALONE, REFERS TO A COMBINATION FLOW ELEMENT AND TRANSMITTER, BOTH PROVIDED BY THE BAS CONTRACTOR.

8. PROVIDE COMMUNICATIONS INTERFACE (INCLUDING NECESSARY SOFTWARE) BETWEEN THE BAS AND EACH MANUFACTURER SUPPLIED CONTROLLER SPECIFIED. BAS SHALL BE CAPABLE OF READING AND DISPLAYING ALL DATA USED BY THE MANUFACTURER'S CONTROL PANEL. SOFTWARE INTERFACE SHALL BE THROUGH LONMARK/BACNET COMPLIANT PROTOCOL. WHERE THE BAS IS REQUIRED TO CONTROL THE OPERATION OF THE EQUIPMENT, PROVIDE INPUT AND OUTPUT INTERFACE AS REQUIRED.

9. FAIL SAFE POSITIONS INDICATED ARE POSITIONS THAT DEVICES WILL GO TO WHEN THE ASSOCIATED EQUIPMENT IS DEENERGIZED.

10. PROVIDE ADEQUATE DAMPING OF ALL MODULATING CONTROL LOOPS TO PREVENT HUNTING. MAXIMUM RESPONSE TIME SHALL BE 30 SECONDS.

11. WHENEVER A UNIT IS SHUT DOWN BECAUSE OF ONE OF IT'S SAFETIES, THE BAS SHALL RETAIN IN MEMORY THE READING AND SETPOINT OF EACH ASSOCIATED DEVICE TO HELP THE OPERATOR IN ISOLATING THE CAUSE OF THE SHUT DOWN.

12. WHENEVER AN ALARM IS INITIATED, THE BAS SHALL RETAIN IN MEMORY THE READING AND SETPOINT OF EACH ASSOCIATED DEVICE TO HELP THE OPERATOR IN ISOLATING THE CAUSE OF THE ALARM.

13. IF ANY DDCFP OR EQUIPMENT MANUFACTURER'S CONTROL PANEL LOSES COMMUNICATION WITH THE BAS NETWORK, AN ALARM SHALL BE INITIATED AT THE BAS INDICATING THE LOCATION OF THE FAULT.

14. THE FOLLOWING DEFINITIONS APPLY TO THE SEQUENCES OF OPERATION:

   a. BAS: PERSONAL COMPUTER BASED WORKSTATION

   b. DDCFP: DIRECT DIGITAL CONTROL FIELD PANEL. DDCFPS ARE VARIOUS APPLICATION BASED LOCAL SYSTEM CONTROLLERS WITH INPUTS FROM MONITORED DEVICES, OUTPUTS TO CONTROLLED DEVICES, CONTROLLING LOGIC SOFTWARE, AND NETWORKING CAPABILITY FOR COMMUNICATION WITH THE BAS.

   c. END DEVICE: MONITORED SENSORS AND CONTROLLED OPERATORS FOR SPECIFIC EQUIPMENT ITEMS. END DEVICES WILL PROVIDE A VARIETY OF ANALOG OR BINARY INPUT SOURCES TO THE DDCFPS AS WELL AS RECEIVE OUTPUTS FROM LOCAL CONTROLLERS OR DDCFPS.

15. UNLESS NOTED OTHERWISE THE FOLLOWING SHALL BE INITIAL SPACE TEMPERATURE SETPOINTS (ADJUSTABLE):

OFFICES AND COMMON AREAS:

OCCUPIED COOLING	75 DEGREES F
OCCUPIED HUMIDITY	50%
OCCUPIED HEATING	70 DEGREES F
UNOCCUPIED COOLING	80 DEGREES F
UNOCCUPIED HUMIDITY	65%
UNOCCUPIED HEATING	60 DEGREES F

IDF/MDF ROOMS:

OCCUPIED	76 DEGREES F
UNOCCUPIED	76 DEGREES F

UTILITY ROOMS (ELECTRICAL ROOMS, PLUMBING ROOMS & PENTHOUSES)

COOLING	80 DEGREES F
HEATING	60 DEGREES F MINIMUM (24 HOURS)

OCCUPANCY SCHEDULE:

AHUs OCCUPIED:	TO BE COORDINATED WITH OWNER
AHUs UNOCCUPIED:	TO BE COORDINATED WITH OWNER
DOAS OCCUPIED:	TO BE COORDINATED WITH OWNER
DOAS UNOCCUPIED:	TO BE COORDINATED WITH OWNER

BUILDING AUTOMATION SYSTEM - GENERAL

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

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SCALE:

DRAWN BY: **LJP**

CHECKED BY: **AJM**

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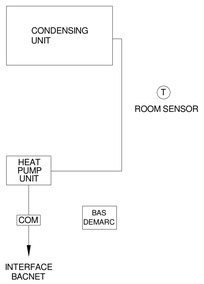
MECHANICAL CONTROLS

SHEET NO:

M601

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A. GENERAL:

1. PACKAGED CONTROL SYSTEM SHALL BE PROVIDED BY THE AIR CONDITIONING EQUIPMENT. MANUFACTURER. THE AIR CONDITIONING UNITS SHALL BE EQUIPPED WITH BACNET IP INTERFACE TO BAS.
2. THE AIR CONDITIONING UNITS SHALL BE AUTOMATICALLY CONTROLLED VIA DEDICATED, WALL-MOUNTED AND WIRED PROGRAMMABLE THERMOSTATS PROVIDED BY THE AIR CONDITIONING EQUIPMENT MANUFACTURER. THE BAS CONTRACTOR SHALL INSTALL THE THERMOSTAT AND ALL CONTROL WIRING IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
3. THE BAS CONTRACTOR SHALL CONNECT TO THE BACNET INTERFACE AND PROVIDE A SEPARATE WALL SENSOR TO MONITOR ROOM TEMPERATURE.

B. RUN CONDITIONS

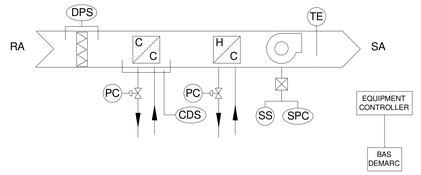
1. AIR CONDITIONING UNITS SHALL BE ENABLED TO RUN BASED ON OPERATOR ADJUSTABLE SCHEDULE.

C. ALARMS SHALL BE PROVIDED AS FOLLOWS:

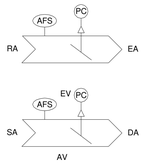
1. COMMON ALARM.

POINT NAME	HARDWARE POINTS AI	AO	BI	BO	SOFTWARE POINTS AVI	AVO	BVI	BVO	TREND	ALARM	SHOW ON GRAPHIC
SPACE TEMPERATURE	X								X	X	X
SPACE TEMPERATURE SET POINT					X						X

AIR CONDITIONING UNIT CONTROL (TEL/DATA AND ELECTRIC ROOMS)







POINTS LIST

POINT NAME	HARDWARE POINTS AI	AO	BI	BO	SOFTWARE POINTS AV	BV	TREND	ALARM	SHOW ON GRAPHIC
DISCHARGE AIR TEMPERATURE	X						X	X	X
ZONE SET POINT ADJUST	X						X		X
ZONE TEMPERATURE	X						X	X	X
COOLING VALVE		X					X		X
REHEAT VALVE		X							X
FAN STATUS			X					X	X
ZONE OVERRIDE			X				X		X
FAN SPEED CONTROL		X					X		X
COOLING SET POINT					X		X		X
HEATING SET POINT					X		X		X
CONDENSATE PAN			X				X		X
FILTER STATUS			X				X	X	X
OCCUPANCY SENSOR			X				X	X	X
AV/EV DAMPER		X					X		X
AV/EV CFM	X						X		X

A. GENERAL:

1. EQUIPMENT CONTROLLED INCLUDES:
   a. FAN COIL UNITS (FCU: FAN COIL UNITS WITH EC FAN, RA FILTER, HOT WATER AND CHILLED WATER COIL.
   b. THE FCU SHALL BE AVAILABLE 24 HOURS PER DAY, 7 DAYS PER WEEK.

B. RUN CONDITIONS:

1. THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:
   a. OCCUPIED MODE: THE UNIT SHALL MAINTAIN:
      a.a. A 75°F (ADJ.) COOLING SET POINT
      a.b. A 70°F (ADJ.) HEATING SET POINT
   b. UNOCCUPIED MODE (NIGHT SETBACK): THE UNIT SHALL MAINTAIN:
      b.a. A 85°F (ADJ.) COOLING SET POINT
      b.b. A 60°F (ADJ.) HEATING SET POINT
2. FCU SHALL OPERATE CONTINUOUSLY DURING OCCUPIED MODES. DURING UNOCCUPIED MODE FCU SHALL DE-ENERGIZE WHEN ZONE SPACE TEMP SET POINT IS SATISFIED.

C. ZONE SET POINT ADJUST:

1. THE OCCUPANT SHALL BE ABLE TO ADJUST THE ZONE TEMPERATURE HEATING AND COOLING SET POINTS AT THE ZONE SENSOR.

D. ZONE UNOCCUPIED OVERRIDE:

1. A TIMED LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO AN OCCUPIED MODE FOR AN ADJUSTABLE PERIOD OF TIME. AT THE EXPIRATION OF THIS TIME, CONTROL OF THE UNIT SHALL AUTOMATICALLY RETURN TO THE SCHEDULE.

F. AV/EV CONTROL:

1. AV/EV DAMPERS ARE TO MAINTAIN CONSTANT VOLUME AND MAINTAIN CFM SET POINT WHEN FCU'S/DOAS ARE RUNNING.
2. IF FCU IS IN UNOCCUPIED MODE, AV/EV SHALL CLOSE.
3. REFER TO MECHANICAL DUCT DRAWINGS FOR AV/EV LOCATIONS AND REQUIRED CFM.

G. ACD CONTROL:

1. AUTOMATIC CONTROL DAMPERS ARE TO MAINTAIN CONSTANT VOLUME AND MAINTAIN CFM SET POINT WHEN DOAS IS RUNNING.
2. ACDS SHALL MODULATE TO MAINTAIN CFM SET POINTS IN OCCUPIED AND UNOCCUPIED MODE.
3. REFER TO MECHANICAL DUCT DRAWINGS FOR ACD LOCATIONS.

H. FAN & TEMPERATURE CONTROL:

1. THE FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, DURING OCCUPIED AND UNOCCUPIED MODES, STARTING AT SLOW SPEED, UNLESS SHUTDOWN ON SAFETIES.
2. WHEN THE SPACE TEMPERATURE RISES ABOVE SET POINT, FCU REHEAT VALVE SHALL BE FULLY CLOSED, FCU FAN SPEED SHALL BE AT MINIMUM AIRFLOW AND THE FCU CHILLED WATER VALVE SHALL MODULATE OPEN TO MAINTAIN SET POINT. IF SPACE TEMPERATURE CONTINUES TO RISE WHEN CW VALVE IS >90% (ADJ.) OPEN, THE FCU SPEED SHALL MODULATE UP TO MAXIMUM SCHEDULED CFM UNTIL THE SPACE TEMPERATURE SET POINT IS SATISFIED. AS SPACE TEMPERATURE DROPS, FCU SHALL REDUCE SPEED FIRST AND THEN THE CHILLED WATER VALVE SHALL MODULATE CLOSED. UPON A CONTINUOUS DROP IN SPACE TEMPERATURE, THE REHEAT VALVE SHALL MODULATE OPEN TO MAINTAIN SET POINT. IF REHEAT VALVE IS 90% (ADJ.) OPEN, FCU SPEED SHALL MODULATE UP THE MAXIMUM SCHEDULED CFM. UPON A RISE IN TEMPERATURE THE REVERSE SHALL OCCUR.
3. OCCUPIED STAND-BY MODE:
   a. DURING SCHEDULED OCCUPIED MODE IF LOCAL OCCUPANCY LIGHTING SENSOR INDICATES NO PERSONNEL PRESENT AFTER 10 MINUTES (ADJ.), THE FCU SHALL REDUCE SPEED TO 1/2 THE SCHEDULED CFM, WHEN IN STBY MODE THE ZONE TEMPERATURE SHALL BE ALLOWED TO DRIFT 3 DEG F (ADJ.) ABOVE/BELOW ZONE CLG/HTG OCC SET POINT, AND FCU SHALL CONTROL PER NORMAL OCCUPIED MODE BUT AT THESE REDUCED SET POINTS. WHEN LOCAL OCCUPANCY LIGHTING SENSOR INDICATES PERSONNEL PRESENT, FCU SHALL RESUME NORMAL OCCUPANCY MODE. ASSOCIATED AV/EV CFM SHALL BE REDUCED BY 50% (ADJ.).
4. UNOCCUPIED MODE:
   a. FCU SHALL BE OFF UNTIL UNOCC HTG/CLG SET POINTS ARE REACHED. FCU SHALL THEN START AND RUN AT MAX CFM PER MECH SCHEDULE. IN HEATING FCU SHALL MAINTAIN 90 DEG F (ADJ.) DISCHARGE TEMPERATURES AND IN IN COOLING 55 DEG F (ADJ.) DISCHARGE TEMPERATURE, WHEN ZONE TEMP RISES 3 DEG F (ADJ.) ABOVE UNOCC HTG SET POINT OR DROPS 3 DEG F (ADJ.) BELOW UNOCC CLG SET POINT. THE FCU SHALL STOP AND THE HTG/CLG VALVE SHALL CLOSE. ASSOCIATED AV/EV SHALL REMAIN CLOSED.

H. ALARMS SHALL BE PROVIDED AS FOLLOWS:

1. FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
2. ROOM TEMPERATURE IS 10 DEGREE ABOVE SET POINT - 10 MINUTE DELAY
3. ROOM TEMPERATURE IS 10 DEGREE BELOW SET POINT - 10 MINUTE DELAY
4. UPON A SIGNAL FROM THE CONDENSATE SENSOR THAT THERE IS CONDENSATE IN THE SECONDARY DRAIN PAN THE FCU SHALL BE DE-ENERGIZED, THE CW VALVE SHALL CLOSE, AND ALARM SHALL BE INITIATED.

FAN COIL UNIT CONTROL DIAGRAM

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FF PROJECT NO: 2248

ORIGINATION DATE: 10/23/26

SCALE:

DRAWN BY: LJP

CHECKED BY: AJM

ISSUE LOG:

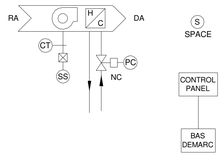
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50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: MECHANICAL CONTROLS

SHEET NO: M602

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BAS POINTS LIST

POINT NAME	HARDWARE POINTS AI	AO	BI	BO	SOFTWARE POINTS AVI	AVO	BVI	BVO	TREND	ALARM	SHOW ON GRAPHIC
SPACE TEMPERATURE	X								X	X	X
FAN START/STOP				X					X		X
HEATING COIL VALVE		X							X		X
FAN STATUS			X						X	X	X

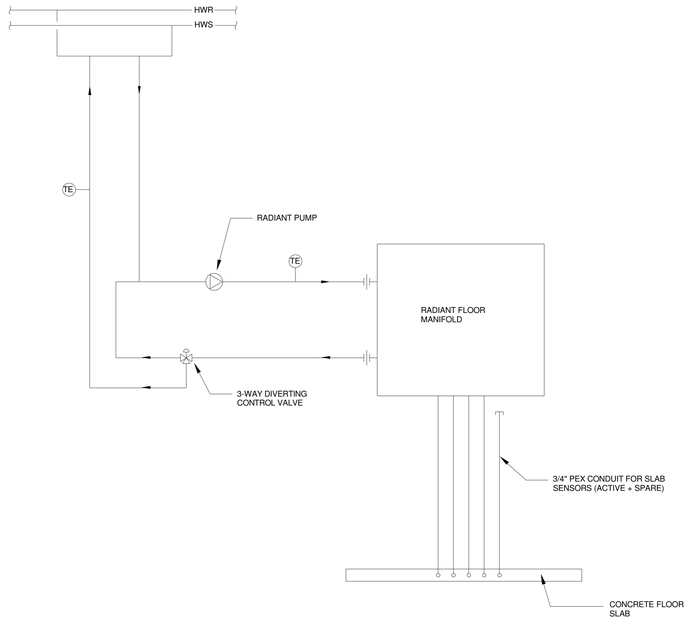
A. GENERAL:
   1. SEPARATE SPACE TEMPERATURE SET POINTS SHALL BE PROVIDED FOR OCCUPIED AND UNOCCUPIED PERIODS.
   2. NORMAL CONTROL DEVICE STATE OR POSITION SHALL BE AS FOLLOWS:
      a. HEATING VALVE SHALL BE NORMALLY OPEN.

B. RUN CONDITIONS:
   1. THE UNIT SHALL BE ENABLED TO RUN WHENEVER THE OUTSIDE AIR TEMPERATURE DROPS BELOW 60°F (ADJ.).

C. FAN AND HEATING COIL:
   1. THE CONTROLLER SHALL MEASURE THE SPACE TEMPERATURE AND RUN THE FAN AND MODULATE THE HEATING COIL VALVE TO MAINTAIN THE HEATING SET POINT.

D. ALARMS SHALL BE PROVIDED AS FOLLOWS:
   1. LOW SPACE TEMP: IF THE SPACE TEMPERATURE IS LOWER THAN THE HEATING SET POINT BY 10°F (ADJ.) FOR MORE THAN 15 MINUTES (ADJ.).

CABINET UNIT HEATER CONTROLS



SEQUENCE OF OPERATIONS-RADIANT HEATING & COOLING SLAB CONTROL:

A. RADIANT MIXING STATION CONTROL:
   1. GENERAL:
      a. 3-WAY MIXING VALVE SHALL MODULATE TO MAINTAIN SUPPLY WATER TEMPERATURE SET POINT SUBJECT TO ZONE FLOOR SLAB SENSORS. EACH ZONE SHALL BE PROVIDED WITH ONE SLAB SENSOR. BMS SHALL MONITOR EACH ZONE AND CONTROL TO SLAB TEMPERATURE SET POINT. MIXING VALVE SHALL BE CONTROLLED TO PROVIDED LIMITS ON SLAB TEMPERATURE RISE NOT TO EXCEED 5° F/HR WITH MAX SLAB TEMPERATURE OF 80° F (HTG) AND MINIMUM 64° F (CLG).
      b. PUMPS SHALL RUN CONTINUOUSLY.
      c. IF THE PUMP IS COMMANDED ON BUT DOES NOT RUN, AN ALARM GENERATES AT THE BMS.
   2. HEATING MODE:
      a. SUPPLY WATER TEMPERATURE SHALL BE CONTROLLED TO MAINTAIN SPACE TEMPERATURE NOT TO EXCEED MAX SLAB TEMP. THROUGH MODULATION OF MIXING STATION 3-WAY VALVE.
   3. COOLING MODE:
      a. SUPPLY WATER TEMPERATURE SHALL BE CONTROLLED TO MAINTAIN SPACE TEMPERATURE NOT TO EXCEED MINIMUM SLAB TEMP. THROUGH MODULATION OF MIXING STATION 3-WAY VALVE.
   4. MIXING STATION SUPPLY WATER TEMPERATURE SHALL BE MONITORED THROUGH LOCAL TEMPERATURE SENSORS AT MIXING STATION. DURING COOLING IF THE WATER TEMPERATURE DROPS BELOW 58°F FOR 5 MINUTES, 3-WAY VALVE SHALL CLOSE TO THE SLABS. IF SUPPLY WATER TEMPERATURE CONTINUES TO FALL BELOW SET POINT (FAILURE OF 3-WAY VALVE), MIXING STATION PUMP SHALL BE DISABLED. AN ALARM SHALL BE GENERATED AT THE BMS. THIS SEQUENCE IS PROVIDED TO REDUCE THE ABILITY FOR CONDENSATION TO BE PRODUCED ON FLOORING SURFACES.

B. SEASONAL CHANGEOVER:
   1. RADIANT FLOOR MODE SHALL BE CAPABLE OF MANUAL SELECTION BY OPERATOR OR AUTOMATICALLY ON OUTSIDE AIR TEMPERATURE. WHEN OAT IS LESS THAN 62°F THE SYSTEM SHALL BE IN HTG MODE. WHEN OAT IS ABOVE 67°F, THE SYSTEM SHALL BE IN CLG MODE.
   2. CHANGEOVER VALVES SHALL BE COMMANDED TO PROVIDE HTG/CLG APPROPRIATE TO THE OPERATING MODE.

C. ALL SET POINTS SHALL BE ADJUSTABLE.

POINT NAME	HARDWARE POINTS AI	AO	BI	BO	SOFTWARE POINTS AVI	AVO	BVI	BVO	TREND	ALARM	SHOW ON GRAPHIC
3-WAY DIVERTING VALVE		X							X		X
SUPPLY TEMPERATURE	X								X	X	X
RETURN TEMPERATURE	X								X		X
SLAB TEMPERATURE	X								X	X	X
SPACE HUMIDITY	X								X		X
SPACE TEMPERATURE	X								X		X
SPACE DEWPOINT	X								X		X
PUMP COMMAND				X					X		X
PUMP STATUS			X						X	X	X
SLAB SET POINT						X			X		X
RADIANT SYSTEM MODE								X	X		X
CHANGEOVER VALVE CMD (x2)				X					X		X

RADIANT FLOOR CONTROLS (HTG/CLG)
NTS

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE:
10/23/26

SCALE:

DRAWN BY:
LJP

CHECKED BY:
AJM

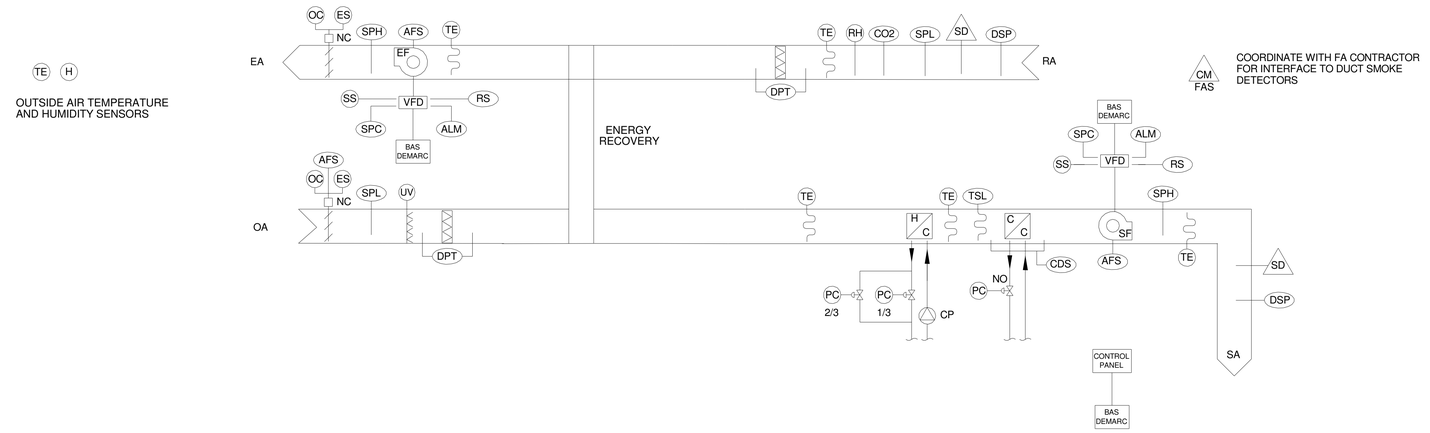
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SHEET CONTENTS:
MECHANICAL CONTROLS

SHEET NO:
M603

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A. GENERAL:
1. CONTROL SHALL BE BY THE BAS CONTRACTOR.
2. THE BAS CONTRACTOR IS RESPONSIBLE TO OBTAIN THE UNIT MANUFACTURER'S INPUT WITH REGARD TO CONTROL STRATEGIES AND SEQUENCES. THE MECHANICAL CONTRACTOR IS RESPONSIBLE TO FACILITATE COMMUNICATION BETWEEN THE BAS CONTRACTOR AND UNIT MANUFACTURER AS REQUIRED TO OBTAIN AGREEMENT AS TO THE CORRECTNESS AND/OR APPROPRIATENESS OF THE CONTROL STRATEGIES AND SEQUENCES.
3. NORMAL CONTROL DEVICE STATE OR POSITION SHALL BE AS FOLLOWS:
   a. SUPPLY FAN SHALL BE OFF AND EXHAUST FAN SHALL BE OFF.
   b. HOT WATER CONTROL VALVE SHALL BE SPRING RETURN OPEN AND COOLING VALVE SHALL BE CLOSED.
   c. OUTSIDE AIR DAMPER SHALL BE CLOSED.
   d. EXHAUST AIR DAMPER SHALL BE CLOSED.

B. SUPPLY AND EXHAUST FAN START:
1. UPON UNIT START-UP, THE OUTSIDE AIR AND EXHAUST AIR DAMPERS SHALL OPEN. UPON PROOF OF DAMPER POSITIONS, THE ENERGY RECOVERY WHEEL SHALL START AND SUPPLY AIR TEMPERATURE CONTROL SHALL BE ESTABLISHED. AFTER A 15 SECOND DELAY, THE EXHAUST FAN SHALL START AND RUN AT MINIMUM SPEED. AFTER A 15 SECOND DELAY, THE SUPPLY AIR FAN SHALL START AND ALL UNIT MODES FUNCTION NORMALLY.
2. ULTRAVIOLET LIGHTS SHALL BE ON WHENEVER THE UNIT IS RUNNING.

C. SUPPLY AND EXHAUST FAN SPEED CONTROL:
1. THE UNIT SHALL CONTROL THE SUPPLY FAN VFD TO MAINTAIN CONSTANT DUCT STATIC PRESSURE. THE DUCT STATIC PRESSURE SET POINT SHALL BE ESTABLISHED DURING TESTING AND BALANCING. THE EXHAUST FAN VFD SPEED SHALL MAINTAIN RETURN AIR DUCT STATIC PRESSURE.

D. UNOCCUPIED/SHUTDOWN MODE:
1. ALL CONTROL DEVICES ASSOCIATED WITH THE SYSTEM SHALL REVERT TO THE NORMAL STATE OR POSITION EXCEPT THE HOT WATER VALVE SHALL MODULATE TO MAINTAIN AN INTERNAL AIR TEMPERATURE BETWEEN THE COILS OF 40°F (ADJ.).

E. OCCUPIED MODE:
1. THE SUPPLY AIR TEMPERATURE SET POINT SHALL BE LINEARLY RESET BASED UPON OUTSIDE AIR TEMPERATURE AS FOLLOWS (ALL SET POINT RANGES SHALL BE ADJUSTABLE):
   a. OAT - 75°F DAT - 63°F
   b. OAT - 40°F DAT - 68°F
2. DOAS IS INTENDED TO RUN 24/7.

F. COOLING MODE:
1. WHEN THE UNIT IS OPERATING IN THE OCCUPIED MODE, THE SUPPLY AIR TEMPERATURE SHALL BE EQUAL TO THE CALCULATED OA SUPPLY AIR TEMPERATURE SET POINT

G. HEATING MODE:
1. WHEN THE UNIT IS OPERATING IN OCCUPIED MODE, THE SUPPLY AIR TEMPERATURE SHALL BE EQUAL TO THE CALCULATED RESET SUPPLY AIR TEMPERATURE SET POINT

H. ECONOMIZER MODE:
1. ECONOMIZER SHALL BE DETERMINED BY UTILIZING THE COMPARATIVE ENTHALPY METHOD.
2. WHEN THE ECONOMIZER IS ACTIVE THE ENERGY RECOVERY WHEEL SHALL BE OFF AND THE OA/EA BYPASS DAMPERS SHALL BE OPEN.

I. WARM-UP MODE:
1. THIS MODE IS TO BE UTILIZED PRIOR TO BUILDING OCCUPANCY 15 MINUTES (ADJ.) IF AVERAGE SPACE TEMPS ARE BELOW 65 DEG.F (ADJ.).
2. THE SUPPLY FAN AND EXHAUST FAN SHALL START AND OPERATE UNDER STATIC PRESSURE CONTROL.
3. THE OA AND EA DAMPERS SHALL BE OPEN.
4. THE HOT WATER VALVE SHALL MODULATE TO MAINTAIN A SUPPLY AIR TEMP OF 75 DEG.F (ADJ.).
5. WHEN AVERAGE AIR TEMPERATURE REACHES 65 DEG. F (ADJ.), OR THE PRIOR TO OCCUPANCY TIME DURATION EXPIRES, WARM-UP MODE SHALL DISENGAGE.

J. COOL-DOWN MODE:
1. THIS MODE IS TO BE UTILIZED PRIOR TO BUILDING OCCUPANCY 15 MINUTES (ADJ.) IF AVERAGE SPACE TEMPS ARE ABOVE 78 DEG.F (ADJ.).
2. THE SUPPLY AND EXHAUST FANS SHALL START AND OPERATE UNDER STATIC PRESSURE CONTROL.
3. THE OA AND EA DAMPERS SHALL BE OPEN.
4. THE COOLING VALVE SHALL MODULATE TO MAINTAIN A SUPPLY AIR TEMP OF 55 DEG.F (ADJ.).
5. WHEN AVERAGE AIR TEMPERATURE REACHES 75 DEG.F (ADJ.), OR THE PRIOR TO OCCUPANCY TIME DURATION EXPIRES, COOL-DOWN MODE SHALL DISENGAGE.

K. FROST PROTECTION:
1. FROST PROTECTION MODE SHALL BE ENGAGED UPON THE FOLLOWING CONDITION:
   a. OAT < 0°F (ADJ.) AND RA RH > 20% (ADJ.)
2. WHEN THESE CONDITIONS EXIST, THE ENERGY RECOVERY OA BYPASS DAMPER SHALL MODULATE AND MAINTAIN AN EXHAUST AIR LEAVING TEMPERATURE 30°F (ADJ.) WHEEL SPEED CONTROL PER HEATING MODE.

L. SAFETIES:
1. THE FOLLOWING SAFETIES, WHEN TRIPPED, SHALL SHUT DOWN THE UNIT AND INITIATE AN ALARM AT THE OPERATOR'S WORKSTATION. EACH OF THE FOLLOWING SAFETIES SHALL BE RESET VIA THE OPERATORS WORKSTATION AND/OR AUTOMATICALLY UPON CORRECTION OF THE PROBLEM AS REQUIRED PER VT DEPARTMENT OF BUILDING AND GENERAL SERVICES STANDARDS:
   a. PROVIDE A DOUBLE POLE, LOW LIMIT THERMOSTAT (FREEZE-STAT) WITH SENSING BULB ON THE DISCHARGE SIDE OF THE UNIT HEATING COIL. FREEZE-STAT SHALL TRIP WHEN ANY ONE-FOOT SECTION OF THE SENSING ELEMENT DROPS BELOW 38°F. ONE POLE SHALL BE HARDWIRED TO STOP SUPPLY AND EXHAUST FANS, CLOSE THE OUTSIDE AIR AND EXHAUST AIR DAMPERS AND OPEN THE HOT WATER VALVE. THE OTHER POLE SHALL BE USED TO PROVIDE STATUS TO THE BAS.
   b. PROVIDE DIFFERENTIAL SWITCHES TO MONITOR PRESSURE DROPS ACROSS OUTSIDE AND RETURN AIR FILTERS. WHEN DIFFERENTIAL PRESSURE RISES ABOVE FILTER MANUFACTURERS RECOMMENDED MAXIMUM, AN ALARM SHALL BE INDICATED. UNIT NOT REQUIRED TO SHUT DOWN.
   c. INITIATION OF LOCAL SMOKE DETECTORS OR AN ALARM CONDITION AT THE BUILDING FIRE ALARM CONTROL PANEL. BAS CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR FA SYSTEM INTERFACE REQUIREMENTS.
   d. HIGH/LOW DUCT PRESSURE SWITCH.
   e. WHEN CONDENSATE SENSOR ACTIVATES DUE TO HIGH LEVEL IN CONDENSATE PAN, CLOSE COOLING VALVE AND INITIATE ALARM AT THE OWS.

DEDICATED OUTDOOR AIR SYSTEM UNIT CONTROLS
AHU-10

POINTS LIST

POINT NAME	HARDWARE POINTS AI	AO	BI	BO	SOFTWARE POINTS AVI	AVO	BVI	BVO	TREND	ALARM	SHOW ON GRAPHIC
OUTSIDE AIR TEMP (GLOBAL)	X								X		X
OUTSIDE AIR HUMIDITY (GLOBAL)	X								X		X
SUPPLY AIR TEMP	X								X	X	X
RETURN AIR TEMP	X								X		X
EXHAUST AIR TEMP	X								X		X
OUTSIDE AIR AIRFLOW	X								X		X
OUTSIDE AIR FILTER STATUS			X						X	X	X
RETURN FILTER STATUS			X						X	X	X
SUPPLY FAN SPEED		X							X		X
EXHAUST FAN SPEED		X							X		X
COOLING COIL VALVE COMMAND		X							X		X
SUPPLY FAN RUN STATUS			X						X	X	X
SUPPLY FAN VFD ALARM/FAULT			X							X	X
EXHAUST FAN RUN STATUS			X						X	X	X
EXHAUST FAN VFD ALARM/FAULT			X							X	X
OUTSIDE AIR DAMPER POSITION			X						X	X	X
EXHAUST AIR DAMPER POSITION			X						X	X	X
FREEZESTAT			X							X	X
SUPPLY FAN START/STOP				X					X		X
EXHAUST FAN START/STOP				X					X		X
OUTSIDE AIR DAMPER COMMAND				X					X		X
EXHAUST AIR DAMPER COMMAND				X					X		X
SUPPLY AIR TEMP SET POINT					X						X
HIGH STATIC TRIP (x2)			X						X	X	X
LOW STATIC TRIP (x2)			X						X	X	X
SA/RA SMOKE DETECTOR			X						X	X	X
COOLING COIL LEAVING AIR TEMPERATURE	X								X		X
RETURN AIR CO2	X								X		X
RETURN AIR HUMIDITY	X								X		X
HEATING COIL VALVE COMMAND 1/3		X							X		X
DUCT STATIC PRESSURE (x2)	X								X	X	X
DUCT STATIC PRESSURE SET POINT (x2)						X					X
EA/OA BYPASS DAMPERS		X							X		X
ULTRAVIOLET LIGHTS			X	X					X	X	X
HEATING COIL VALVE COMMAND 2/3		X							X		X
VFD FREQUENCY					X				X		X
VFD AMPS					X				X		X
FREEZE PUMP COMMAND				X					X		X
FREEZE PUMP STATUS			X						X	X	X
CONDENSATE SENSOR			X						X	X	X
SA/EA FLOW MEASUREMENT STATIONS	X								X		X

NOTE: DOAS UNIT CONTROLLER REQUIRES A DEMARCATION POINT TO SUPPORT BACNET IP

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 10/23/26 | SCALE:

DRAWN BY: LJP | CHECKED BY: AJM

ISSUE LOG:
- 25% DESIGN DEVELOPMENT
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- 75% DD SET/OWNER REV. 05/29/2026
- 100% DD SET 10/23/2026

SHEET CONTENTS: MECHANICAL CONTROLS

SHEET NO: M604

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FIRE ALARM SYSTEM LEGEND

FACP — FIRE ALARM CONTROL PANEL

FATC — FIRE ALARM TERMINAL CABINET

PRE — PRE-ACTION SYSTEM/CONTROL UNIT

TPR# — FIRE ALARM TRANSPONDER
= TRANSPONDER NUMBER

FAA — FIRE ALARM ANNUNCIATOR

EVAC — VOICE EVACUATION CONTROL UNIT

MIC — REMOTE VOICE EVACUATION MICROPHONE

F — FIRE ALARM PULL STATION/FIRE ALARM BOX, MH = 44"AFF, UON

#W S C — CEILING MOUNTED FIRE ALARM SPEAKER
#W = WATTAGE

#W S — WALL MOUNTED FIRE ALARM SPEAKER, MH = 6'-8"AFF, UON
#W = WATTAGE

CD — CEILING MOUNTED FIRE ALARM STROBE
CD = CANDELA RATING/SETTING

CD — WALL MOUNTED FIRE ALARM STROBE, MH = 6'-8"AFF, UON
CD = CANDELA RATING/SETTING

CD #W C — CEILING MOUNTED FIRE ALARM SPEAKER STROBE
#W = WATTAGE
CD = CANDELA RATING/SETTING

CD #W — WALL MOUNTED FIRE ALARM SPEAKER STROBE, MH = 6'-8"AFF, UON
#W = WATTAGE
CD = CANDELA RATING/SETTING

S X — CEILING MOUNTED SMOKE DETECTOR
E = ELEVATOR RECALL CONTROL
WP = WEATHER PROOF
L = LOCAL 120V DETECTOR
LS = LOCAL 120V DETECTOR WITH INTEGRAL 177 CANDELA STROBE
SB = LOCAL SYSTEM CONNECTED WITH SOUNDER BASE

WF — FLOW DETECTOR/SWITCH *

VS — VALVE WITH INTEGRATED SUPERVISORY SWITCH *

RTS — REMOTE ALARM INDICATING & TEST SWITCH, MH = 84"AFF MIN, COORDINATE LOCATION WITH FIRE DEPARTMENT

AOM — ADDRESSABLE OUTPUT CONTROL MODULE

AIM — ADDRESSABLE INPUT MONITOR MODULE

AIO # — ADDRESSABLE INPUT/OUTPUT MODULE
= NUMBER OF INPUTS AND OUTPUTS

SAP* — SPRINKLER ALARM PANEL WITH DOOR TAMPER SWITCH CONNECTED TO FIRE ALARM SYSTEM

E — SPRINKLER ALARM BELL FURNISHED BY SPRINKLER CONTRACTOR, INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR

MB — MASTER BOX

KB — LOCKED KEY BOX (KNOX BOX)

DH — DOOR HOLDER **

HVAC X — CONTROL PANEL FOR:
E = EXHAUST
P = STAIRWELL PRESSURIZATION

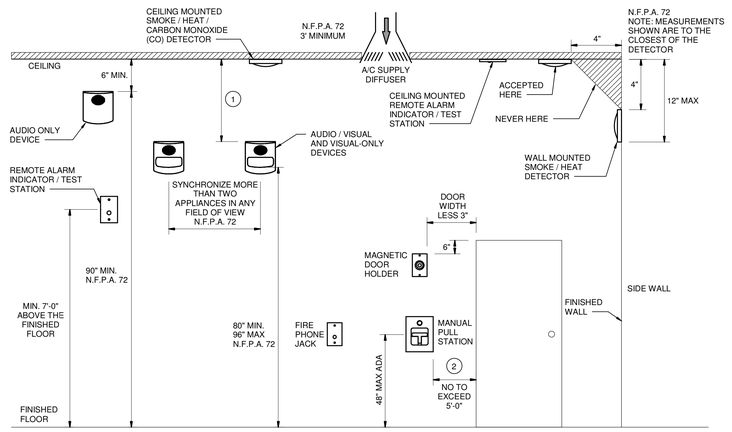
FIRE DAMPER *

S — FIRE/SMOKE DAMPER *
COORDINATE LOCATION OF TEST SWITCH WITH FIRE DEPARTMENT PRIOR TO INSTALLATION.

S — SMOKE DAMPER *
COORDINATE LOCATION OF TEST SWITCH WITH FIRE DEPARTMENT PRIOR TO INSTALLATION.

S — DUCT SMOKE DETECTOR
COORDINATE LOCATION OF TEST SWITCH WITH FIRE DEPARTMENT PRIOR TO INSTALLATION.

W — WET ALARM VALVE - VALVE LOCATION
INCLUDES FLOW & TAMPER SWITCH



NOTES:

1. WHERE LOW CEILING HEIGHTS DO NOT PERMIT A MIN. OF 80", THE APPLIANCE SHALL BE MOUNTED WITHIN 6" OF THE CEILING. FOR ROOMS REQUIRED TO COMPLY WITH ADA REQUIREMENTS THE APPLIANCE SHALL BE INSTALLED AT 80" OR WITHIN 6" OF THE CEILING, WHICHEVER IS LOWER.
2. PULL STATION TO BE LOCATED A MINIMUM OF 18" FROM CORNER.

2 FIRE ALARM DEVICE MOUNTING HEIGHT DETAIL
NOT TO SCALE

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT *
C	CEILING MOUNTED
CUH	CABINET UNIT HEATER *
DN	DOWN
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN *
EHH	ELECTRICAL HANDHOLE
EMH	ELECTRICAL MANHOLE
FB	FAN BOX *
FIBO	FURNISHED AND INSTALLED BY OWNER/OTHERS
HOA	HAND-OFF-AUTO SELECTOR SWITCH
HP	HORSEPOWER
LOR	LOCATED ON ROOF
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MD	MOTORIZED DOOR **
MH	MOUNTING HEIGHT
NTS	NOT TO SCALE
OD	OVERHEAD DOOR **
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
PC	PLUMBING CONTRACTOR
PUH	PROPELLER UNIT HEATER *
RF	RETURN FAN *
RTU	ROOF TOP UNIT *
SF	SUPPLY FAN *
SPCP	SEWAGE PUMP CONTROL PANEL
S/S	START/STOP PUSH BUTTONS
S. STL	STAINLESS STEEL
THH	TELECOMMUNICATIONS HANDHOLE
TMH	TELECOMMUNICATIONS MANHOLE
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VP	VANDAL PROOF
WPCP	WELL PUMP CONTROL PANEL
WG	WIRE GUARD
WP	WEATHER PROOF
WUH	WALL MOUNTED UNIT HEATER *
*	EQUIPMENT PROVIDED BY MECHANICAL TRADE, WIRED BY ELECTRICAL TRADE
**	EQUIPMENT PROVIDED BY DOOR HARDWARE TRADE, WIRED BY ELECTRICAL TRADE

DEMOLITION LEGEND

X — EXISTING EQUIPMENT OR DEVICE TO BE REMOVED

X — EXISTING EQUIPMENT OR DEVICE TO REMAIN
XRL = EXISTING RELOCATED
XRU = EXISTING BOX & CONDUIT REUSED
XTR = EXISTING TO REMAIN
XR = EXISTING TO BE REMOVED

FIRE ALARM TRADE NOTES

FA-1 ALL FIRE ALARM AND ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES AND THE CURRENT NATIONAL ELECTRICAL CODE (NEC) BY ELECTRICIANS LICENSED BY THE STATE IN WHICH THE WORK IS PERFORMED.

FA-2 THE ELECTRICAL CONTRACTOR AND FIRE ALARM INSTALLER SHALL VERIFY THE EXACT LOCATION AND REQUIREMENTS OF ALL EQUIPMENT PRIOR TO INSTALLING ANY CONDUIT AND/OR CABLE. IF REQUIREMENTS DIFFER FROM THOSE INDICATED, OR IF ADDITIONAL EQUIPMENT IS REQUIRED BY CODE, INFORM THE ENGINEER.

FA-3 WIRING FOR ALL SINGLE PHASE CIRCUITS, 20A OR SMALLER, SHALL BE A MINIMUM OF 2#12&1#12G-3/4"C., FOR CIRCUIT LENGTHS UNDER 100FT AND 2#10&1#10G-3/4"C., FOR CIRCUIT LENGTHS 100FT AND OVER, UNLESS OTHERWISE NOTED.

FA-4 MOUNTING HEIGHTS GIVEN FOR ALL FIRE ALARM DEVICES ARE TO THE CENTERLINE OF THE JUNCTION BOX USED TO MOUNT THE DEVICE, UNLESS OTHERWISE NOTED.

FA-5 REMOVE AND DISPOSE OF EXISTING FIRE ALARM EQUIPMENT AND ASSOCIATED BOXES, CONDUIT AND WIRE WHERE INDICATED OR WHERE LOCATED ON OR WITHIN WALLS AND CEILINGS BEING DEMOLISHED OR ALTERED AS A RESULT OF THIS CONTRACT, UNLESS OTHERWISE INDICATED. IT IS NOT THE INTENT OF THESE DRAWINGS TO INDICATE ALL FIRE ALARM AND ASSOCIATED ELECTRICAL ITEMS TO BE REMOVED.

FA-6 CIRCUIT WIRING INDICATED ON DRAWINGS IS SCHEMATIC IN NATURE AND SHALL NOT BE CONSIDERED TO BE POINT-TO-POINT, UNLESS OTHERWISE NOTED.

FA-7 EXISTING DEVICES AND PANELS THAT REMAIN SHALL BE RECIRCUITED, IF NECESSARY, TO ENSURE CONTINUED OPERATION.

FA-8 COORDINATE FINAL LOCATIONS OF CEILING MOUNTED DEVICES WITH REFLECTED CEILING PLANS AND ALL OTHER TRADE DRAWINGS PRIOR TO INSTALLATION.

FA-9 PROVIDE AND ENSURE FIREPROOFING OF ALL CONDUIT, CABLING AND ANY OTHER ELECTRICAL AND FIRE ALARM DEVICES THROUGH FIRE RATED ASSEMBLIES.

FA-10 PROVIDE PULL STRINGS IN ALL CONDUIT SYSTEMS LEFT FOR USE BY OTHERS.

FA-11 PROVIDE EXPANSION FITTINGS IN CONDUIT RISERS FROM ALL EXTERIOR UNDERGROUND CONDUITS TO FIXED EQUIPMENT OR CONDUIT FITTINGS AND PROVIDE FLEXIBLE CONNECTIONS TO ANY EQUIPMENT SUBJECT TO SETTLEMENT OR FROST HEAVES. PROVIDE FLEXIBLE CONNECTIONS ON CONDUITS CROSSING BUILDING EXPANSION JOINTS.

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY TO ALL RIST-FROST-SHUMWAY ENGINEERING, INC., DRAWINGS AND TRADES ASSOCIATED WITH THOSE DRAWINGS INVOLVED ON THIS PROJECT:

G-1 RIST-FROST-SHUMWAY ENGINEERING, INC., WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND/OR THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE GUIDANCE OF RIST-FROST-SHUMWAY ENGINEERING, INC., WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE DISCOVERED OR ALLEGED.

G-2 ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS INCLUDING, BUT NOT LIMITED TO: NFPA, IBC, UL, SMACNA, OSHA, AND NEC.

G-3 THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL PROTECT THE WORK SITE, SURROUNDING AREAS AND OCCUPANTS FROM DAMAGE AND INJURY.

G-4 THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE CONTRACT DOCUMENTS. ALL DRAWINGS OF ANY PARTICULAR TRADE SHALL BE USED IN CONJUNCTION WITH DRAWINGS OF ALL OTHER TRADES TO COORDINATE ALL CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED WORK. ANY PROPOSED CHANGES, VARIATIONS OR SUBSTITUTIONS MUST BE REVIEWED AND ACCEPTED BY THE ENGINEER PRIOR TO IMPLEMENTATION.

G-5 ALL DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN INTENT AND EXTENT OF THE WORK. THEY SHALL BE CONSIDERED PARTLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR ROUGHING-IN MEASUREMENTS OR TO SERVE AS SHOP DRAWINGS.

G-6 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS (AS-BUILT OR OTHERWISE) BEFORE COMMENCING FABRICATION, AND/OR ORDERING MATERIALS.

G-7 DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS OTHERWISE INDICATED.

G-8 (2) INFORMATION ON THESE DRAWINGS PERTAINING TO AS-BUILT CONSTRUCTION AND OTHER EXISTING CONDITIONS HAVE BEEN OBTAINED FROM OTHER DOCUMENTATION OR BY FIELD INVESTIGATION. (SEE GENERAL AND SUPPLEMENTAL CONDITIONS FOR LISTING). THIS INFORMATION IS PROVIDED FOR THE CONTRACTOR'S BENEFIT IN PERFORMANCE OF THE WORK.

G-8 (3) INFORMATION ON THESE DRAWINGS PERTAINING TO AS-BUILT CONSTRUCTION AND OTHER EXISTING CONDITIONS HAS BEEN OBTAINED FROM ENGINEERING DRAWINGS OR OTHER DOCUMENTATION BY:

abc & associates, jpb no. xxx, dated xx/xx/xx, rev. xx [LIST DRAWINGS, REPORTS, BORINGS, ETC.]

OR BY FIELD INVESTIGATION. THIS INFORMATION IS PROVIDED FOR THE CONTRACTORS BENEFIT IN PERFORMANCE OF THE WORK.

G-9 IN THE EVENT THE CONTRACTOR ENCOUNTERS MATERIAL REASONABLY BELIEVED TO BE HAZARDOUS WHICH HAS NOT BEEN RENDERED HARMLESS, THE CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO THE OWNER AND ARCHITECT/ENGINEER IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED UNTIL WRITTEN VERIFICATION BY THE OWNER THAT THE MATERIAL HAS BEEN REMOVED OR OTHERWISE BEEN RENDERED HARMLESS.

G10 (4) THE FOLLOWING LIST OF BUILDING MATERIALS, WHICH MAY NOT BE ALL INCLUSIVE, CONTAIN ASBESTOS: [LIST ALL FIXTURES AND LOCATIONS]. THESE ASBESTOS CONTAINING MATERIALS ARE NOT TO BE DISTURBED AS PART OF THIS PROJECT. SHOULD THE CONTRACTOR OR ANY OF HIS SUBCONTRACTORS ACCIDENTALLY DISTURB THESE ASBESTOS CONTAINING MATERIALS (OR NEED TO DISTURB THESE MATERIALS), THE CONTRACTOR SHALL TEMPORARILY STOP ALL WORK IN THIS AREA AND IMMEDIATELY CONTACT [INSERT CLIENT CONTACT AND PHONE NUMBER] SO THAT PROPER ACTION MAY BE TAKEN. THE CONTRACTOR WILL MAKE EVERY ATTEMPT TO AVOID DISTURBING ASBESTOS.

OR THE EXISTING FACILITY IS SUSPECTED OF CONTAINING ASBESTOS. IF ANY ASBESTOS OR SUSPECTED ASBESTOS IS DISCOVERED, DISTURBED OR REQUIRED TO BE REMOVED, THE CONTRACTOR SHALL TEMPORARILY STOP ALL WORK IN THIS AREA AND IMMEDIATELY CONTACT [INSERT CLIENT CONTACT AND PHONE NUMBER] SO THAT PROPER ACTION MAY BE TAKEN. THE CONTRACTOR WILL MAKE EVERY ATTEMPT TO AVOID DISTURBING ASBESTOS.

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO.: **2248**

ORIGINATION DATE: **10/23/26**

SCALE: **As indicated**

DRAWN BY: **TEM**

CHECKED BY: **AMS**

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:
FIRE ALARM LEGENDS, NOTES & ABBREVIATIONS

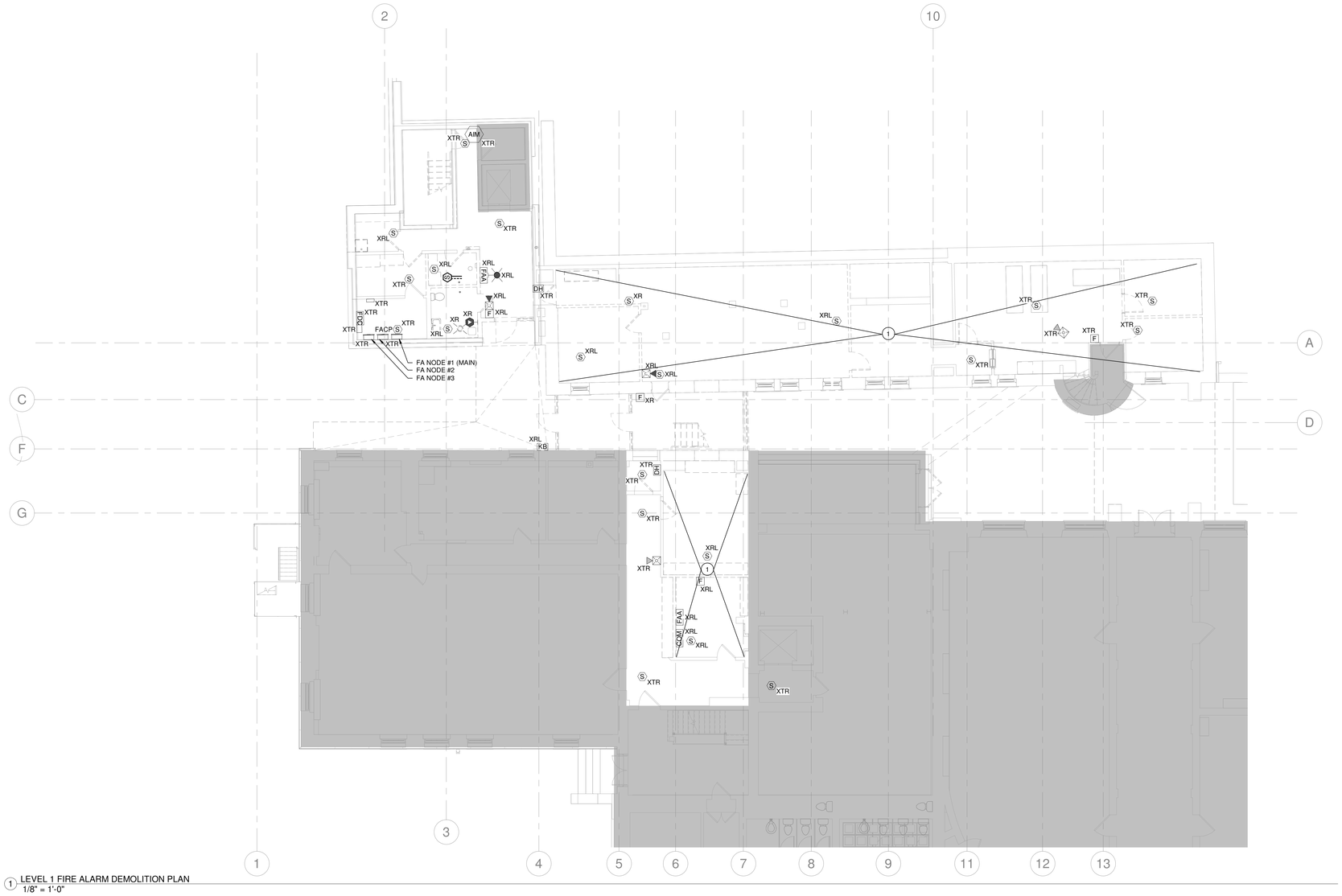
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FA021

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DEMOLITION NOTES

1. EXISTING FIRE ALARM DEVICES SHALL BE REMOVED AND SET ASIDE FOR REUSE (UON). MAINTAIN EXISTING WIRING FOR REUSE. MAKE NOTE OF QUANTITIES OF EXISTING DEVICES. ANY NOT USED DURING NEW WORK SHALL BE OFFERED UP TO OWNER FOR ATTIC STOCK.



1 LEVEL 1 FIRE ALARM DEMOLITION PLAN
1/8" = 1'-0"

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SHEET CONTENTS:
LEVEL 1 FIRE ALARM DEMOLITION PLAN

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1 MEZZANINE FIRE ALARM DEMOLITION PLAN
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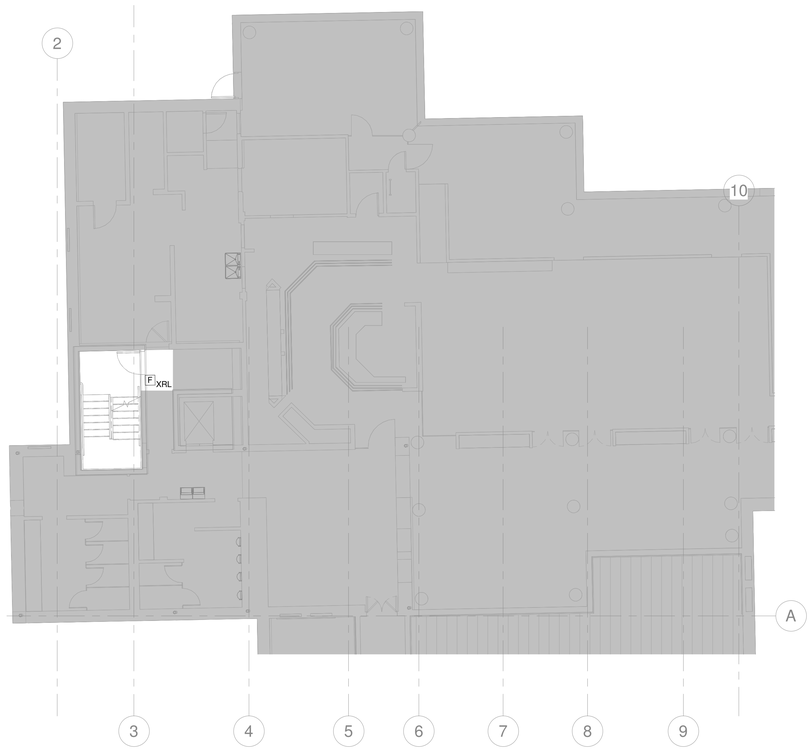
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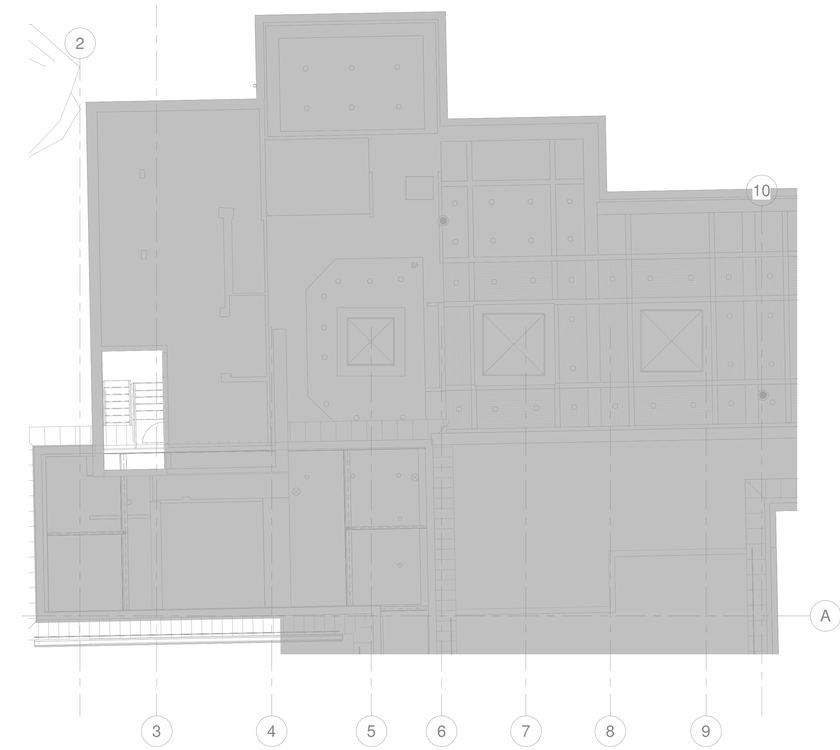
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MEZZANINE FIRE ALARM DEMOILITION PLAN

SHEET NO:
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1 LEVEL 2 - PARTIAL FIRE ALARM DEMOLITION PLAN - PHASE 2
1/8" = 1'-0"



2 LEVEL 3 - PARTIAL FIRE ALARM DEMOLITION PLAN - PHASE 2
1/8" = 1'-0"

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Author

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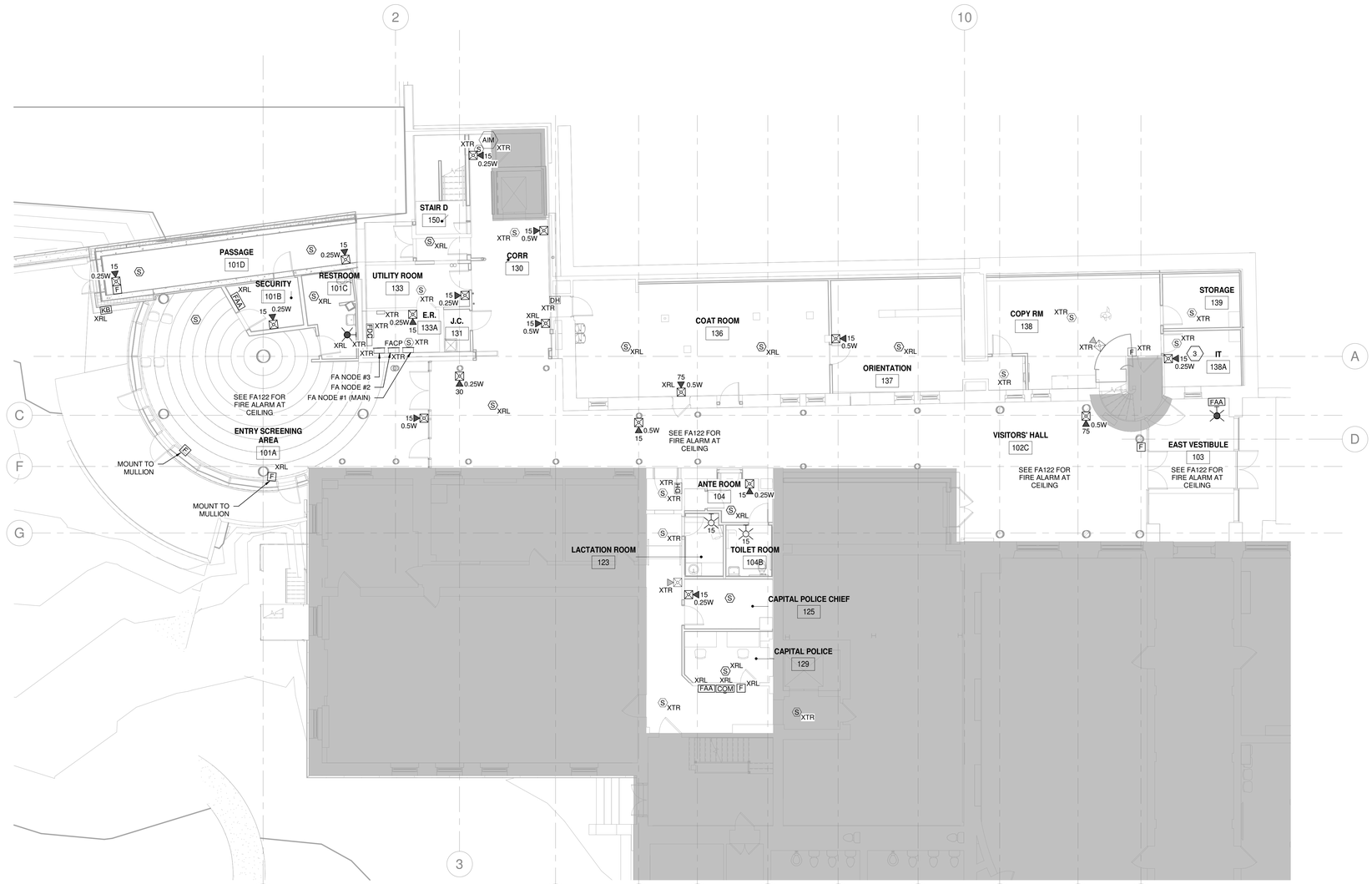
SHEET TITLE:
LEVELS 2 & 3 PARTIAL FIRE ALARM DEMOLITION PLANS

SHEET NO:
FAD123

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DRAWING NOTES

1. EXTEND ALL MAINTAINED FIRE ALARM WIRING TO NEW NODE. ANY JUNCTION BOXED BETWEEN INTERCEPTION POINT AND NEW NODE LOCATION SHALL BE PROVIDED WITH RED COVER PLATES. RECONNECT ALL WIRING TO EXISTING NODE. ALL CONDUITS AND WIRING SHALL MATCH EXISTING IN ALL RESPECTS.
2. INSTALL ALL NEW CONDUITS AND WIRING AS COMPLETE AS POSSIBLE TO REDUCE REQUIRED FIRE WATCH TIME. PROVIDE A FIRE WATCH ONCE NO FURTHER WORK CAN BE COMPLETED UNLESS THE SYSTEM IS OFFLINE. FIRE WATCH SHALL COMPLETE UPON REENERGIZING, TESTING, AND FULL FUNCTIONALITY OF THE FIRE ALARM SYSTEM HAS BEEN RESTORED AND APPROVED BY THE FIRE DEPARTMENT.
3. CONNECT NEW NOTIFICATION DEVICE TO EXISTING NAC CIRCUIT WIRING. NEW CONDUIT AND WIRING SHALL MATCH EXISTING IN ALL RESPECTS.



1 LEVEL 1 FIRE ALARM PLAN
1/8" = 1'-0"

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MONTPELIER, VT

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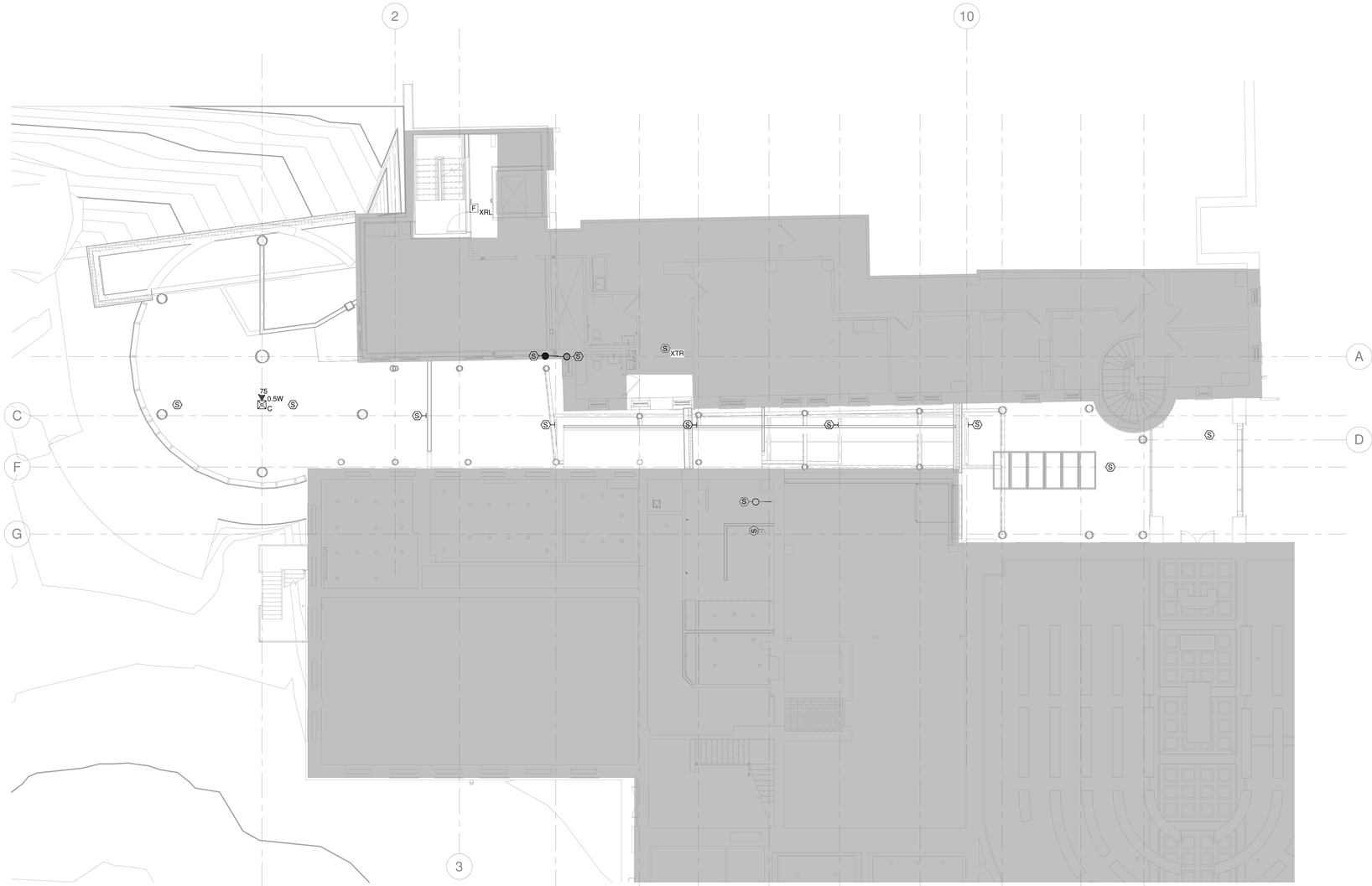
LEVEL 1 FIRE ALARM PLAN

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1 MEZZANINE FIRE ALARM PLAN
1/8" = 1'-0"

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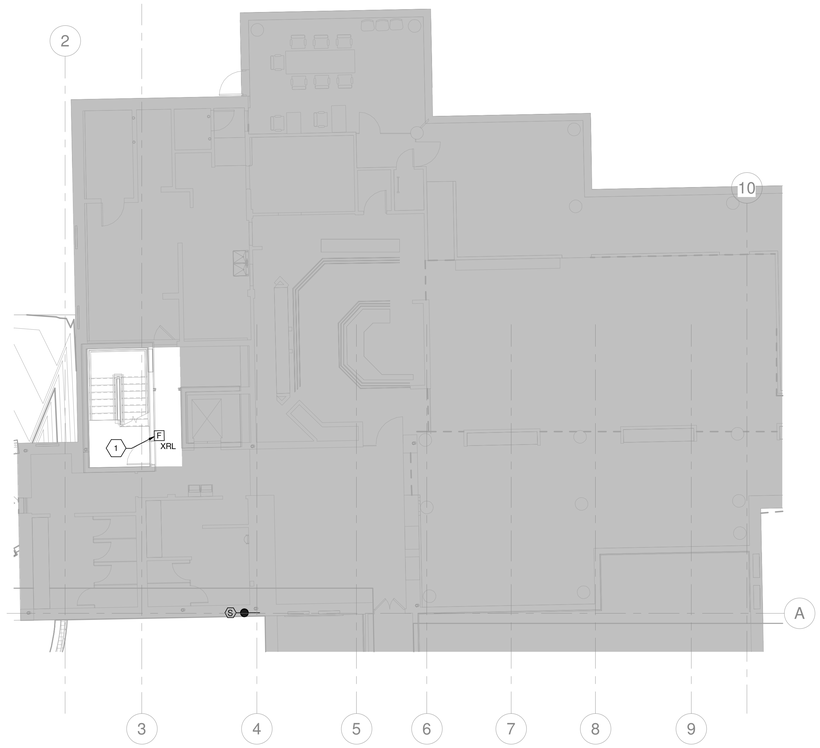
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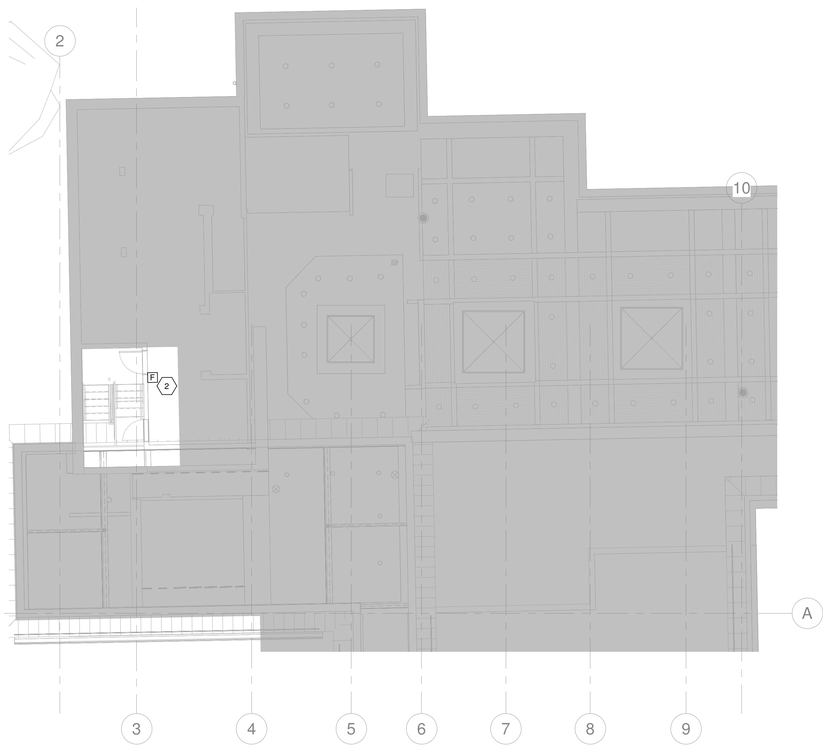
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DRAWING NOTES

1. NEW CONDUIT AND WIRING FOR ALL RELOCATED DEVICES SHALL MATCH EXISTING IN ALL RESPECTS.
2. CONNECT NEW INITIATION DEVICE TO EXISTING IDC CIRCUIT WIRING SERVING THE AREA. NEW CONDUIT AND WIRING SHALL MATCH EXISTING IN ALL RESPECTS.



1 LEVEL 2 - PARTIAL FIRE ALARM PLAN - PHASE 2
1/8" = 1'-0"



2 LEVEL 3 - PARTIAL FIRE ALARM PLAN - PHASE 2
1/8" = 1'-0"

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LEVELS 2 & 3 PARTIAL FIRE ALARM PLANS

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POWER LEGEND

- NEW SURFACE MOUNTED PANELBOARD
- NEW RECESSED MOUNTED PANELBOARD
- EXISTING SURFACE MOUNTED PANELBOARD
- EXISTING RECESSED MOUNTED PANELBOARD
- GROUNDED DUPLEX RECEPTACLE, MH=18"AFF, UON
- GROUNDED QUAD RECEPTACLE, MH=18"AFF, UON
- GFCI DUPLEX RECEPTACLE, MH= 18"AFF, UON
- GFCI QUAD RECEPTACLE, MH=18"AFF, UON
- PLUG LOAD CONTROLLED RECEPTACLE, MH=18"AFF, UON
- QUAD PLUG LOAD CONTROLLED RECEPTACLE, MH=18"AFF, UON
- USB RECEPTACLE, MH=18"AFF, UON
  - U1 = (1) DUPLEX RECEPTACLE WITH (2) USB CHARGERS
  - U2 = (4) USB CHARGERS
  - Q = (1) QUAD RECEPTACLE WITH (4) USB CHARGERS
- TYPICAL RECEPTACLE SUBSCRIPTS
  - E = EMERGENCY
  - C = COUNTER HEIGHT
  - F = MINI-FRIDGE UNDER COUNTER
  - CLG = CEILING MOUNTED
  - T = TASKLIGHT
  - CR = CORROSION RESISTANT
  - WP = WEATHER PROOF
  - TR = TAMPER RESISTANT
  - SM = SURFACE MOUNTED
- A — SPECIAL PURPOSE RECEPTACLE, LETTER INDICATES TYPE, REFER TO SPECIAL PURPOSE RECEPTACLE SCHEDULE
- MOTOR LOCATION, X=HORSEPOWER *
- CP — ADO — MOTOR LOCATION WITH CONTROL PANEL & DISCONNECT, DISCONNECT PROVIDED BY ELECTRICAL CONTRACTOR, ADO=AUTOMATIC DOOR OPENER
- SINGLE PHASE MANUAL MOTOR STARTER W/HAND-AUTO SELECTOR SWITCH
- MAGNETIC STARTER (WITH HOA, UON)
- COMBINATION MAGNETIC STARTER, (WITH HOA, UON)
- DISCONNECT SWITCH
- FUSED DISCONNECT SWITCH
- J — JUNCTION BOX
- SINGLE SECTION, SURFACE PLUG MOLD. RECEPTACLES SPACED 18" APART, U.O.N.
- TWO SECTION, SURFACE RACEWAY. ■ INDICATES NORMAL DUPLEX RECEPTACLE LOCATION IN RACEWAY, UON
  - IG = INDICATES ISOLATED GROUND RECEPTACLE LOCATION
- CP — CONTROL PANEL OR PACKAGE FURNISHED WITH EQUIPMENT
- CS — CONTROL STATION FURNISHED WITH EQUIPMENT, WIRED BY ELECTRICAL CONTRACTOR. MH=44" UON. PROVIDE OUTLET BOX AS REQUIRED BY MANUFACTURER. PROVIDE MANUFACTURERS RECOMMENDED CABLE IN 1"C TO CONTROL PACKAGE
- PS# — POWER SUPPLY, # INDICATES TYPE
  - 1 = CAMERA
  - 2 = DOOR STRIKE
  - 3 = DOOR RELEASE BAR **
  - 4 = DOOR EGRESS ALARM **
- WC — ELECTRIC WATER COOLER *
- HT — HEAT TRACE POWER DROP - PROVIDE CONNECTION AND TESTING OF HEAT TRACE CABLES (BY OTHERS) TO POWER SOURCE. COORDINATE REQUIREMENTS WITH PLUMBING CONTRACTOR
- HD — ELECTRIC HAND OR HAIR DRYER, COORDINATE MH WITH ARCHITECT
- T1 — ELECTRONIC FLUSH-VALVE POWER SUPPLY FURNISHED BY PC, WIRED BY EC (COORDINATE NUMBER OF JUNCTION BOXES REQUIRED WITH PC)
- MOD — 120V MOTOR OPERATED DAMPER,
- XX / XX — MECHANICAL OR PLUMBING EQUIPMENT THAT REQUIRE POWER
- ETP — ELECTRONIC TRAP PRIMER
- INV — INVERTER
- BAS — BUILDING AUTOMATION SYSTEM
- UM — UTILITY METER
- CB — ENCLOSED CIRCUIT BREAKER
- XX / LCD — LCD DISPLAY LOCATION - XX INDICATES HEIGHT AFF REFER TO AUDIO VISUAL OUTLET SCHEDULE FOR MORE INFORMATION
- FIRE/SMOKE DAMPER W/ INTEGRATED SMOKE DETECTOR *
- SMOKE DAMPER W/ INTEGRATED SMOKE DETECTOR *

CONTROLS LEGEND

- VFD — VARIABLE FREQUENCY DRIVE (MOTOR STARTER) *
- ATC — AUTOMATIC TEMPERATURE CONTROL PANEL *
- KS — KEY OPERATED SWITCH
- REMOTE PUSH BUTTON
- PB — MOTORIZED DOOR CONTROL PUSH BUTTON 44"AFF. PROVIDE 4" DOUBLE GANG OUTLET BOX W/ 3/4"C TO DOOR CONTROLLER, COORDINATE CABLING REQUIREMENTS WITH MANUFACTURER
  - SM = SURFACE MOUNTED
  - B = BOLLARD MOUNTED
- R — RELAY WITH 277V OR 120V COIL AND CONTACTS RATED AS REQUIRED
- C — MAGNETIC CONTACTOR WITH CONTACTS RATED AS REQUIRED
- J1 — JUNCTION BOX WITH BLANK COVER FOR TRANSFORMER

LIGHTING LEGEND

- PANEL-# A1 / (E) a — LIGHT FIXTURE
  REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
  - A1 = FIXTURE TYPE
  - a = SWITCHING OR DIMMING ZONE
  - PANEL-# = PANEL AND CIRCUIT #
  - (E) = FIXTURE CONNECTED TO EMERGENCY CIRCUIT
  - (N/L) = NIGHT LIGHT, WIRED CONSTANT ON
  - (E/N) = DUAL CIRCUIT - FIXTURE CONNECTED TO EMERGENCY AND NORMAL
- TH1 TH1 / T1 / a PANEL-# — TRACK LIGHTING FIXTURE(S)
  REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
  - T1 = TRACK TYPE
  - TH1 = TRACK HEAD TYPE
  - a = SWITCHING OR DIMMING ZONE
  - PANEL-# = PANEL AND CIRCUIT #
- EB1 / PANEL-# — WALL MOUNTED EMERGENCY BATTERY FIXTURE
  REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
  - EB1 = FIXTURE TYPE
  - PANEL-# = PANEL AND CIRCUIT #
- EB1 / PANEL-# — CEILING MOUNTED EMERGENCY BATTERY FIXTURE
  REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
  - EB1 = FIXTURE TYPE
  - PANEL-# = PANEL AND CIRCUIT #
- EB1 / PANEL-# a — WALL MOUNTED EMERGENCY BATTERY PACK
  - EB1 = FIXTURE TYPE
  - a = SWITCHING ZONE CONTROLLED
  - PANEL-# = PANEL AND CIRCUIT #
- X1 / PANEL-# — X1 / PANEL-# — WALL MOUNTED EXIT LIGHT
  FILLED AREA INDICATES FACE LOCATION. PROVIDE WITH ARROW DIRECTION INDICATING CHEVRONS AS SHOWN ON PLANS. REFER TO TYPICAL DEVICE LOCATIONS, UON. REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
  - X1 = FIXTURE TYPE
  - PANEL-# = PANEL AND CIRCUIT #
  - • = INTERNATIONAL SYMBOL OF ACCESSIBILITY
- X1 / PANEL-# — X1 / PANEL-# — CEILING/PENDANT MOUNTED EXIT LIGHT
  FILLED AREA INDICATES FACE LOCATION. PROVIDE WITH ARROW DIRECTION INDICATING CHEVRONS AS SHOWN ON PLANS. REFER TO TYPICAL DEVICE LOCATIONS, UON. REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
  - X1 = FIXTURE TYPE
  - PANEL-# = PANEL AND CIRCUIT #
  - • = INTERNATIONAL SYMBOL OF ACCESSIBILITY
- LR1 / PANEL-# a — LIGHTING CONTROL RELAY MODULE
  20A DIMMING, WIRED, UNIVERSAL VOLTAGE, (0-10V) DIMMING, SYSTEM CONNECTED. WIRED FOR DIMMING U.O.N. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
  - a = SWITCHING OR DIMMING ZONE CONTROLLED
  - PANEL-# = PANEL AND CIRCUIT #
- OS1 a — CEILING MOUNTED OCCUPANCY SENSOR
  WIRED, 360°, DUAL-TECHNOLOGY (INFRARED / ULTRASONIC), SYSTEM CONNECTED.
  - a = SWITCHING OR DIMMING ZONE CONTROLLED
- OS2 a — CEILING MOUNTED OCCUPANCY SENSOR
  HIGH BAY, WIRED, 360°, INFRARED, SYSTEM CONNECTED.
  - a = SWITCHING OR DIMMING ZONE CONTROLLED
- C# a — LOW VOLTAGE LIGHTING CONTROL STATION
  SYSTEM CONNECTED
  - # = STATION NUMBER. REFER TO CONTROL STATION ELEVATIONS AND DETAILS.
  - a = SWITCHING OR DIMMING ZONE CONTROLLED
- PC1 a — DAYLIGHTING CONTROL PHOTOCELL SENSOR
  WIRED, SYSTEM CONNECTED, MOUNT PER MANUFACTURER'S SPECIFICATIONS.
  - a = SWITCHING OR DIMMING ZONE CONTROLLED
- D — REMOTE DRIVER OR POWER SUPPLY
- E a / PANEL-# — EMERGENCY LIGHTING TRANSFER DEVICE WITH TEST SWITCH, UL924 LISTED.
  - a = SWITCHING OR DIMMING ZONE CONTROLLED
  - PANEL-# = PANEL AND CIRCUIT #
- TC — DIGITAL TIMECLOCK

INTERCOM/MASTER CLOCK SYSTEM LEGEND

- ICP — INTERCOM CONTROL PANEL
- MCP — MASTER CLOCK CONTROL PANEL
- LIN — LOCAL INTERCOM SYSTEM
- INT — 2-WAY W.P. EXTERIOR INTERCOM STATION MH = + 60"AFF, UON
- PA — RECESSED CEILING MOUNTED PA SPEAKER
- PA BB — SURFACE MOUNTED PA SPEAKER WITH BACK BOX
- PA V — RECESSED PA SPEAKER WITH INTEGRAL VOLUME CONTROL
- HPA — RECESSED WALL MOUNTED PA SPEAKER
- VC — VOLUME CONTROL KNOB, MH = 44" AFF, UON
- HLS — WALL MOUNTED LOUD SPEAKER
- WALL MOUNTED CLOCK
- PA C H — WALL MOUNTED COMBINATION CLOCK/INTERCOM UNIT
  - H=HORIZONTALLY MOUNTED
  - V=VERTICALLY MOUNTED

SWITCHING & WIRING LEGEND

- $ — SINGLE POLE SWITCH, MH = 44"AFF, UON
  - 3 = THREE-WAY
  - 4 = FOUR-WAY
  - PL = PILOT LIGHT
  - D = DIMMER
  - VS = VARIABLE SPEED CONTROLLER
  - K = KEY OPERATED
  - O = OCCUPANCY SENSOR
  - OD = DUAL RELAY OCCUPANCY SENSOR
  - T = DIGITAL TIMER
  - LV = LOW VOLTAGE
- DOUBLE SWITCHING, ONE SWITCH SHALL CONTROL INBOARD LAMP, OTHER SWITCH SHALL CONTROL OUTBOARD LAMP(S) OF CONTROLLED LIGHTING CIRCUIT
- { # } — LIGHTING CONTROL PANEL CIRCUIT NUMBER
- { E# } — EMERGENCY LIGHTING CONTROL PANEL CIRCUIT NUMBER
- LP1(#) — HOMERUN TO DESIGNATED PANELBOARD, (#=QUANTITY OF HOMERUNS IF MULTIPLE) (2#12&1#12G-3/4"C., UON)
- ELECTRICAL WIRING CIRCUIT (IN WALLS AND CEILINGS)
- ELECTRICAL WIRING CIRCUIT (BELOW FLOOR OR SLAB)
- SWITCH OR CONTROL CIRCUIT
- EMERGENCY LIGHTING AC CIRCUIT
- DC CIRCUIT
- CONNECTION AT EQUIPMENT

DEMOLITION LEGEND

- X — EXISTING EQUIPMENT OR DEVICE TO BE REMOVED
- X — EXISTING EQUIPMENT OR DEVICE TO REMAIN

XRL = EXISTING RELOCATED
XRU = EXISTING BOX & CONDUIT REUSED
XTR = EXISTING TO REMAIN
XR = EXISTING TO BE REMOVED

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT *
C	COUNTER HEIGHT
CLG	CEILING MOUNTED
CUH	CABINET UNIT HEATER *
DN	DOWN
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN *
EHH	ELECTRICAL HANDHOLE
EMH	ELECTRICAL MANHOLE
FB	FAN BOX *
FIBO	FURNISHED AND INSTALLED BY OWNER/OTHERS
HOA	HAND-OFF-AUTO SELECTOR SWITCH
HP	HORSEPOWER
LOR	LOCATED ON ROOF
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MH	MOUNTING HEIGHT
NTS	NOT TO SCALE
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
PC	PLUMBING CONTRACTOR
PUH	PROPELLER UNIT HEATER *
RF	RETURN FAN *
RTU	ROOF TOP UNIT *
SF	SUPPLY FAN *
S/S	START/STOP PUSH BUTTONS
S. STL	STAINLESS STEEL
THH	TELECOMMUNICATIONS HANDHOLE
TMH	TELECOMMUNICATIONS MANHOLE
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VP	VANDAL PROOF
WG	WIRE GUARD
WUH	WALL MOUNTED UNIT HEATER *
*	EQUIPMENT PROVIDED BY MECHANICAL TRADE, WIRED BY ELECTRICAL TRADE
**	EQUIPMENT PROVIDED BY DOOR HARDWARE TRADE, WIRED BY ELECTRICAL TRADE

CIRCUIT BREAKER TYPES

AF	AFCI CIRCUIT BREAKER
G	GFCI CIRCUIT BREAKER
H	HACR CIRCUIT BREAKER
L	LOCKED-ON CIRCUIT
S	SHUNT TRIP CIRCUIT BREAKER

ELECTRICAL TRADE NOTES

E-1 ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES AND THE CURRENT NATIONAL ELECTRICAL CODE (NEC) BY ELECTRICIANS LICENSED BY THE STATE IN WHICH THE WORK IS PERFORMED.

E-2 THE ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT PRIOR TO INSTALLING ANY CONDUIT AND/OR CABLE. IF ELECTRICAL REQUIREMENTS DIFFER FROM THOSE INDICATED, OR IF ADDITIONAL EQUIPMENT IS REQUIRED BY CODE, INFORM THE ENGINEER.

E-3 WIRING FOR ALL SINGLE PHASE CIRCUITS, 20A OR SMALLER, SHALL BE A MINIMUM OF 2#12 &1#12G-3/4"C., FOR CIRCUIT LENGTHS UNDER 100FT AND 2#10&1#10G-3/4"C., FOR CIRCUIT LENGTHS 100FT AND OVER , UNLESS OTHERWISE NOTED. CIRCUITS FOR ISOLATED GROUND RECEPTACLES SHALL INCLUDE ADDITIONAL ISOLATED GROUND CONDUCTOR. CIRCUITS FOR DOUBLE SWITCHED LIGHT FIXTURES SHALL INCLUDE ADDITIONAL SWITCHED CONDUCTOR(S) AS REQUIRED. THE SHARING OF NEUTRAL CONDUCTORS IS NOT ALLOWED.

E-4 MOUNTING HEIGHTS GIVEN FOR ALL WIRING DEVICES (WALL SWITCHES, RECEPTACLES, ETC.), TELEPHONE EQUIPMENT, SPEAKERS AND LIGHT FIXTURES ARE TO THE CENTERLINE OF THE JUNCTION BOX USED TO MOUNT THE DEVICE, UNLESS OTHERWISE NOTED.

E-5 REMOVE AND DISPOSE OF EXISTING ELECTRICAL EQUIPMENT AND ASSOCIATED BOXES, CONDUIT AND WIRE WHERE INDICATED OR WHERE LOCATED ON OR WITHIN WALLS AND CEILINGS BEING DEMOLISHED OR ALTERED AS A RESULT OF THIS CONTRACT, UNLESS OTHERWISE INDICATED. IT IS NOT THE INTENT OF THESE DRAWINGS TO INDICATE ALL ELECTRICAL ITEMS TO BE REMOVED.

E-6 CIRCUIT WIRING INDICATED ON DRAWINGS IS SCHEMATIC IN NATURE AND SHALL NOT BE CONSIDERED TO BE POINT-TO-POINT, UNLESS OTHERWISE NOTED.

E-7 EXISTING ELECTRICALLY POWERED ITEMS THAT REMAIN SHALL BE RECIRCUITED, IF NECESSARY, TO ENSURE CONTINUED OPERATION.

E-8 COORDINATE FINAL LOCATIONS OF CEILING LIGHT FIXTURES AND OTHER EQUIPMENT WITH REFLECTED CEILING PLANS AND ALL OTHER TRADE DRAWINGS PRIOR TO INSTALLATION.

E-9 WHERE LONG CIRCUIT LENGTHS ARE REQUIRED, ENSURE LESS THAN 3% VOLTAGE DROP UNDER FULL LOAD. INCREASE WIRE SIZE ON CIRCUITS 100 FEET LONG AND ABOVE.

E-10 PROVIDE AND ENSURE FIREPROOFING OF ALL CONDUIT, CABLING AND ANY OTHER ELECTRICAL DEVICES THROUGH FIRE RATED ASSEMBLIES.

E-11 PROVIDE PULL STRINGS IN ALL CONDUIT SYSTEMS LEFT FOR USE BY OTHERS.

E-12 MOUNTING HEIGHT FOR ELECTRICAL DEVICES (RECEPTACLES, MULTICOMMUNICATIONS OUTLETS, ETC) LOCATED ON WALLS ABOVE FINTUBE SHALL BE 4" FROM TOP OF FINTUBE ENCLOSURE TO CENTERLINE OF ELECTRICAL DEVICE.

E-13 PROVIDE EXPANSION FITTINGS IN CONDUIT RISERS FROM ALL EXTERIOR UNDERGROUND CONDUITS TO FIXED EQUIPMENT OR CONDUIT FITTINGS AND PROVIDE FLEXIBLE CONNECTIONS TO ANY EQUIPMENT SUBJECT TO SETTLEMENT OR FROST HEAVES.

E-14 WHERE DOUBLE SWITCHES ARE INDICATED, FIXTURES SHALL BE PROVIDED WITH MULTIPLE BALLASTS.

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY TO ALL RIST-FROST-SHUMWAY ENGINEERING, INC., DRAWINGS AND TRADES ASSOCIATED WITH THOSE DRAWINGS INVOLVED ON THIS PROJECT:

G-1 RIST-FROST-SHUMWAY ENGINEERING, INC., WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND/OR THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE GUIDANCE OF RIST-FROST-SHUMWAY ENGINEERING, INC., WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE IS COVERED OR ALLEGED.

G-2 ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS INCLUDING, BUT NOT LIMITED TO: NFPA, IBC, UL, SMACNA, OSHA, AND NEC.

G-3 THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL PROTECT THE WORK SITE, SURROUNDING AREAS AND OCCUPANTS FROM DAMAGE AND INJURY.

G-4 THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE CONTRACT DOCUMENTS. ALL DRAWINGS OF ANY PARTICULAR TRADE SHALL BE USED IN CONJUNCTION WITH DRAWINGS OF ALL OTHER TRADES TO COORDINATE ALL CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED WORK. ANY PROPOSED CHANGES, VARIATIONS OR SUBSTITUTIONS MUST BE REVIEWED AND ACCEPTED BY THE ENGINEER PRIOR TO IMPLEMENTATION.

G-5 ALL DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN INTENT AND EXTENT OF THE WORK. THEY SHALL BE CONSIDERED PARTLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR ROUGHING-IN MEASUREMENTS OR TO SERVE AS SHOP DRAWINGS.

G-6 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS (AS-BUILT OR OTHERWISE) BEFORE COMMENCING FABRICATION, AND/OR ORDERING MATERIALS.

G-7 DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS OTHERWISE INDICATED.

G-8 INFORMATION ON THESE DRAWINGS PERTAINING TO AS-BUILT CONSTRUCTION AND OTHER EXISTING CONDITIONS HAVE BEEN OBTAINED FROM OTHER DOCUMENTATION OR BY FIELD INVESTIGATION. (SEE GENERAL AND SUPPLEMENTAL CONDITIONS FOR LISTING). THIS INFORMATION IS PROVIDED FOR THE CONTRACTOR'S BENEFIT IN PERFORMANCE OF THE WORK.

G-9 IN THE EVENT THE CONTRACTOR ENCOUNTERS MATERIAL REASONABLY BELIEVED TO BE HAZARDOUS WHICH HAS NOT BEEN RENDERED HARMLESS, THE CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO THE OWNER AND ARCHITECT/ENGINEER IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED UNTIL WRITTEN VERIFICATION BY THE OWNER THAT THE MATERIAL HAS BEEN REMOVED OR OTHERWISE BEEN RENDERED HARMLESS.

ELECTRICAL DEMOLITION NOTES

D-1 AS DIRECTED BY THE OWNER, ALL EXISTING ELECTRICAL SYSTEMS, EQUIPMENT AND APPURTENANCES LOCATED IN THE EXISTING FACILITY ARE TO BE CAREFULLY DISASSEMBLED AND REMOVED, SALVAGED, AND TURNED OVER TO THE OWNER, UNLESS INDICATED TO BE REUSED ON THE ARCHITECTURAL AND/OR ELECTRICAL PLANS AND SPECIFICATIONS.

D-2 NO EXISTING ELECTRICAL EQUIPMENT, SYSTEMS, OR APPURTENANCES SHALL BE ABANDONED IN PLACE. (NOTE: CONDUIT LOCATED IN EXISTING WALLS TO REMAIN AND FLOOR SLABS MAY BE ABANDONED IN PLACE OR REUSED.

D-3 WHERE EQUIPMENT OR APPURTENANCES ARE REMOVED WHICH WERE BUILT-IN TO EXISTING CONSTRUCTION, COORDINATE WITH THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR TO PATCH AND/OR REPAIR ALL SUCH AREAS IN ACCORDANCE WITH APPROVED CONSTRUCTION METHODS AND FINISHES, AS DIRECTED BY THE CONTRACT DRAWINGS, SPECIFICATIONS, AND/OR THE ARCHITECT/ENGINEER.

D-4 COORDINATE WITH THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR AND ALL OTHER SUB-CONTRACTORS IN ORDER TO DETERMINE OVERALL PROJECT PHASING AND DEMOLITION WORK SEQUENCING. COORDINATE REQUIRED DEMOLITION BY OTHER TRADES RESULTING FROM ELECTRICAL SYSTEMS DEMOLITION.

D-5 PROTECT ALL EXISTING FINISHES WHICH ARE TO REMAIN.

D-6 REFER TO THE ARCHITECTS DEMOLITION NOTES AND PROJECT SPECIFICATIONS FOR ADDITIONAL DEMOLITION INFORMATION AND REQUIREMENTS.

D-7 ALL PCB TYPE LIGHTING FIXTURE BALLASTS TO BE REMOVED SHALL BE TURNED OVER TO THE ABATEMENT CONTRACTOR FOR FURTHER DISPOSITION.

D-8 REMOVE AND DISPOSE OF EXISTING ELECTRICAL EQUIPMENT AND ASSOCIATED BOXES, CONDUIT AND WIRE WHERE INDICATED OR WHERE LOCATED ON OR WITHIN WALLS AND CEILINGS BEING DEMOLISHED OR ALTERED AS A RESULT OF THIS CONTRACT, UNLESS OTHERWISE INDICATED. IT IS NOT THE INTENT OF THESE DRAWINGS TO INDICATE ALL ELECTRICAL ITEMS TO BE REMOVED.

D-9 EXISTING ELECTRICALLY POWERED ITEMS THAT REMAIN SHALL BE RECIRCUITED, IF NECESSARY, TO ENSURE CONTINUED OPERATION.

D-10 WORK FOR THIS PROJECT WILL BE PHASED, AS DIRECTED BY THE OWNER. WHEN A PARTIAL SYSTEM IS PLACED BACK IN SERVICE DURING CONSTRUCTION. THE SYSTEM SHALL BE TESTED TO ENSURE IT IS FULLY OPERATIONAL. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO POWER, FIRE ALARM, LIGHTING, EMERGENCY LIGHTING, EXIT SIGNAGE, DATA, TELEPHONE, AND P/A SYSTEMS.

D-11 REMOVE OR MODIFY THE PART OF EACH ELECTRICAL SYSTEM CORRESPONDING TO THE PHASING PLANS FOR THE PROJECT. PROVIDE TEMPORARY WIRING FOR EACH SYSTEM TO REMAIN OPERATIONAL DURING CONSTRUCTION.

D-12 FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BID. NO ALLOWANCE WILL BE MADE FOR ADDITIONAL COSTS DUE TO THE CONTRACTOR'S FAILURE TO FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS.

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE:	SCALE:
10/23/26	NO SCALE
DRAWN BY:	CHECKED BY:
TEM	AMS

ISSUE LOG:

- 25% DESIGN DEVELOPMENT
- 50% DESIGN DEVELOPMENT 02/13/2026
- 75% DESIGN DEVELOPMENT 05/01/2026
- 75% DD SET/OWNER REV. 05/29/2026
- 100% DD SET 10/23/2026

SHEET CONTENTS: **ELECTRICAL LEGENDS, NOTES & ABBREVIATIONS**

SHEET NO: **E021**

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10/22/2026 3:19:32 PM

ELECTRIC EQUIPMENT AND CONTROL SCHEDULE

EQUIPMENT TAG & NUMBER	EQUIPMENT NAME	EQUIPMENT ROOM LOCATION	AMPS	HP	KW	PHASE	VOLTAGE	PANEL	CIRCUIT NUMBER	CIRCUIT BREAKER	POWER WIRING FROM PANEL TO CONTROL UNIT AND FROM CONTROL UNIT TO EQUIPMENT	REFERENCE NOTES	CONTROL DEVICES NOTES
AC-138	FAN COIL UNIT	COPY ROOM 138	3.346	0.25	0.696	1	208 V	LP2	22,24	15	2#12, 1#12 GND, 3/4" C	A	4
ACC-138	AIR COOLED CONDENSING UNIT	BUILDING EXTERIOR	13.125		2.73	1	208 V	LP2	22,24	20	2#12, 1#12 GND, 3/4"C	A	4
AHU-10	DEDICATED OUTDOOR AIR UNIT	BUILDING EXTERIOR	19.4		6.989	3	208 V	P2N1A	2,4,6	25	3#10, 1#10 GND, 3/4"C	B,C,D	3 *
CUH-101D	CABINET UNIT HEATER	FIRE EXIT & SERV. ENTR. 101D	3.5	0.1	0.42	1	120 V	LP2	6	15	2#12, 1#12 GND, 3/4" C	E	4
CUH-103	CABINET UNIT HEATER	EAST VESTIBULE 103	3.5	0.1	0.42	1	120 V	LP2	18	15	2#12, 1#12 GND, 3/4" C	E	4
EAC-1	ENTRY AIR CURTAIN	ENTRY SCREENING AREA 101A	5	0.2	0.6	1	120 V	LP2	8	15	2#12, 1#12 GND, 3/4" C	A	4
EAC-2	ENTRY AIR CURTAIN	ENTRY SCREENING AREA 101A	5	0.2	0.6	1	120 V			15	2#12, 1#12 GND, 3/4" C	A	4
EAC-3	ENTRY AIR CURTAIN	ENTRY SCREENING AREA 101A	5	0.2	0.6	1	120 V	LP2	8	15	2#12, 1#12 GND, 3/4" C	A	4
EF-1	EXHAUST FAN	MECHANICAL ROOM 104	11	1.5	2.288	1	208 V			20	2#12, 1#12 GND, 3/4" C	F,G	4
FCU-101A	FAN COIL UNIT	ENTRY SCREENING AREA 101A	19.6	0.5	2.352	1	120 V	LP2	2	35	2#8, 1#10 GND, 3/4" C	E	4
FCU-101B	FAN COIL UNIT	SECURITY 101B	5.8	0.25	0.696	1	120 V	LP2	4	15	2#12, 1#12 GND, 3/4" C	E	4
FCU-101C	FAN COIL UNIT	SECURITY 101C	5.8	0.25	0.696	1	120 V	LP2	4	15	2#12, 1#12 GND, 3/4" C	E	4
FCU-102	FAN COIL UNIT	CORRIDOR 101E	13.05	0.25	1.566	1	120 V	LP2	10	25	2#10, 1#10 GND, 3/4" C	E	4
FCU-104	FAN COIL UNIT	ANTE ROOM 104	0.7		0.084	1	120 V	LP2	12	15	2#12, 1#12 GND, 3/4" C	E	4
FCU-105	FAN COIL UNIT	LACTATION ROOM 105	0.7		0.084	1	120 V	LP2	12	15	2#12, 1#12 GND, 3/4" C	E	4
FCU-106	FAN COIL UNIT	CAPITAL POLICE CHIEF 106	0.7		0.084	1	120 V	LP2	12	15	2#12, 1#12 GND, 3/4" C	E	4
FCU-136	FAN COIL UNIT	LEG COAT ROOM 136	5.8	0.25	0.696	1	120 V	LP2	16	15	2#12, 1#12 GND, 3/4" C	E	4
FCU-137	FAN COIL UNIT	ORIENTATION 137	5.8	0.25	0.696	1	120 V	LP2	16	15	2#12, 1#12 GND, 3/4" C	E	4
FCU-138	FAN COIL UNIT	COPY ROOM 138	13.05	0.25	1.566	1	120 V	LP2	14	25	2#10, 1#10 GND, 3/4" C	E	4
FCU-139	FAN COIL UNIT	IT 139	5.8	0.25	0.696	1	120 V	LP2	18	15	2#12, 1#12 GND, 3/4" C	E	4

GENERAL NOTES:

1.) ALL ACCESSORIES PROVIDED BY THE DIVISION 26 CONTRACTOR, UON.
2.) ALL CONTROL DEVICES ARE TO BE SURFACE MOUNTED, UNLESS OTHERWISE NOTED.
3.) PROVIDE OVERLOADS, SIZE AS REQUIRED, BY THE DIVISION 26 CONTRACTOR.
4.) IF DIFFERENT THAN INDICATED ON THIS SCHEDULE OR PANELBOARD SCHEDULE, PROVIDE NEW CIRCUIT BREAKER IN DESIGNATED PANELBOARD SIZED PER EQUIPMENT NAMEPLATE DATA.

REFERENCE NOTES:

A. PROVIDE PROPERLY SIZED DISCONNECT SWITCH.
B. UNIT PROVIDED WITH SINGLE POINT POWER.
C. UNIT PROVIDED WITH WEATHERPROOF DISCONNECT SWITCHES. EC TO WIRE.
D. PROVIDE PROPERLY SIZED 60kA RATED FUSES.
E. UNIT PROVIDED WITH DISCONNECT SWITCH. EC TO WIRE.
F. PROVIDE WITH PROPERLY SIZED FUSED DISCONNECT SWITCH.
G. PROVIDE PROPERLY SIZED RATED FUSES.

CONTROL DEVICES NOTES:

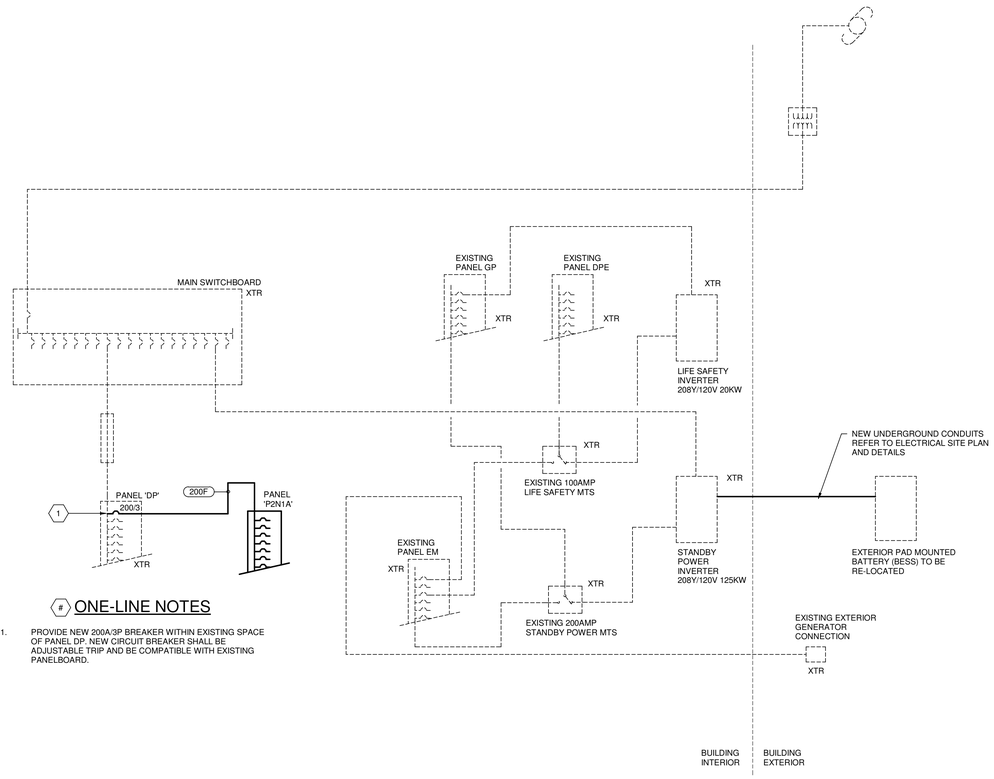
1.) MANUAL MOTOR STARTER
2.) COMBINATION MAGNETIC STARTER
3.) VARIABLE SPEED DRIVE
4.) PACKAGED CONTROL UNIT
5.) FIRE ALARM FAN SHUT DOWN
6.) BOILER SHUTDOWN SWITCH & THERMAL CUTOUT

*SUPPLIED BY MECHANICAL CONTRACTOR
INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR

FEEDER CABLE SCHEDULE

OVERCURRENT DEVICE RATING	FOUR(4) WIRE FEEDER WITH EQUIPMENT GROUND - COPPER		THREE(3) WIRE FEEDER WITH EQUIPMENT GROUND - COPPER	
	IDENT.	DESCRIPTION	IDENT.	DESCRIPTION
15A or 20A	15F or 20F	4#12&1#12G-3/4"C	15T or 20T	3#12&1#12G-3/4"C
25A or 30A	25F or 30F	4#10&1#10G-3/4"C	25T or 30T	3#10&1#10G-3/4"C
35A or 40A	35F or 40F	4#8&1#10G-3/4"C	35T or 40T	3#8&1#10G-3/4"C
45A or 50A	45F or 50F	4#6&1#10G-1"C	45T or 50T	3#6&1#10G-1"C
60A	60F	4#4&1#10G-1 1/4"C	60T	3#4&1#10G-1 1/4"C
70A	70F	4#4&1#8G-1 1/4"C	70T	3#4&1#8G-1 1/4"C
80A	80F	4#3&1#8G-1 1/4"C	80T	3#3&1#8G-1 1/4"C
90A	90F	4#2&1#8G-1 1/4"C	90T	3#2&1#8G-1 1/4"C
100A	100F	4#1&1#6G-1-1/2"C	100T	3#1&1#6G-1 1/2"C
110A	110F	4#1&1#6G-1-1/2"C	110T	3#1&1#6G-1-1/2"C
125A	125F	4#1/0&1#6G-2"C	125T	3#1/0&1#6G-1 1/2"C
150A	150F	4#1/0&1#6G-2"C	150T	3#1/0&1#6G-1 1/2"C
175A	175F	4#2/0&1#6G-2"C	175T	3#2/0&1#6G-2"C
200A	200F	4#3/0&1#6G-2"C	200T	3#3/0&1#6G-2"C
225A	225F	4#4/0&1#4G-2 1/2"C	225T	3#4/0&1#4G 2"C
250A	250F	4#250&1#4G-3"C	250T	3#250&1#4G-2 1/2"C
300A	300F	4#350&1#4G-3"C	300T	3#350&1#4G-3"C
350A	350F	4#500&1#3G-4"C	350T	3#500&1#3G-3"C
400A	400F	4#600&1#3G-4"C	400T	3#600&1#3G-4"C
450A	450F	(2) 4#4/0&1#2G-2 1/2"C	450T	(2) 3#4/0&1#2G-2"C
500A	500F	(2) 4#250&1#2G-3"C	500T	(2) 3#250&1#2G-2 1/2"C
600A	600F	(2) 4#350&1#1G-3"C	600T	(2) 3#350&1#1G-3"C
700A	700F	(2) 4#500&1#1/0G-4"C	700T	(2) 3#500&1#1/0G-3"C
800A	800F	(2) 4#600&1#1/0G-4"C	800T	(2) 3#600&1#1/0G-4"C
1000A	1000F	(3) 4#500&1#2/0G-4"C	1000T	(3) 3#500&1#2/0G-3"C
1200A	1200F	(3) 4#600&1#3/0G-4"C	1200T	(3) 3#600&1#3/0G-4"C
1600A	1600F	(4) 4#600&1#4/0G-4"C	1600T	(4) 3#600&1#4/0G-4"C
2000A	2000F	(5) 4#600&1#250G-4"C	2000T	(5) 3#600&1#250G-4"C
2500A	2500F	(6) 4#600&1#350G-4"C	2500T	(6) 3#600&1#350G-4"C
3000A	3000F	(8) 4#500&1#400G-4"C	3000T	(8) 3#500&1#400G-3"C
4000A	4000F	(10) 4#600&1#500G-4"C	4000T	(10) 3#600&1#500G-4"C
5000A	5000F	(12) 4#600&2#500G-5"C	5000T	(12) 3#600&2#500G-4"C
6000A	6000F	(16) 4#500&2#500G-5"C	6000T	(16) 3#500&2#500G-4"C

NOTES:
1. CONDUIT SIZES ARE BASED ON TYPE THHN, THWN, THWN-2 CONDUCTORS, TABLE C.11, NATIONAL ELECTRICAL CODE
2. WHERE MULTIPLE SETS ARE SPECIFIED BY (#), PROVIDE 3 PHASE CONDUCTORS, NEUTRAL CONDUCTOR AND GROUND CONDUCTOR IN EACH CONDUIT. CONDUCTORS AND CONDUITS SHALL BE EQUAL IN LENGTH, AND OF THE SAME MANUFACTURER.
3. IF IDENT. ON THE ONE-LINE DIAGRAM SHOWS CONDUCTORS SELECTED ABOVE THE OVERCURRENT PROTECTION, VOLTAGE DROP HAS BEEN ACCOUNTED FOR.
4. COPPER CONDUCTORS ARE REQUIRED FOR ANY CONDUCTORS BELOW 110A.



ONE-LINE NOTES

1. PROVIDE NEW 200A/3P BREAKER WITHIN EXISTING SPACE OF PANEL DP. NEW CIRCUIT BREAKER SHALL BE ADJUSTABLE TRIP AND BE COMPATIBLE WITH EXISTING PANELBOARD.

ONE-LINE LEGEND

- NEW WIRE OR DEVICE
- EXISTING WIRE OR DEVICE TO REMAIN
- EXISTING WIRE OR DEVICE TO BE REMOVED
- CIRCUIT BREAKER, ET = ELECTRONIC TRIP
- SHUNT-TRIP CIRCUIT BREAKER
- FUSED DISCONNECT SWITCH (XXXAF / XXXAT = SIZE)
- TRANSFORMER
- UTILITY METER
- AUTOMATIC TRANSFER SWITCH
- GROUND
- PANELBOARD (MAIN LUG)
- PANELBOARD (MAIN CIRCUIT BREAKER)
- IDENTIFICATION FOR WIRE SIZE & QUANTITY (SEE FEEDER SCHEDULE)
- LIGHTNING ARRESTOR
- FUSE
- SWITCH
- MOTOR

EXISTING PARTIAL ONE-LINE AND PROPOSED NEW WORK

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Project #: 9171.001

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE: **10/23/26** | SCALE:

DRAWN BY: **TEM** | CHECKED BY: **AMS**

ISSUE LOG:
- **25% DESIGN DEVELOPMENT**
- **50% DESIGN DEVELOPMENT 02/13/2026**
- **75% DESIGN DEVELOPMENT 05/01/2026**
- **75% DD SET/OWNER REV. 05/29/2026**
- **100% DD SET 10/23/2026**

SHEET CONTENTS: **EQUIPMENT SCHEDULE & PARTIAL ONE-LINE DIAGRAM**

SHEET NO: **E022**

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PANELBOARD: L.P.1 — WESTINGHOUSE CAT #: SYC21362IT1 (EXISTING)

BUS SIZE: | **MAIN:** MLO | **SUPPLY FROM:** DP
VOLTAGE: 120/208V, 3PH, 4W | **NEUTRAL:** 100%
SERVICE RATED: NO | **LOCATION:** ELECTRICAL RM 133
ISOLATED GROUND BUS: NO | **MOUNTING:** SURFACE
SHORT CIR. CURRENT RATING: 10 kAIC | **SPD:** NO

DIRECTORY	# OF POLES	CKT BKR AMPS	CKT BKR TYPE	CKT #	A	B	C	A	B	C	CKT #	CKT BKR TYPE	CKT BKR AMPS	# OF POLES	DIRECTORY
(EX) RM 103, 104, 105, 106 LTS	*1*	*20*	--	1	0			0			2	--	*20*	*1*	*(EX) HALLWAY HEATER*
(EX) LTS ENTRY & EXT.	*1*	*20*	--	3		0			0		4	--	*20*	*1*	*(EX) RM 102, 103, 104, 105 & CORR. REC*
(EX) RM 109 LIGHTS	*1*	*20*	--	5			0			0	6	--	*20*	*1*	*(EX) RM 107 REC*
(EX) RM 108 LIGHTS	*1*	*20*	--	7	0			0			8	--	*20*	*1*	*(EX) RM 108 N. WIREMOLD REC*
(EX) RM 108 N. SNACK AREA REC	*1*	*20*	--	9		0			0		10	--	*20*	*1*	*(EX) RM 108 N. WIREMOLD REC*
(EX) SPEAKERS OFFICE	*1*	*15*	--	11			0			0	12	--	*20*	*1*	*(EX) RM 109 N. WIREMOLD REC*
(EX) HEAT TAPE (INFIRMIRY)	*2*	*20*	--	13	0			0			14	--	*20*	*1*	*(EX) RM 109 N. WIREMOLD REC*
				15		0			0		16	--	*20*	*1*	*(EX) RM 109 N. WIREMOLD REC*
(EX) BLOWERS LEG. COUNCIL	*1*	*20*	--	17			0			0	18	--	*20*	*1*	*(EX) RM 110 REC.*
(EX) RM 108 S. WIREMOLD REC	*1*	*20*	--	19	0			0			20				
(EX) RM 108 S. WIREMOLD REC	*1*	*20*	--	21		0			0		22	--	*30*	*3*	*(EX) DUCT HEATER*
(EX) RM 108 S. WIREMOLD REC	*1*	*20*	--	23			0			0	24				

NOTES:

TOTAL WATTS A:	0 W
TOTAL WATTS B:	0 W
TOTAL WATTS C:	0 W
TOTAL WATTS:	0 W
TOTAL AMPS @100%:	0 A
TOTAL AMPS @125%:	0 A
TOTAL PANEL RECEPTACLE LOAD:	
TOTAL AMPS WITH DIVERSITY:	0 A
MIN. CIRCUIT BREAKER RATING:	0 A

CKT BKR TYPE	
S = SHUNT TRIP	G = GFCI
L = LOCK ON C.B.	ET = ELECTRONIC TRIP
AF = ARC FAULT	N = NEW (EXISTING PANEL ONLY)
EX = EXISTING (EXISTING PANEL ONLY)	

PANELBOARD: LP2 — SIEMENS CAT #: S1C30ML125ATS (EXISTING)

BUS SIZE: 125A | **MAIN:** MLO | **SUPPLY FROM:** DP
VOLTAGE: 120/208V, 3PH, 4W | **NEUTRAL:** 100%
SERVICE RATED: NO | **LOCATION:** ELECTRICAL RM 133
ISOLATED GROUND BUS: NO | **MOUNTING:** SURFACE
SHORT CIR. CURRENT RATING: EXISTING | **SPD:** NO

DIRECTORY	# OF POLES	CKT BKR AMPS	CKT BKR TYPE	CKT #	A	B	C	A	B	C	CKT #	CKT BKR TYPE	CKT BKR AMPS	# OF POLES	DIRECTORY
(EX) EXISTING LOAD	*1*	*20*	--	1	0			0			2	--	*20*	*1*	(EX) SPARE
(EX) EXISTING LOAD	*1*	*20*	--	3		0			0		4	--	*20*	*1*	(EX) SPARE
(EX) EXISTING LOAD	*1*	*20*	--	5			0			0	6	--	*20*	*1*	(EX) SPARE
(EX) SPARE	*1*	*20*	--	7	0			0			8	--	*20*	*1*	(EX) SPARE
(EX) EXISTING LOAD	*1*	*20*	--	9		0			0		10	--	*20*	*1*	(EX) SPARE
(EX) SPARE	*1*	*20*	--	11			0			0	12	--	*20*	*1*	(EX) SPARE
(EX) EXISTING LOAD	*1*	*20*	--	13	0			0			14	--	*20*	*1*	(EX) SPARE
(EX) SPARE	*1*	*20*	--	15		0			0		16	--	*20*	*1*	(EX) SPARE
(EX) SPARE	*1*	*20*	--	17			0			0	18	--	*20*	*1*	(EX) SPARE
(EX) SPARE	*1*	*20*	--	19	0			--			20	--	--	*1*	SPACE
(EX) SPARE	*1*	*20*	--	21		0			0		22	--	*30*	*2*	SPARE
SPACE	*1*	--	--	23			--			0	24				
SPACE	*1*	--	--	25	--			--			26	--	--	*1*	SPACE
SPACE	*1*	--	--	27		--			--		28	--	--	*1*	SPACE
SPACE	*1*	--	--	29			--			--	30	--	--	*1*	SPACE

NOTES:

TOTAL WATTS A:	0 W
TOTAL WATTS B:	0 W
TOTAL WATTS C:	0 W
TOTAL WATTS:	0 W
TOTAL AMPS @100%:	0 A
TOTAL AMPS @125%:	0 A
TOTAL PANEL RECEPTACLE LOAD:	
TOTAL AMPS WITH DIVERSITY:	0 A
MIN. CIRCUIT BREAKER RATING:	0 A

CKT BKR TYPE	
S = SHUNT TRIP	G = GFCI
L = LOCK ON C.B.	ET = ELECTRONIC TRIP
AF = ARC FAULT	N = NEW (EXISTING PANEL ONLY)
EX = EXISTING (EXISTING PANEL ONLY)	

PANELBOARD: P2N1A — NEW

BUS SIZE: 225A | **MAIN:** 200A | **SUPPLY FROM:** DP
VOLTAGE: 120/208V, 3PH, 4W | **NEUTRAL:** 100%
SERVICE RATED: NO | **LOCATION:** UTILITY ROOM 132
ISOLATED GROUND BUS: NO | **MOUNTING:** SURFACE
SHORT CIR. CURRENT RATING: 22 kAIC | **SPD:** NO

DIRECTORY	# OF POLES	CKT BKR AMPS	CKT BKR TYPE	CKT #	A	B	C	A	B	C	CKT #	CKT BKR TYPE	CKT BKR AMPS	# OF POLES	DIRECTORY
RECEPT...	1	20		1	1260			2330			2				
RECEPT ENTRY 101A, 101C	1	20		3		900			2330		4		25	3	AHU - 10
				5						2330	6				
101A DOOR OPERATOR	1	20		7	0			720			8		20	1	RECEPT SECUIRTY 101B
				9					500		10		20	1	RECEPT JC 131
RECEPT 104, 104A, 104B, 108	1	20		11			900			900	12		20	1	RECEPT C. POLICE CH. 105
RECEPT FRIG 105	1	20		13	180			720			14		20	1	RECEPT CAPITAL POLICE 106
HADN DRYERS 104A, 104B	1	20		15		1000			1080		16		20	1	RECEPT LEG COAT RM 136
RECEPT WIRE MOLD 136	1	20		17			1440			1260	18		20	1	RECEPT WIRE MOLD 136
RECEPT WIRE MOLD COPY 138	1	20		19	720			1080			20		20	1	RECEPT ORIENTATION 137
RECEPT WIRE MOLD 137	1	20		21		900			0		22		20	1	VEST 103 DOOR OPERATOR
DOOR OPERATOR LEG COAT RM...	1	20		23			0			360	24		20	1	RECEPT IT 138A
RECEPT IT 138A	1	20		25	360						26				
				27							28				
				29							30				
				31							32				
				33							34				
				35							36				
				37							38				
				39							40				
				41							42				

NOTES:

TOTAL WATTS A:	7370 W
TOTAL WATTS B:	6710 W
TOTAL WATTS C:	7190 W
TOTAL WATTS:	21269 W
TOTAL AMPS @100%:	59 A
TOTAL AMPS @125%:	74 A
TOTAL PANEL RECEPTACLE LOAD:	7700 W
TOTAL AMPS WITH DIVERSITY:	59 A
MIN. CIRCUIT BREAKER RATING:	74 A

CKT BKR TYPE	
S = SHUNT TRIP	G = GFCI
L = LOCK ON C.B.	ET = ELECTRONIC TRIP
AF = ARC FAULT	N = NEW (EXISTING PANEL ONLY)
EX = EXISTING (EXISTING PANEL ONLY)	

PANELBOARD: DP — WESTINGHOUSE CAT#: SYC21362IT8 (EXISTING)

BUS SIZE: 600A | **MAIN:** MLO | **SUPPLY FROM:** MCC
VOLTAGE: 120/208V, 3PH, 4W | **NEUTRAL:** 100%
SERVICE RATED: NO | **LOCATION:** ELECTRICAL RM 133
ISOLATED GROUND BUS: NO | **MOUNTING:** SURFACE
SHORT CIR. CURRENT RATING: EXISTING LOAD | **SPD:** NO

DIRECTORY	# OF POLES	CKT BKR AMPS	CKT BKR TYPE	CKT #	A	B	C	A	B	C	CKT #	CKT BKR TYPE	CKT BKR AMPS	# OF POLES	DIRECTORY
				1	7370						2				
P2N1A	**3**	**200**	**N / ET**	3		6710			0		4	--	*100*	*3*	*(EX) PANEL CP2*
				5			7190			0	6				
PANEL LP2	*3*	*100*	*EX*	7	0			0			8				
				9		0			0		10	--	*100*	*3*	*(EX) PANEL PP1*
				11			0			0	12				
(EX) PANEL KP-1	*3*	*100*	--	13	0			0			14				
				15		0			0		16	--	*100*	*3*	*(EX) PANEL LPM*
				17			0			0	18				
PANEL L.P.1	*3*	*100*	*EX*	19	0			0			20				
				21		0			0		22	--	*100*	*3*	*(EX) PANEL LP2*
				23			0			0	24				
(EX) PANEL KP2	*3*	*225*	--	25	0			--			26	--	--	*1*	*NOT A SPACE*
				27		0			--		28	--	--	*1*	*NOT A SPACE*
				29			0			--	30	--	--	*1*	*NOT A SPACE*
(EX) KITCHEN ELEVATOR	*3*	*175*	--	31	0			--			32	--	--	*1*	*NOT A SPACE*
				33		0			--		34	--	--	*1*	*NOT A SPACE*
				35			0			--	36	--	--	*1*	*NOT A SPACE*

NOTES:
1. PROVIDE NEW BREAKER SIZED AS INDICATED

TOTAL WATTS A:	7370 W
TOTAL WATTS B:	6710 W
TOTAL WATTS C:	7190 W
TOTAL WATTS:	21269 W
TOTAL AMPS @100%:	59 A
TOTAL AMPS @125%:	74 A
TOTAL PANEL RECEPTACLE LOAD:	7700 W
TOTAL AMPS WITH DIVERSITY:	59 A
MIN. CIRCUIT BREAKER RATING:	74 A

CKT BKR TYPE	
S = SHUNT TRIP	G = GFCI
L = LOCK ON C.B.	ET = ELECTRONIC TRIP
AF = ARC FAULT	N = NEW (EXISTING PANEL ONLY)
EX = EXISTING (EXISTING PANEL ONLY)	

PANELBOARD: LP2 — SIEMENS CAT #: S1C30ML125ATS (EXISTING NEW WORK)

BUS SIZE: 125 AMP | **MAIN:** MLO | **SUPPLY FROM:**
VOLTAGE: 120/208V, 3PH, 4W | **NEUTRAL:** 100% DP
SERVICE RATED: NO | **LOCATION:** ELECTRICAL RM 133
ISOLATED GROUND BUS: NO | **MOUNTING:** SURFACE
SHORT CIR. CURRENT RATING: EXISTING | **SPD:** NO

DIRECTORY	# OF POLES	CKT BKR AMPS	CKT BKR TYPE	CKT #	A	B	C	A	B	C	CKT #	CKT BKR TYPE	CKT BKR AMPS	# OF POLES	DIRECTORY
(EX) EXISTING LOAD	1	20	--	1	0			2352			2		35	1	FCU - 101A
(EX) EXISTING LOAD	1	20	--	3		0			1392		4		20	1	FCU - 101B, 101C
(EX) EXISTING LOAD	1	20	--	5			0			420	6		20	1	FCU - 101D
(EX) SPARE	1	20	--	7	0			1200			8		20	1	EAC - 1, EAC - 2
(EX) EXISTING LOAD	1	20	--	9		0			1566		10		20	1	FCU - 102
(EX) SPARE	1	20	--	11			0			252	12		20	1	FCU - 104, FCU - 105, FCU - 106
(EX) EXISTING LOAD	1	20	--	13	0			1566			14		20	1	FCU - 138
(EX) SPARE	1	20	--	15		0			1392		16		20	1	FCU - 136, FCU - 137
(EX) SPARE	1	20	--	17			0			1116	18		20	1	FCU - 139, CUH - 103
(EX) SPARE	1	20	--	19	0			0			20	--	20	1	SPARE
(EX) SPARE	1	20	--	21		0			1713		22	N	20	2	ACC - 138, AC 138
SPACE	1	--	--	23			--			1713	24				
SPACE	1	--	--	25	--						26				
SPACE	1	--	--	27		--		--			28				
SPACE	1	--	--	29			--				30				

NOTES:

TOTAL WATTS A:	5118 W
TOTAL WATTS B:	6063 W
TOTAL WATTS C:	3501 W
TOTAL WATTS:	14682 W
TOTAL AMPS @100%:	41 A
TOTAL AMPS @125%:	51 A
TOTAL PANEL RECEPTACLE LOAD:	
TOTAL AMPS WITH DIVERSITY:	41 A
MIN. CIRCUIT BREAKER RATING:	51 A

CKT BKR TYPE	
S = SHUNT TRIP	G = GFCI
L = LOCK ON C.B.	ET = ELECTRONIC TRIP
AF = ARC FAULT	N = NEW (EXISTING PANEL ONLY)
EX = EXISTING (EXISTING PANEL ONLY)	

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Project #: 9171.001

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 10/23/26 | SCALE:

DRAWN BY: TEM | CHECKED BY: AMS

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: PANELBOARD SCHEDULES

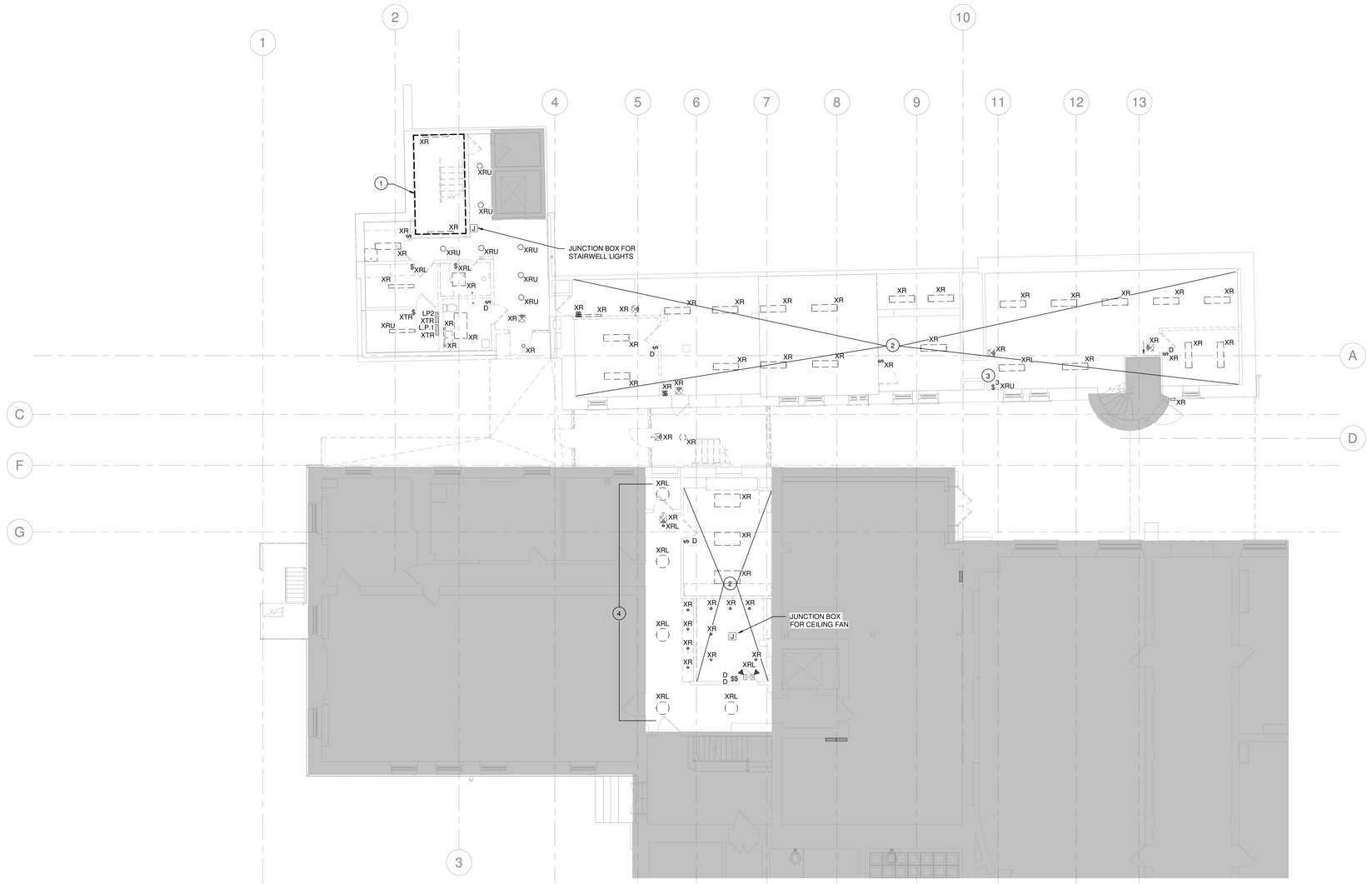
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DRAWING NOTES

1. REMOVE ALL EXISTING LIGHTING FIXTURES AND ASSOCIATED LIGHTING CONTROLS WITHIN EXISTING STAIRWELL. EXISTING CIRCUIT SHALL BE MAINTAINED. ALL CONDUIT AND WIRING WITHIN THE STAIRWELL TO BE REMOVED COMPLETE. PROVIDE JUNCTION BOX AT CEILING LEVEL OUTSIDE OF THE STAIRWELL AND COIL EXISTING WIRING BACK TO INTERCEPTION POINT UNTIL READY FOR EXTENSION.
2. EXISTING LIGHTING, CONTROLS AND ASSOCIATED WIRING WITHIN THIS AREA SHALL BE REMOVED COMPLETE (UON)
3. REMOVE EXISTING SWITCH AND MAINTAIN EXISTING RACEWAY FOR REUSE AND SWITCH RECONFIGURATION.
4. CONTRACTOR SHALL CAREFULLY REMOVE EXISTING HISTORIC FIXTURES AND STORE IN A SAFE LOCATION UNTIL READY FOR REINSTALLATION.



1 LEVEL 1 LIGHTING DEMOLITION PLAN - PHASE 2
1/8" = 1'-0"

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Fire Protection • Plumbing • Mechanical • Electrical
Project #: 9971.001

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE:	SCALE:
10/23/26	1/8" = 1'-0"
DRAWN BY:	CHECKED BY:
TEM	AMS

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:

LEVEL 1 LIGHTING DEMOLITION PLAN

SHEET NO:

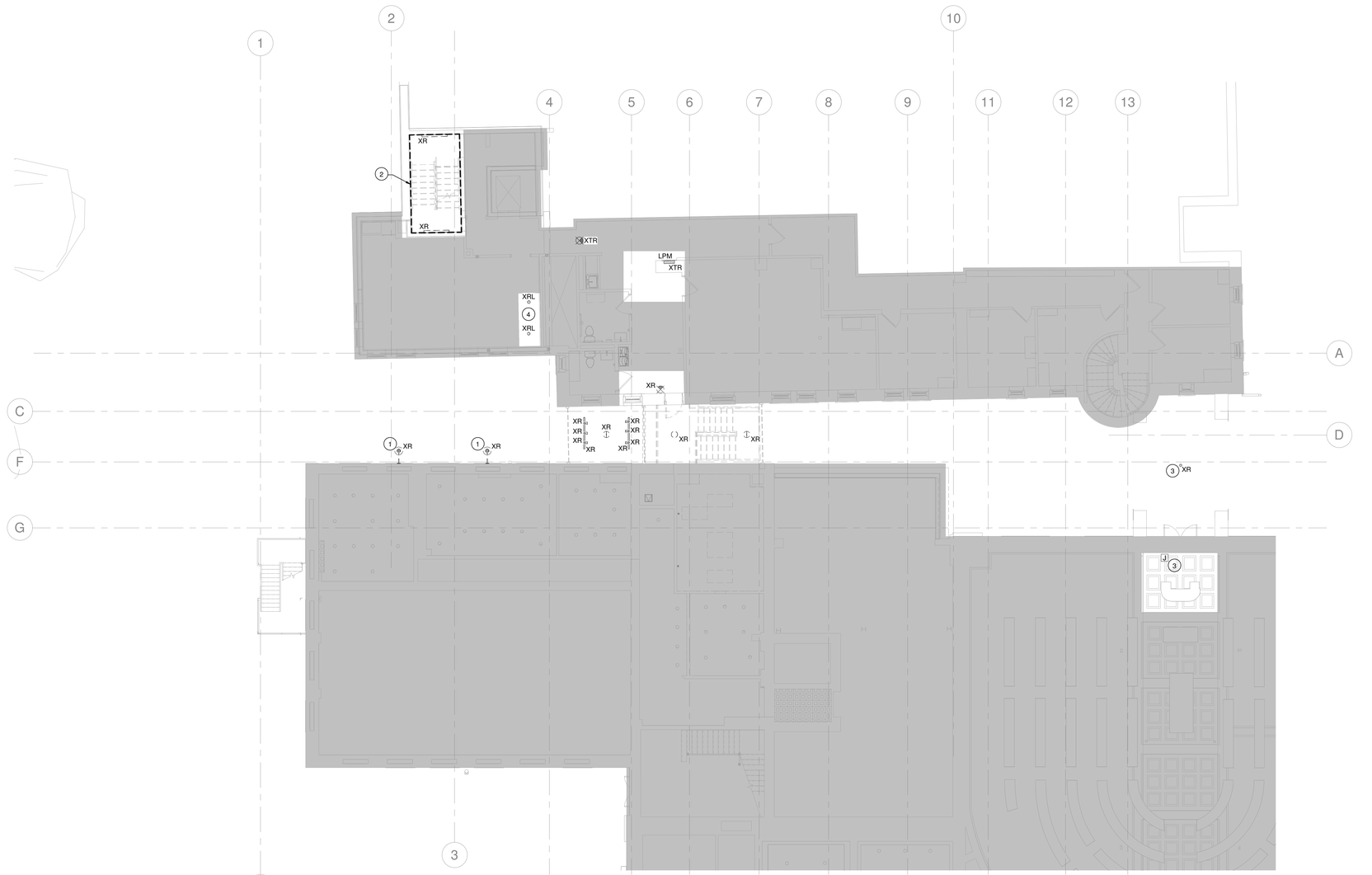
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DRAWING NOTES

1. CONTRACTOR SHALL TAKE SPECIAL CARE WHEN REMOVING EXISTING LIGHT FIXTURE. OFFER UP TO OWNER UPON REMOVAL OF FIXTURE.
2. REMOVE ALL EXISTING LIGHTING FIXTURES AND ASSOCIATED LIGHTING CONTROLS WITHIN EXISTING STAIRWELL. EXISTING CIRCUIT SHALL BE MAINTAINED. ALL CONDUIT AND WIRING WITHIN THE STAIRWELL TO BE REMOVED COMPLETE.
3. EXISTING SINGLE LAMP FIXTURE TO BE REMOVED. MAINTAIN EXISTING CONDUIT PATH WITHIN WOOD CEILING FOR REUSE WITH NEW LIGHTING. PROVIDE JUNCTION BOX AT SOURCE END OF CONDUIT AND PULL WIRING BACK UNTIL READY FOR EXTENSION.
4. EXISTING FIXTURES TO BE CAREFULLY REMOVED FOR INSTALLATION OF NEW SOFFIT. MAINTAIN EXISTING WIRING FOR REUSE.



1 MEZZANINE LIGHTING DEMOLITION PLAN - PHASE 2
1/8" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FF PROJECT NO:
2248

ORIGINATION DATE:	SCALE:
10/23/26	1/8" = 1'-0"
DRAWN BY:	CHECKED BY:
TEM	AMS

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:
MEZZANINE LIGHTING DEMOLITION PLAN

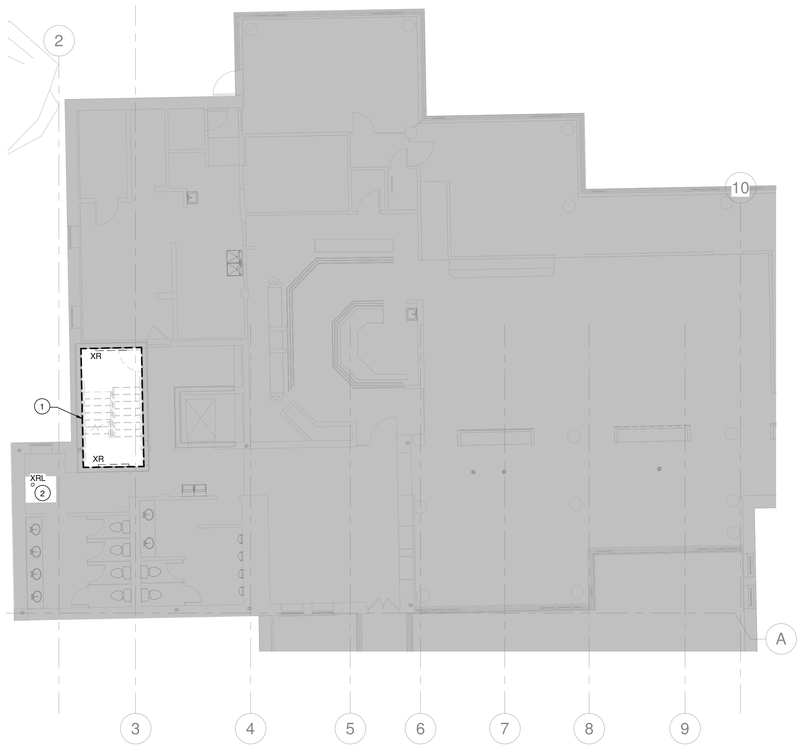
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ED122

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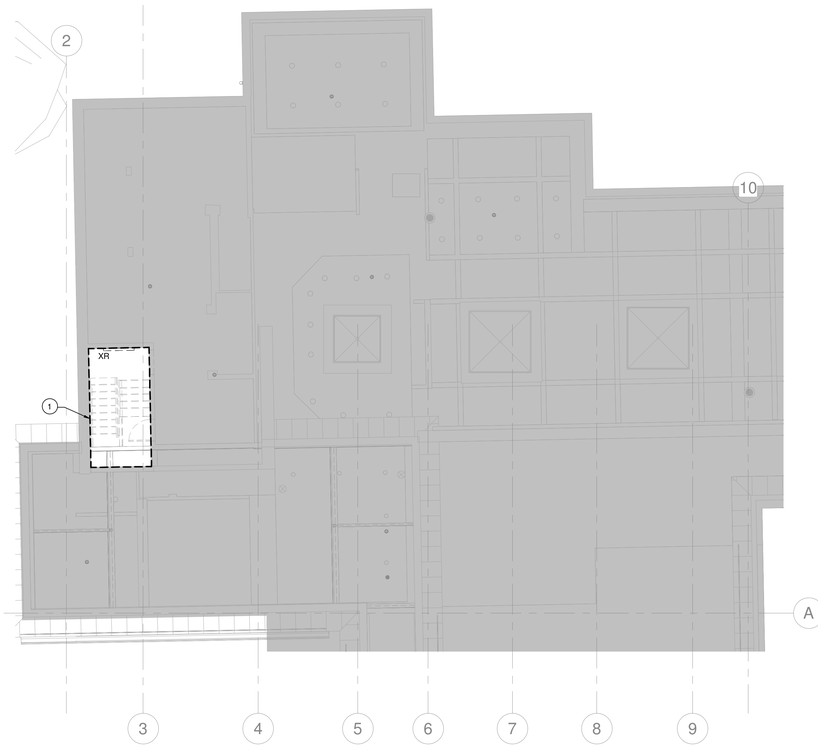
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DRAWING NOTES

1. REMOVE ALL EXISTING LIGHTING FIXTURES AND ASSOCIATED LIGHTING CONTROLS WITHIN EXISTING STAIRWELL. EXISTING CIRCUIT SHALL BE MAINTAINED. ALL CONDUIT AND WIRING WITHIN THE STAIRWELL TO BE REMOVED COMPLETE. PROVIDE JUNCTION BOX AT CEILING LEVEL OUTSIDE OF THE STAIRWELL AND COIL EXISTING WIRING BACK TO INTERCEPTION POINT UNTIL READY FOR EXTENSION.
2. EXISTING FIXTURE TO BE CAREFULLY REMOVED FOR INSTALLATION OF NEW SOFFIT. MAINTAIN EXISTING WIRING FOR REUSE.



1 SHEET - CAFETERIA LEVEL - ELECT - LIGHTING DEMOLITION
1/8" = 1'-0"



2 DESIGNER SHALL ADD CORRECT VIEWPORT TITLE (MATCH ARCHITECT/OTHER RFS TRADE'S FORMAT)
1/8" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE:	SCALE:
10/23/26	1/8" = 1'-0"
DRAWN BY: Author	CHECKED BY: Checker

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:
LEVELS 2 & 3 LIGHTING PARTIAL DEMOLITION PLAN

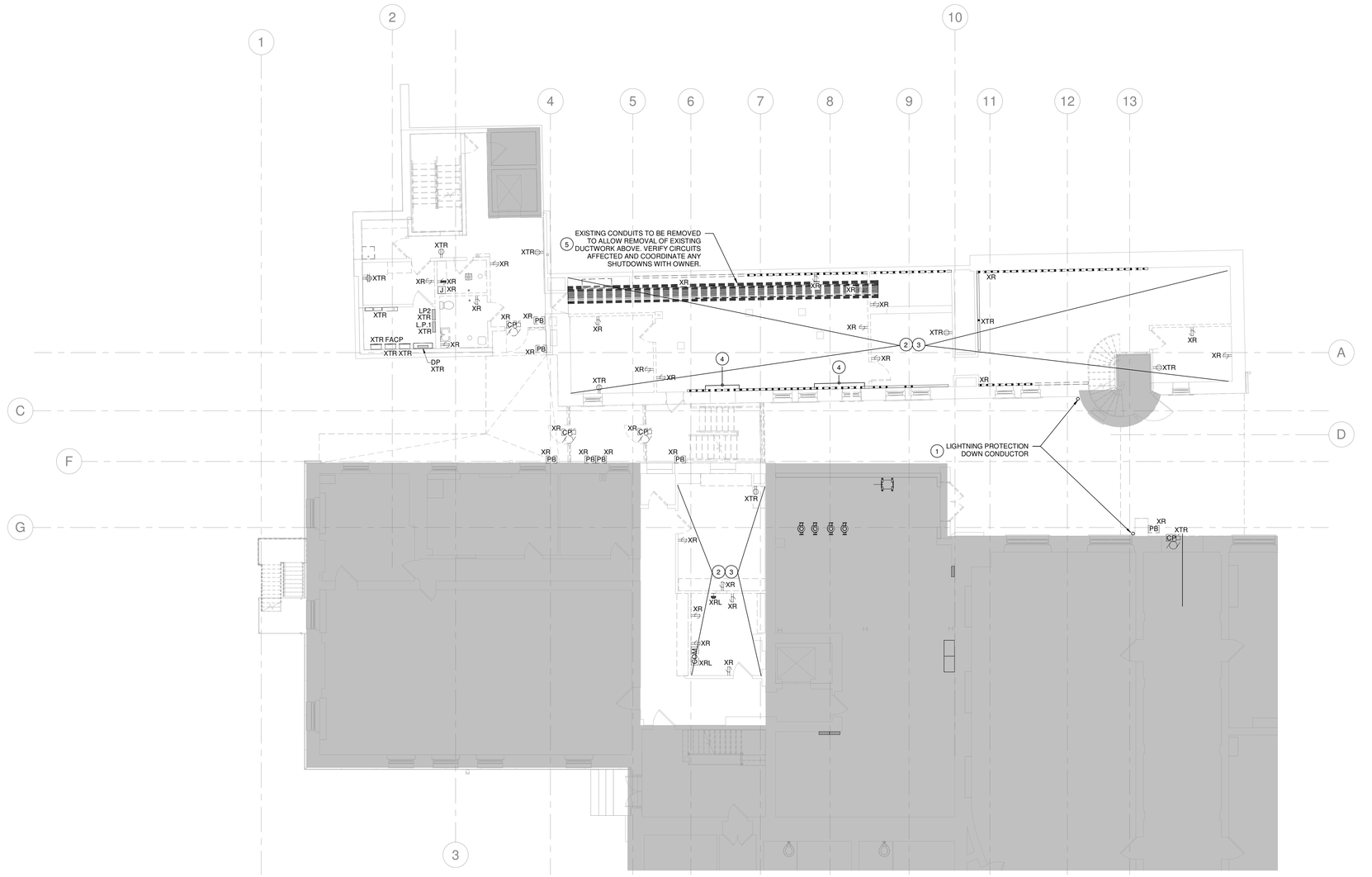
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DRAWING NOTES

1. EXISTING LIGHTNING PROTECTION DOWN CONDUCTOR TO REMAIN. COORDINATE WITH ARCHITECT TO ENCLOSE WITHIN CHASE.
2. EXISTING POWER, DEVICES, AND ASSOCIATED WIRING SHALL BE REMOVED COMPLETE (UON).
3. DISCONNECT AND MAKE SAFE FOR REMOVAL ALL MECHANICAL EQUIPMENT TO BE REMOVED. REMOVE ALL ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE COMPLETE. (UON).
4. REMOVE EXISTING SECTION OF WIREMOLD. MAINTAIN EXISTING WIRING WITHIN. LONGER SECTION (PLAN WEST) SHALL REMAIN CONNECTED TO EXISTING CIRCUITS. PLAN EAST SECTIONS SHALL BE PULLED BACK AND PREPPED FOR RECIRCUITING. PROVIDE END CAP FOR WIREMOLD TO REMAIN.
5. CONTRACTOR SHALL TAKE NOTE ALL CONDUIT FOR REMOVAL AND LABEL ACCORDINGLY. CONTRACTOR SHALL TAKE CARE WHEN REMOVING CONDUIT NOT TO DAMAGE CONDUIT SO IT CAN BE REINSTALLED. CONDUIT SHOWN IS FOR REFERENCE ONLY. EXACT LOCATION, ROUTING, AND LENGTHS TO BE REMOVED SHALL BE VERIFIED IN FIELD PRIOR TO REMOVAL.



1 LEVEL 1 POWER DEMOLITION PLAN - PHASE 2
1/8" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FF PROJECT NO: **2248**

ORIGINATION DATE: **10/23/26** | SCALE: **1/8" = 1'-0"**

DRAWN BY: **TEM** | CHECKED BY: **AMS**

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:

LEVEL 1 POWER DEMOLITION PLAN

SHEET NO:

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1 MEZZANINE POWER DEMOLITION PLAN - PHASE 2
1/8" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE:	SCALE:
10/23/26	1/8" = 1'-0"
DRAWN BY:	CHECKED BY:
TEM	AMS

ISSUE LOG:

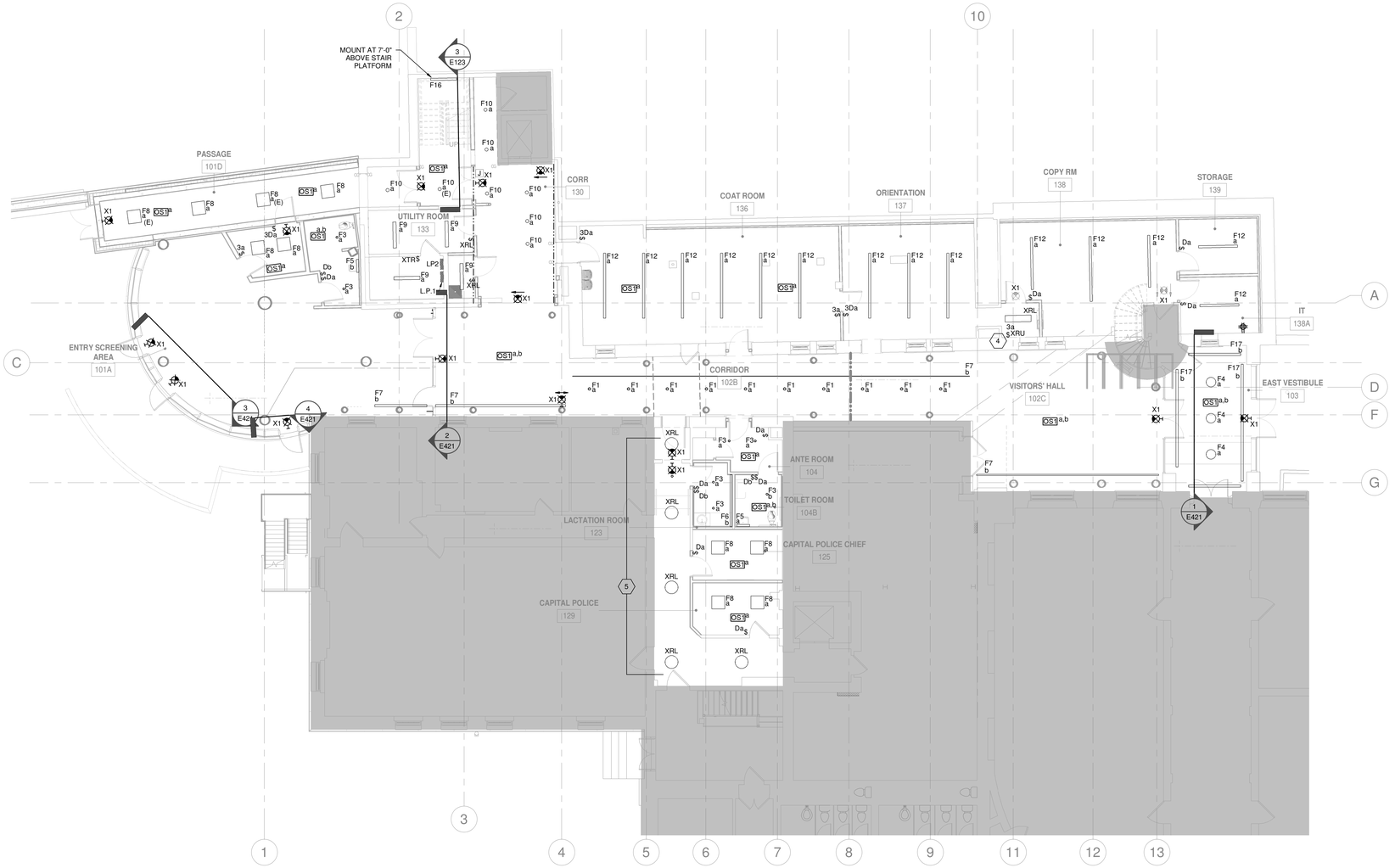
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50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:
MEZZANINE POWER DEMOLITION PLAN

SHEET NO:
ED222

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1 LEVEL 1 LIGHTING PLAN
1/8" = 1'-0"

DRAWING NOTES

1. MOUNT EXIT SIGN TO MULLION ABOVE DOOR. UTILIZE MULLION AS RACEWAY. REFER TO DRAWING E401 FOR ADDITIONAL INFORMATION.
2. REUSE EXISTING STAIRWELL LIGHTING CIRCUIT MAINTAINED FOR NEW FIXTURES. PROVIDE NEW CONDUIT AND WIRING FROM JUNCTION BOX INTERCEPTION POINT AND EXTEND TO NEW LOCATIONS. NEW CONDUIT AND WIRING SHALL MATCH EXISTING IN ALL RESPECTS.
3. CONNECT NEW FIXTURE TO EXISTING EXIT LIGHTING CIRCUIT SERVING THE AREA. NEW CONDUIT AND WIRING SHALL MATCH EXISTING IN ALL RESPECTS.
4. PROVIDE NEW 3-WAY SWITCH IN EXISTING BOX. PROVIDE NEW WIRING TO FIXTURES AND RECONFIGURE TO SWITCH LEG AS SHOWN.
5. REINSTALL SALVAGED FIXTURES. CONTRACTOR SHALL CLEAN AND REPAIR TO EXTENT POSSIBLE AND RELAMP. IF FIXTURE CAN NOT BE EASILY REPAIRED, CONTRACTOR SHALL SEND OUT FOR REPAIR BY AN APPROVED HISTORIC FIXTURE RESTORATION COMPANY

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
2248

ORIGINATION DATE:	SCALE:
10/23/26	1/8" = 1'-0"
DRAWN BY: TEM	CHECKED BY: AMS

ISSUE LOG:

25% DESIGN DEVELOPMENT	
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75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:

LEVEL 1 LIGHTING PLAN

SHEET NO:
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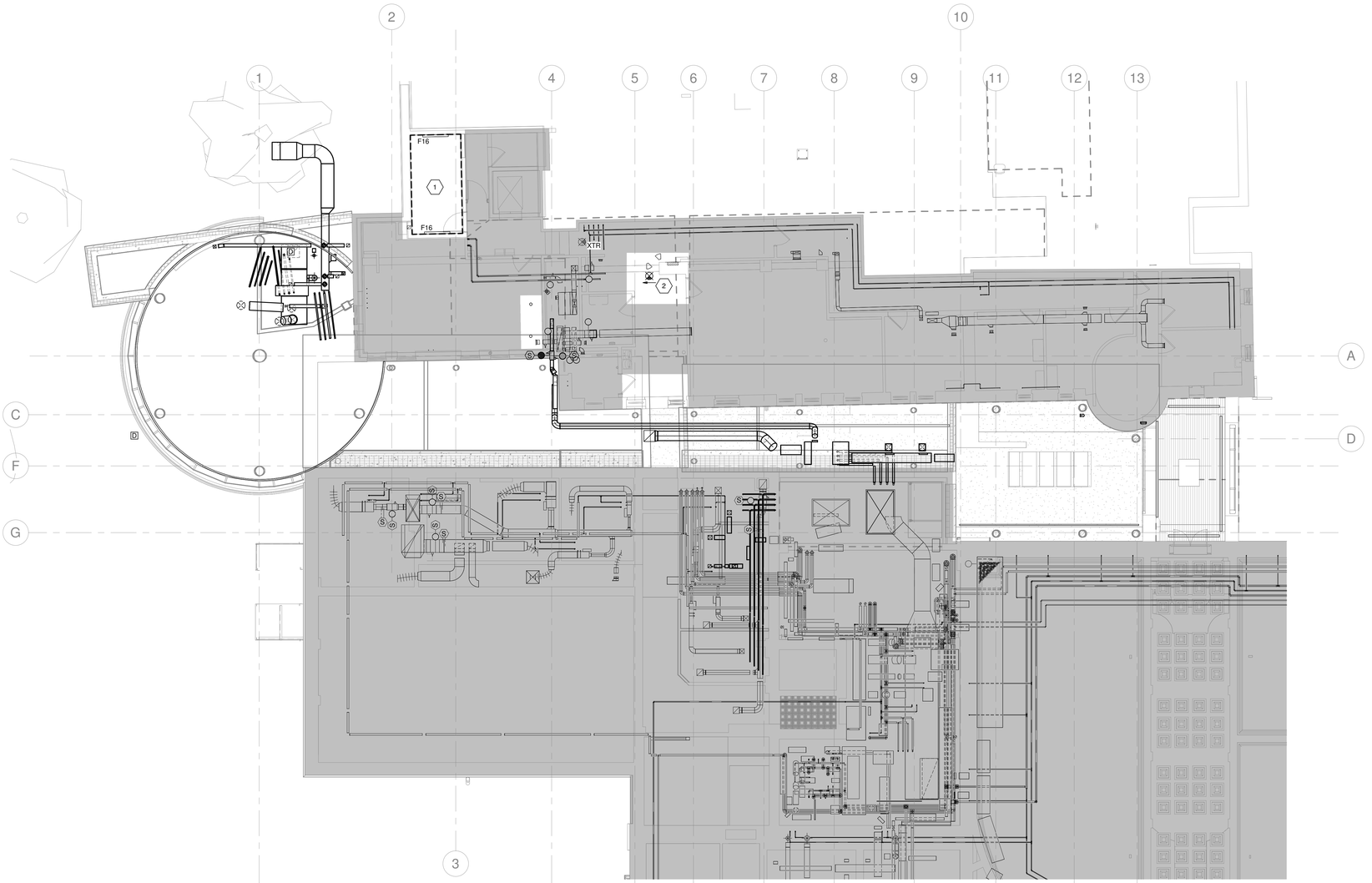
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DRAWING NOTES

1. REUSE EXISTING STAIRWELL LIGHTING CIRCUIT MAINTAINED FOR NEW FIXTURES. NEW CONDUIT AND WIRING SHALL MATCH EXISTING IN ALL RESPECTS. LIGHT FIXTURES SHALL BE MOUNTED AT 7'-0" ABOVE STAIR PLATFORM AND LANDINGS (UON).

2. CONNECT NEW FIXTURE TO EXISTING EXIT LIGHTING CIRCUIT SERVING THE AREA. NEW CONDUIT AND WIRING SHALL MATCH EXISTING IN ALL RESPECTS.



1 MEZZANINE LIGHTING PLAN
1/8" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO:
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ORIGINATION DATE: 10/23/26
SCALE: 1/8" = 1'-0"
DRAWN BY: TEM
CHECKED BY: AMS

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100% DD SET	10/23/2026

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MEZZANINE LIGHTING PLAN

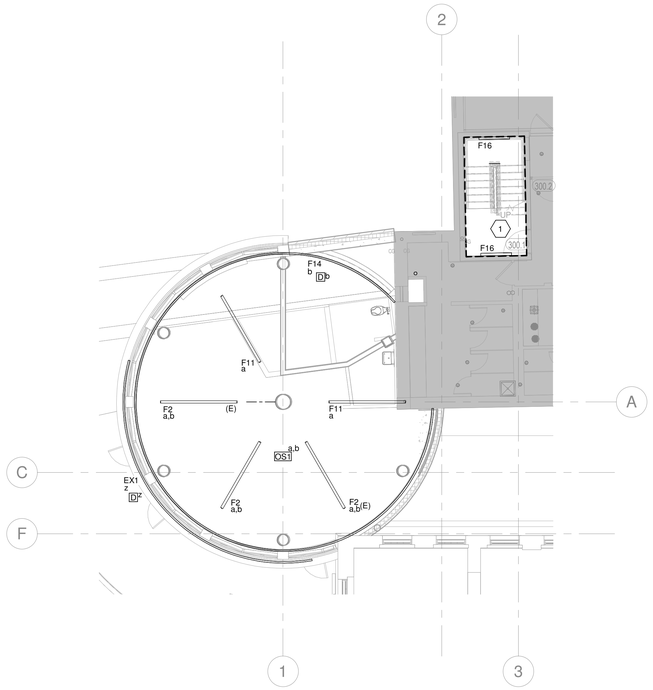
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DRAWING NOTES

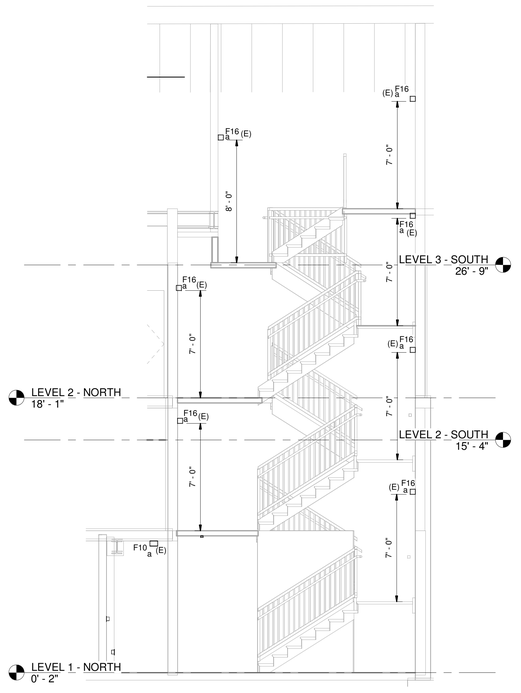
1. REUSE EXISTING STAIRWELL LIGHTING CIRCUIT MAINTAINED FOR NEW FIXTURES. NEW CONDUIT AND WIRING SHALL MATCH EXISTING IN ALL RESPECTS. LIGHT FIXTURES SHALL BE MOUNTED AT 7'-0" ABOVE STAIR PLATFORM AND LANDINGS (UON).



1 LEVEL 2 LIGHTING PART PLAN
1/8" = 1'-0"



2 LEVEL 3 STAIR LIGHTING PLAN
1/8" = 1'-0"



3 STAIRWAY LIGHTING SECTION
1/4" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 10/23/26

SCALE: As indicated

DRAWN BY: Author

CHECKED BY: Checker

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:

LEVELS 2 & 3 PARTIAL LIGHTING PLANS

SHEET NO:

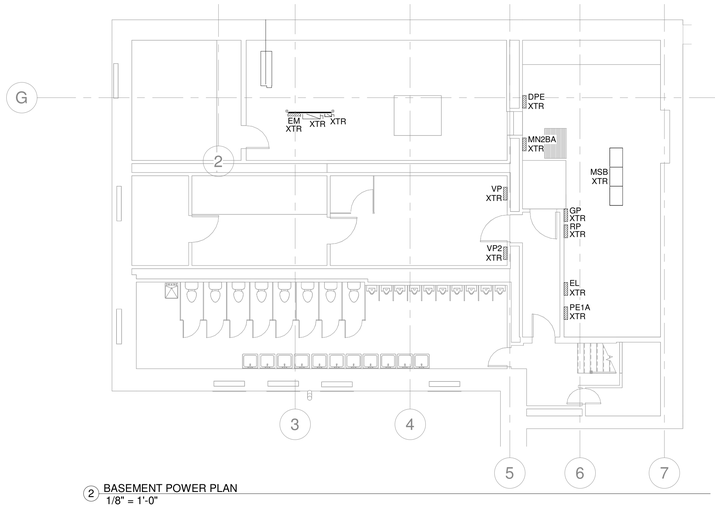
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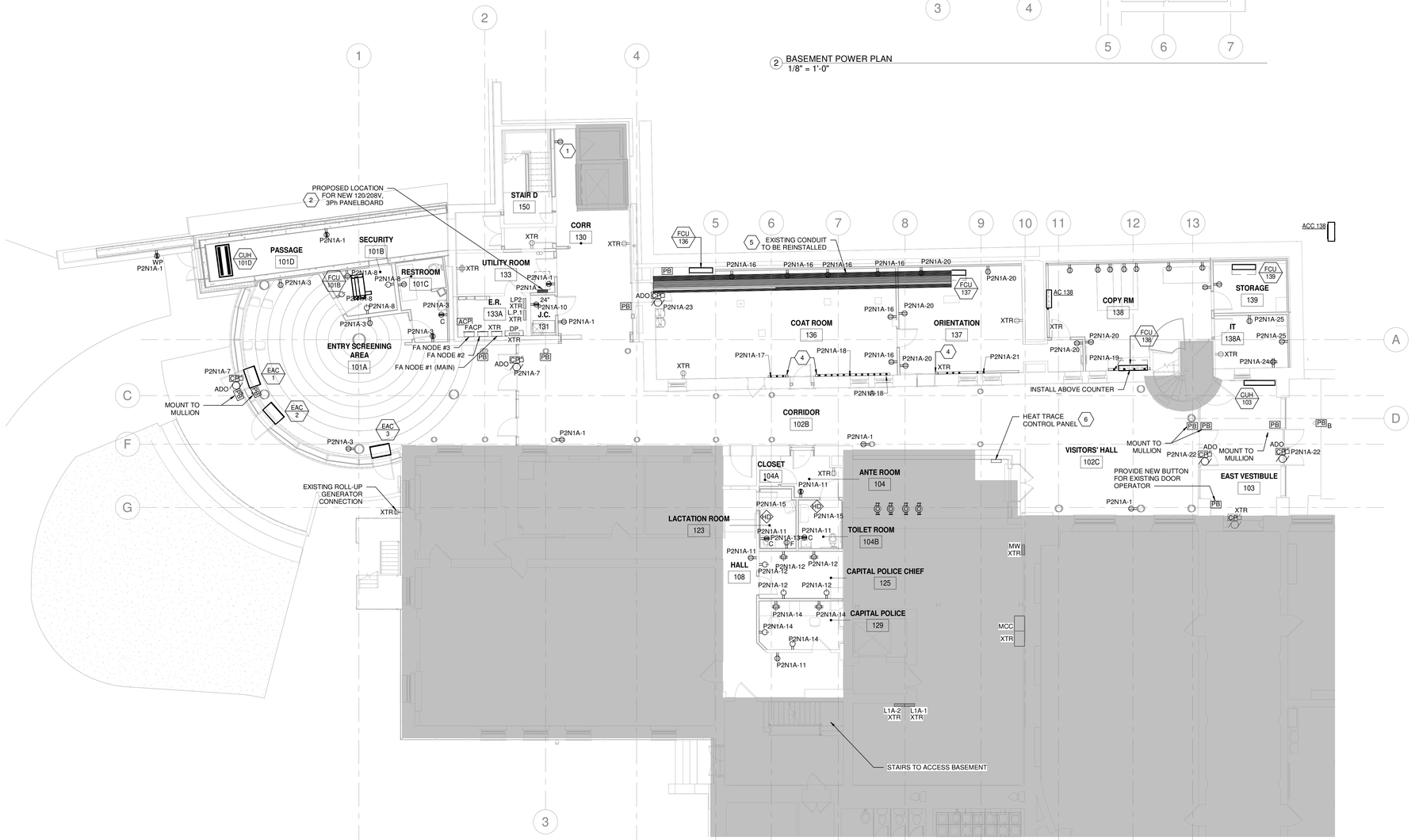
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DRAWING NOTES

1. CONNECT NEW RECEPTACLE TO EXISTING GENERAL POWER CIRCUIT SERVING THE AREA. NEW CONDUIT AND WIRING TO MATCH EXISTING IN ALL RESPECTS.
2. PROVIDE NEW CIRCUIT BREAKER WITHIN EXISTING PANEL "DP" FOR NEW PANELBOARD.
3. INSTALL POWER POLE TIGHT TO EXISTING WALL FOR FEED TO DESK POWER AND LOW-VOLTAGE. PROVIDE (1) 1"C FOR POWER AND (1)1-1/4"C FOR LOW-VOLTAGE TO POWER POLE.
4. UTILIZE WIREMOLD 4000 SERIES AND RUN FROM EXISTING WIREMOLD TO CEILING. UTILIZE NEW RACEWAY TO REFEED EXISTING RECEPTACLES.
5. REINSTALL EXISTING CONDUIT UPON REMOVAL OF EXISTING DUCTWORK. CONTRACTOR SHALL PLACE ALL CONDUIT BACK IN LOCATION IT WAS TAKEN. REPLACE ANY CONDUIT FOUND TO BE DAMAGED OR BECOME DAMAGED DURING REMOVAL.
6. PROVIDE NEW HEAT TRACE CONTROL PANEL. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. FIELD COORDINATE EXACT LOCATION OF HEAT TRACE CONTROL PANEL WITHIN ROOM. ENSURE WORKING CLEARANCES PER NEC ARE MET.



2 BASEMENT POWER PLAN
1/8" = 1'-0"



1 LEVEL 1 POWER PLAN
1/8" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: **2248**

ORIGINATION DATE: **10/23/26**

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

DRAWN BY: **TEM**

CHECKED BY: **AMS**

ISSUE LOG:

25% DESIGN DEVELOPMENT	
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75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

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BASEMENT & LEVEL 1 POWER PLANS

SHEET NO:

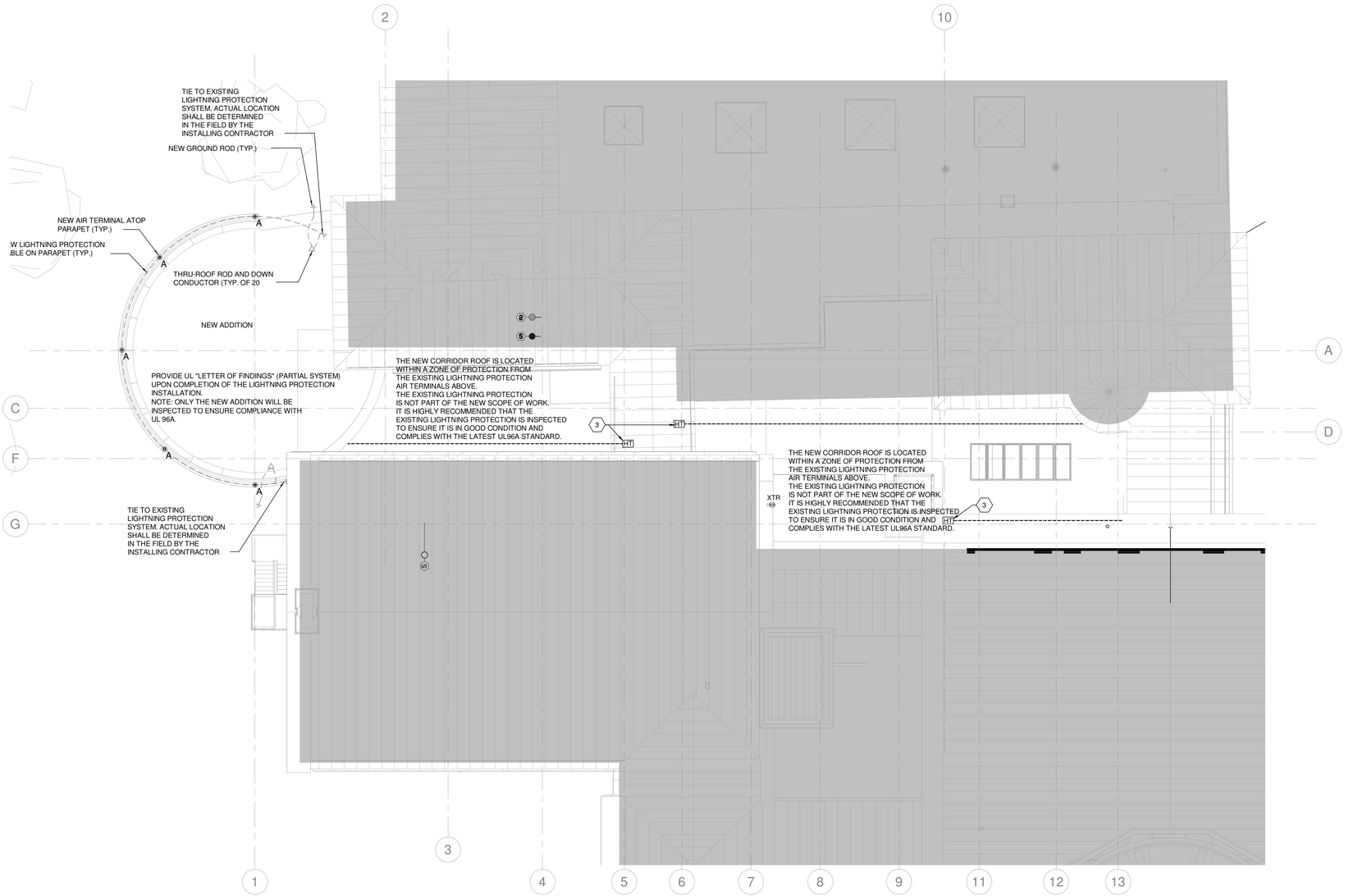
E221

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DRAWING NOTES

1. BUILDING IS EQUIPPED WITH A CONVENTIONAL LIGHTING PROTECTION SYSTEM. AREA HIGHLIGHTED IS APPROXIMATE LOCATION OF NEW ROOF. PROVIDE FULLY COMPLETE AND FUNCTIONAL LIGHTING PROTECTION SYSTEM. CONNECT NEW WIRING TO EXISTING SYSTEM. COORDINATE ANY NEW DOWN CONDUCTORS WITH ARCHITECT PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL VERIFY EXTENT OF EXISTING LIGHTNING PROTECTION SYSTEM PRIOR TO START OF WORK AND WORK WITH A LICENSED AND REPUTABLE VENDOR TO DETERMINE THE EXTENT OF NEW WIRING REQUIRED TO ADD LIGHTNING PROTECTION SYSTEM TO EXISTING SYSTEM.
3. PROVIDE NEW HEAT TRACE FOR GUTTER STYLE DRAIN. PROVIDE ENOUGH HEAT TRACE TO ALSO INSTALL WITHIN DOWNSPOUT PIPE TO PREVENT FREEZING. LOCATE HEAT TRACE CONTROL PANEL WITHIN EXISTING MECHANICAL ROOM BELOW. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.



1 ROOF POWER PLAN - LIGHTNING PROTECTION
1/8" = 1'-0"

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE:	SCALE:
10/23/26	1/8" = 1'-0"
DRAWN BY: TEM	CHECKED BY: AMS

ISSUE LOG:

25% DESIGN DEVELOPMENT	
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75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS: ROOF POWER PLAN

SHEET NO: E223

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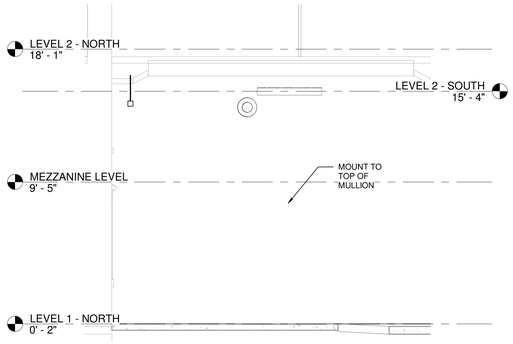
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LIGHTING FIXTURE SCHEDULE

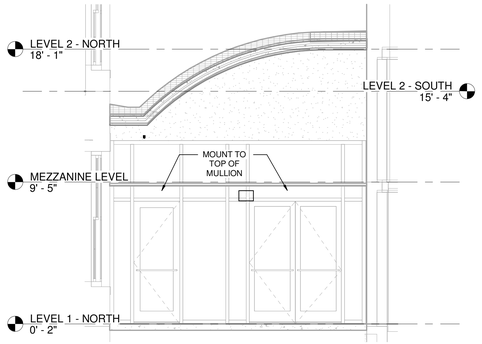
TYPE	DESCRIPTION	MANUFACTURER	LAMP TYPE	CONTROL	VOLTAGE	FIXTURE WATTAGE	REMARKS
F1	4" RECESSED LED DOWNLIGHT	GOTHAM LIGHTING #IVO4-D-15L-30K-90CRI-(DISTRIBUTION)-MIN1-MVOLT-ZT-NCH-P-(TRIM)-(TRIM)-(FLANGE)	15W, 90 CRI 3000K 1486 LUMENS	0-10V DIMMING 1%	UNV	15	ARCHITECT TO CONFIRM TRIM COLOR, TRIM FINISH AND FLANGE STYLE. CONTRACTOR TO COORDINATE IF ACCESSORIES ARE NEEDED, PRIOR TO INSTALLATION.
F2	1-7/8" SUSPENDED BI-DIRECTIONAL LED LINEAR SLOT	LUMENWERX #SQUP-DI-MR035-[FINISH]-WI02-SW-90CRI-500LMF-350LMF-30K-UNV-D1-2C-[MOUNTING]-[FINISH]	4.3W/LF DN, 2.4WLM/LF UP, 90 CRI 3000K 500LM/LF DN, 350LM/LF UP	0-10V DIMMING 1%	UNV	6.5	BI-DIRECTIONAL LUMINAIRE SHALL BE ON 2 CIRCUIT CONTROL. ARCHITECT TO CONFRIM MOUNTING AND FINISH.
F3	4" RECESSED LED DOWNLIGHT	GOTHAM LIGHTING #IVO4-D-10L-30K-90CRI-(DISTRIBUTION)-MIN1-MVOLT-ZT-NCH-P-(TRIM)-(TRIM)-(FLANGE)	10W, 90 CRI 3000K 991 LUMENS	0-10V DIMMING 1%	UNV	10	ARCHITECT TO CONFIRM TRIM COLOR, TRIM FINISH AND FLANGE STYLE. CONTRACTOR TO COORDINATE IF ACCESSORIES ARE NEEDED, PRIOR TO INSTALLATION.
F4	14" DIA SUSPENDED DECORATIVE PENDENT	VISA LIGHTING #CP4517-L30K(L)-MVOLT-[FINISH]	19W, 90 CRI 3000K 2400 LUMENS	0-10V DIMMING 1%	UNV	19	ARCHITECT TO CONFIRM FINISH. LUMINAIRE TO BE MOUNTED 10'-0" AFF.
F5	24" X 36" WALL MOUNTED LED MIRROR VANITY LIGHT	PARIS MIRROR #BHARM24363000	98W 3000K 10,890 LUMENS	0-10V DIMMING 1%	UNV	98	REFER TO ARCHITECTURAL DRAWINGS FOR MIRROR MOUNTING HEIGHT.
F6	3" RECESSED PERIMETER LIGHT - SHALLOW DEPTH	LUMENWERX #V3PERS-HLO-SW-90CRI-500LMF-30K-[LENGTH]-UNV-D1-1C-[MOUNTING]-W-NA-NA-NA	4.1W/LF, 90 CRI 3000K 500LM/LF	0-10V DIMMING 1%	UNV	4.1	REFER TO ARCHITECTURAL DRAWINGS FOR LENGTHS.
F7	4" SURFACE MOUNTED LED INDIRECT ASYMMETRIC LIGHT	LUMENWERX #ALC-APO-SW-90-950-30-[LENGTH]-UNV-D1-1-COVH-W	7.5W/LF, 90CRI 3000K 950LM/LF	0-10V DIMMING 1%	UNV	7.5	LUMINAIRE TO BE PLACED IN COVE POCKET. REFER TO ARCHITECTURAL DWG.
F8	2X2 RECESSED LED TROFFER WITH COMPRESSION PLANAR OPTIC	LUMENWERX #SIDCR-22-CPO-SW-90-2000-30-UNV-D1-1-[MOUNTING]-W	23W, 90CRI 3000K 2000 LUMENS	0-10V DIMMING 1%	UNV	23	ARCHITECT TO CONFIRM MOUNTING AND FINISH.
F9	6" LED LINEAR LOW BAY LIGHT	LITHONIA LIGHTING #MLX-L4-4000LM-90CRI-30K-WGDL-MD-MIN10-ZT-MVOLT-WH	24.9W, 90 CRI 3000K 3169 LUMENS	0-10V DIMMING 10%	UNC	25	LUMINIAIRE SHALL BE SUSPENDED OR CEILING MOUNTED.
F10	6" DIA SURFACE MOUNTED LED CYLINDER, 60 DEG BEAM SPREAD	SPITZER LIGHTING #CCR-6-43LC-9-U-30K-WD-CD-B-TB-SS	20W, 90CRI 3000K 2100 LUMENS	0-10V DIMMING 1%	UNV	20	ONE TO ONE REPLACEMENT ARCHITECT TO CONFIRM BLACK FINISH.
F11	1-7/8" SUSPENDED INDIRECT LED LINEAR SLOT	LUMENWERX #SQUP-I(MOD)-NA-NA-WI02-SW-90CRI-NA-350LMF-30K-UNV-D1-1C-NA-[MOUNTING]-[FINISH]-NA-NA-NA	2.4WLM/LF UP, 90 CRI 3000K 350LM/LF UP	0-10V DIMMING 1%	UNV	2.4	ARCHITECT TO CONFRIM MOUNTING AND FINISH.
F12	4" SURFACE MOUNTED LED LINEAR SLOT - SHALLOW HEIGHT	LUMENWERX #SHLU3S-D-INTEGRAL-SLO-SW-90CRI-500LMF-30K-[LENGTH]-UNV-DI-1C-NA-UNC-W-NA-NA	4.2W/LF, 90CRI 3000K 500LM/LF	0-10V DIMMING 1%		4.2	LUMINAIRE TO BE FLUSHED MOUNTED TO HARD CEILING. LUMINAIRE REQUIRES ENDCAP KNOCKOUTS FOR INSTALLATION.
F13	NOT USED	NOT USED					
F14	3" SURFACE MOUNTED LED CURVED SLOT	LUMENWERX #CURV2XYZPAT-D-HLO-NA-SW-90CRI-750LMF-NA-30K-[LENGTH]-UNV-D1-1C-#EC##-DRM-[FINISH]	7.2W/LF, 90CRI 3000K 750LM/LF	0-10V DIMMING 1%		7.2	TOP OF LUMINAIRE TO BE FLUSHED WITH CEILING. ARCHITECT TO CONFIRM FINISH. DRIVER TO BE REMOTED.
F15	NOT USED	NOT USED					
F16	5" WALL MOUONTED LED STAIR LIGHT	PMC LIGHTING #D-W-30K-055-[LENGTH]-AL-[FINISH]-UNV-MOD2CIRCUIT	3.4W/LF, 90 CRI 3000K 550LM/LF	0-10V DIMMING 1%		3.4	LUMINAIRE TO BE 2-CIRCUITED (NORMAL & EMERGENCY POWER) REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE LENGTH. ARCHITECT TO CONFIRM FINISH.
F17	3" STEM MOUNTED LED INDIRECT ASYMMETRIC LINEAR SLOT	ELLIPTIPAR #S107-L-[LENGTH]-[MOUNTING]-[FINISH]-M-OO-O-930-ZX	3.3W/LF, 90CRI 3000K 480 LM/LF	0-10V DIMMING 1%			PROVIDE AN ALLOWANCE FOR $100 PER FOOT
EX1	3" RECESSED LED CURVED SLOT - WET RATED	LUMENWERX #CURVSLIMSEAL2RPAT-D-IP64-EPDO-SW-90CRI-500LMF-30K-[LENGTH]-UNV-RD1-IC-[POWER FEED] [MOUNTING]-[FINISH]-FL	4W/LF, 90 CRI 3000K 500LM/LF	0-10V DIMMING 1%		4	CONTRACTOR TO COORDINATE POWER FEED, PRIOR TO INSTALLATION. ARCHITECT TO CONFIRM FINISH. DRIVER TO BE REMOTED.
X1	LED EXIT SIGN - EDGELIT	ISOLITE #ELT2-[OPERATION]-G-[FACE]-AG-[FRAME COLOR]-[MOUNTING]-[CHEVRON]	2.5W			2.5	PROVIDE MOUNTING FOR CONFIGURATIONS INDICATED ON PLANS PROVIDE FACES AND CHEVRONS FOR LAYOUT INDICATED ON PLANS PROVIDE STEM MOUNTING KIT AS REQUIRED, PROVIDE SURFACE MOUNT OR RECESSED AS REQUIRED.

NOTES:

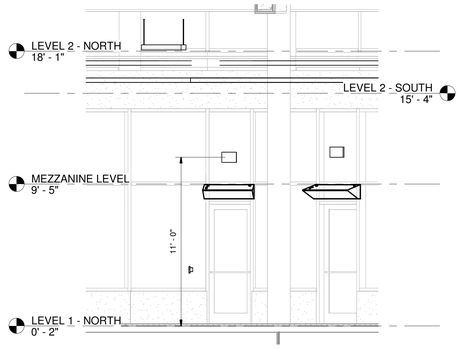
1. WIRE ALL EXIT SIGNS AND EMERGENCY BATTERY PACKS AHEAD OF ALL SWITCHING.
2. ALL 0-10VOLT LED DIMMING DRIVERS SHALL MEET THE REQUIREMENTS OF IEC 60929 AND SHALL HAVE AN ISOLATED 0-10VDC CONTROL CIRCUIT.
3. WHERE N/E IS NOTED, PROVIDE FIXTURE WITH TWO (2) DRIVERS. ONE DRIVER SHALL BE POWERED FROM THE NORMAL CIRCUIT AND ONE SHALL BE POWERED FROM THE EMERGENCY CIRCUIT.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REMOTE DRIVER LOCATIONS. COORDINATE DRIVER LOCATIONS WITH THE ARCHITECT. PROVIDE WIRE SIZE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DO NOT EXCEED MANUFACTURER'S RECOMMENDATIONS FOR DISTANCE.



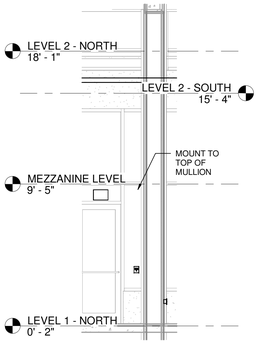
1 EAST VESTIBULE EXIT SIGN MOUNTING
NOT TO SCALE



2 ENTRY SCREENING INNER DOOR EXIT SIGN MOUNTING
NOT TO SCALE



3 ENTRY SCREENING EXTERIOR DOUBLE DOOR EXIT SIGN MOUNTING
NOT TO SCALE



4 ENTRY SCREENING SIDE DOOR EXIT SIGN MOUNTING
NOT TO SCALE

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FF PROJECT NO:
2248

ORIGINATION DATE:
10/23/26

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

DRAWN BY:
TEM

CHECKED BY:
AMS

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:

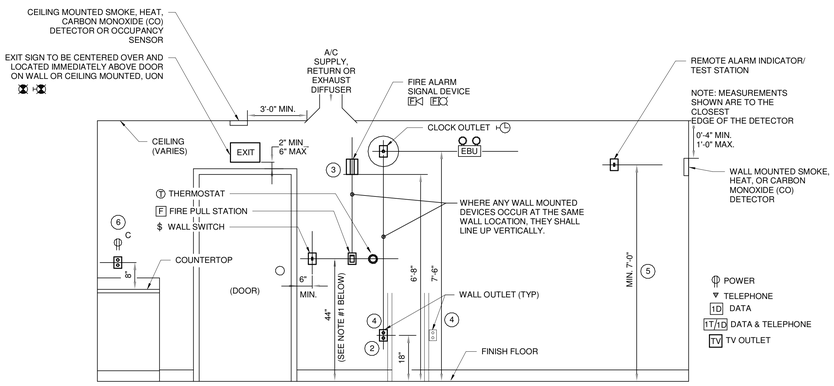
LIGHTING FIXTURE SCHEDULE & DETAILS

SHEET NO:

E421

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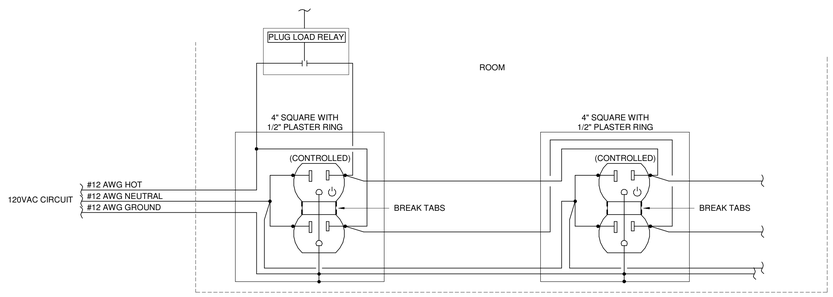
10/22/2026 3:20:33 PM



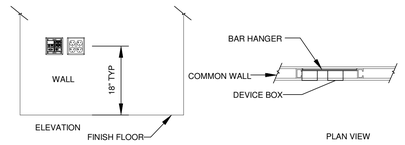
NOTES:

1. HEIGHT GIVEN FOR THIS DEVICE IS THE HEIGHT TO THE CENTERLINE OF THE DEVICE.
2. WHERE ELECTRICAL DEVICES ARE LOCATED ON WALLS ABOVE FINTUBE, MOUNT DEVICES ABOVE FINTUBE. MOUNTING HEIGHT SHALL BE MINIMUM 18" AFF OR 4" ABOVE TOP OF FINTUBE ENCLOSURE. COORDINATE FINTUBE LOCATIONS, SIZE AND MOUNTING HEIGHT WITH MECHANICAL CONTRACTOR.
3. MOUNT NOTIFICATION DEVICE WITH BOTTOM OF LENS AT 80" AFF.
4. WHEN LOCATED ON OPPOSITE SIDES OF COMMON WALLS, DEVICE BOXES SHALL NOT BE INSTALLED BACK-TO-BACK IN THE SAME STUD BAY. TYPICALLY, ALL BOXES SHALL BE ONE COMPLETE STUD BAY APART.
5. COORDINATE LOCATION WITH FIRE DEPARTMENT PRIOR TO THE INSTALLATION OF ANY CABLE OR CONDUIT.
6. COORDINATE DEVICE LOCATION AND MOUNTING WITH ARCHITECT.

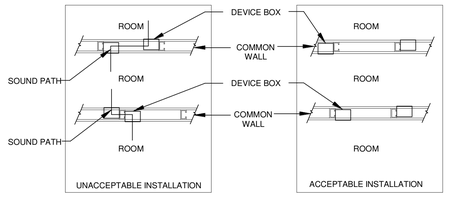
1 TYPICAL DEVICE LOCATIONS
NOT TO SCALE



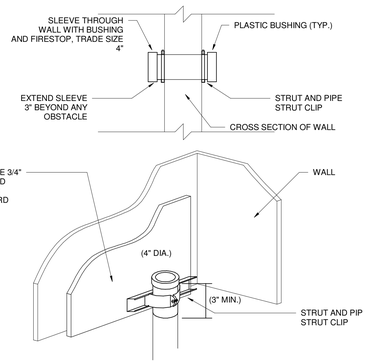
6 TYPICAL CONTROLLED RECEPTACLE WIRING DIAGRAM - SPLIT RECEPTACLE
NOT TO SCALE



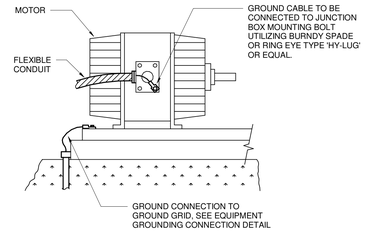
MOUNTING OF ADJACENT ELECTRICAL AND TELECOMMUNICATIONS DEVICE BOXES



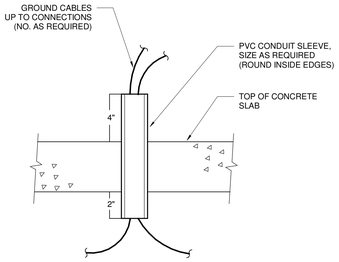
2 ACCEPTABLE DEVICE BOX MOUNTING LOCATION
NOT TO SCALE



5 SLEEVE / CONDUIT DETAILS
NOT TO SCALE



3 TYPICAL MOTOR GROUNDING DETAIL
NOT TO SCALE



4 TYPICAL SLEEVE FOR GROUND CABLE EXTENDING THROUGH CONCRETE SLAB
NOT TO SCALE

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 10/23/26 | SCALE: NOT TO SCALE

DRAWN BY: TEM | CHECKED BY: AMS

ISSUE LOG:

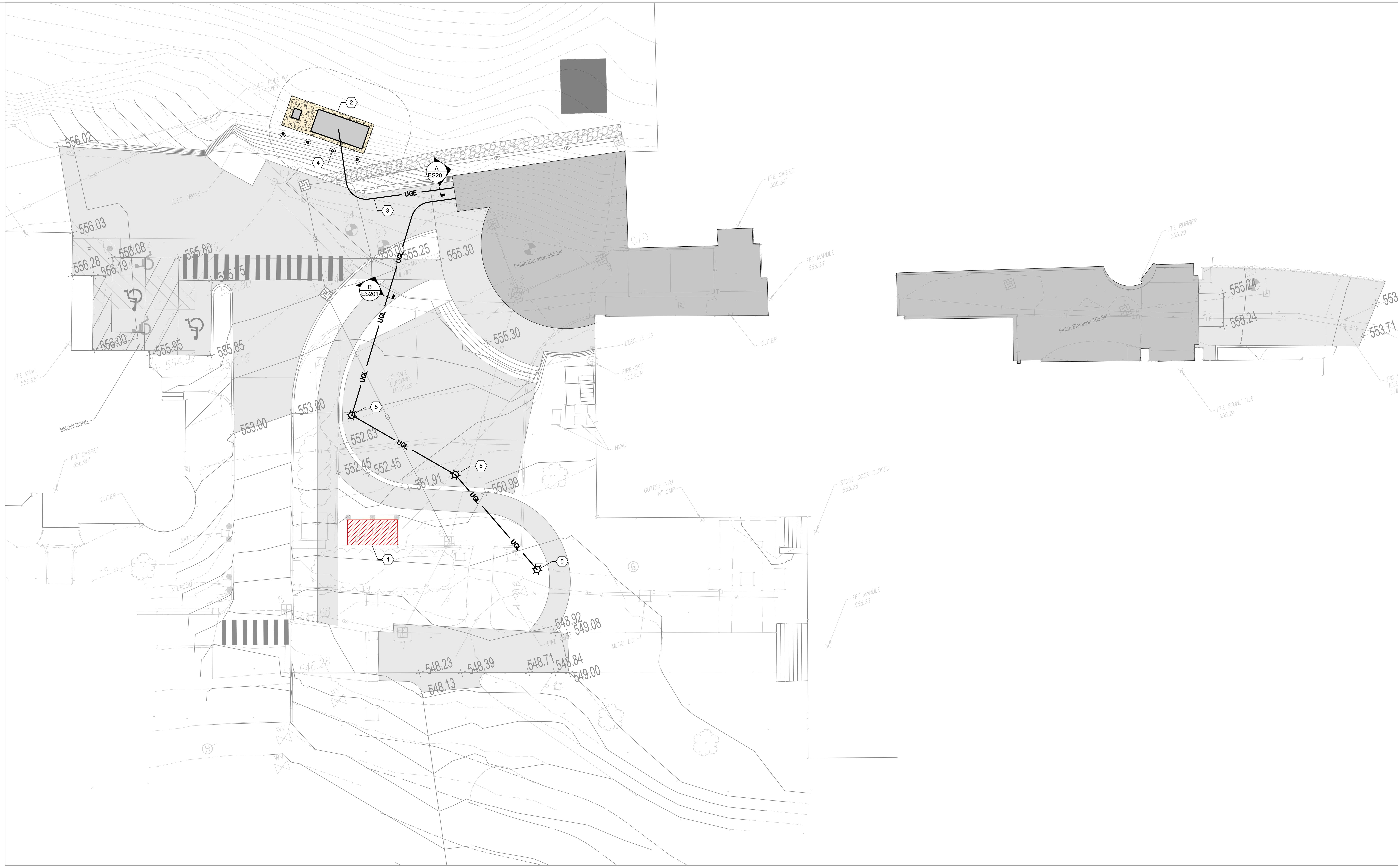
25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

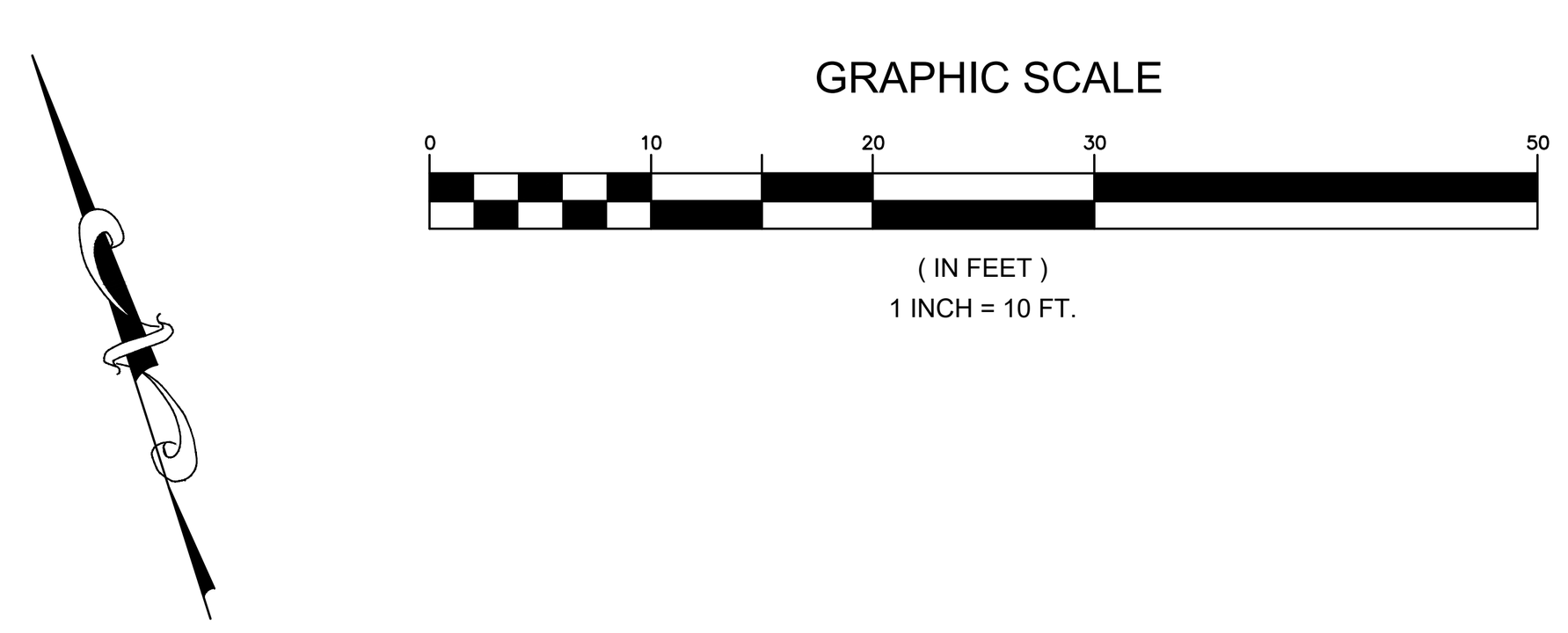
SHEET CONTENTS: ELECTRICAL DETAILS

SHEET NO: E521

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10/22/2026 3:29:31 PM





DRAWING NOTES:

A. SEE ELECTRICAL ONE-LINE DIAGRAMS FOR ALL CABLING REQUIREMENTS. PROVIDE PULL ROPE IN ALL EMPTY CONDUITS.

KEYED NOTES ⬡:

1. DE-ENERGIZE, DISCONNECT, AND REMOVE EXISTING PAD-MOUNTED BATTERY SYSTEM AND SALVAGE FOR REINSTALLATION. COORDINATE STORAGE AND TRANSFER OF EQUIPMENT WITH OWNER.
2. PROVIDE PAD-MOUNTED BATTERY AND FIRE SUPPRESSION SYSTEM. ENSURE A MINIMUM 10' CLEARANCE FROM A PUBLIC WAY.
3. PROVIDE BATTERY AND FIRE SUPPRESSION POWER AND CONTROLS CONDUIT FROM EQUIPMENT TO ELECTRICAL ROOM.
4. PROVIDE EQUIPMENT PROTECTION BOLLARDS AS SHOWN. SEE SHEET ES201 FOR DETAIL.
5. PROVIDE SITE LIGHT FIXTURE, CONCRETE BASE, AND CIRCUITRY FROM ELECTRICAL ROOM. SEE SHEET ES201 FOR DETAIL.

SITE LEGEND

"X"HH [E]	ELECTRICAL HANDHOLE, ("N" NORMAL, "E" EMERGENCY, "L" LIGHTING, "ST" STANDBY)
"X"HH [C]	TELECOM HANDHOLE / LOW VOLTAGE ("T" TELECOM, "CT" EMERGENCY CONTROLS)
EMH"#" (E)	CONCRETE ELECTRICAL MANHOLE
TMH"#" (C)	CONCRETE TELECOM MANHOLE
UGE	UNDERGROUND ELECTRICAL PATHWAY (GROUP OF CONDUITS)
UPE	UNDERGROUND PRIMARY PATHWAY
UGL	UNDERGROUND LIGHTING PATHWAY
UGC	UNDERGROUND COMMUNICATIONS PATHWAY (GROUP OF CONDUITS)
	CONCRETE ENCASED DUCTBANK

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248	
ORIGINATION DATE: 10/23/26	SCALE: AS NOTED
DRAWN BY: WRB	CHECKED BY: FPW

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:

ELECTRICAL SITE PLAN

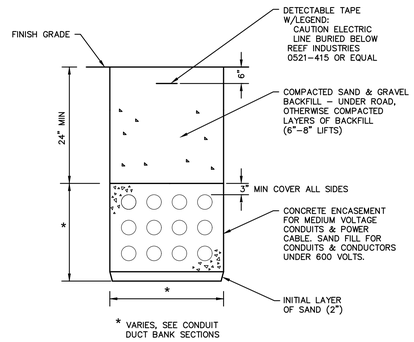
SHEET NO:

ES101

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TRENCHING NOTES

1. CONTRACTOR SHALL USE EXTREME CAUTION WHEN TRENCHING. DIGGING TEST PITS IS REQUIRED AT EVERY UTILITY CROSSING. THE KNOWN UNDERGROUND UTILITIES ARE INDICATED ON THE DRAWINGS. FAILURE TO PERFORM TEST PITS MAY RESULT IN UNNECESSARY DELAYS AND CONFLICTS FOR WHICH THE CONTRACTOR MAY BE HELD RESPONSIBLE.
2. TEST PITS SHALL BE COORDINATED WITH THE ENGINEER, AND ALL SHALL INCLUDE INFORMATION AS TO SIZE AND CONFIGURATION OF PIPES FOUND AS WELL AS INVERT ELEVATIONS.
3. TRENCH BOTTOM SHALL BE UNDISTURBED, FIRM, AND UNIFORM FOR ITS ENTIRE LENGTH.
4. KEEP THE TRENCH WIDTH AS NARROW AS POSSIBLE TO AVOID ERECTING FORMS FOR CONCRETE.
5. PLACE 2" LAYER OF SAND IN BOTTOM OF TRENCH AS BASE FOR CONCRETE PLACEMENT.
6. WHEN FINAL BACKFILLING IS PERFORMED, UTILIZE EXCAVATED MATERIAL. REMOVE ALL LARGE ROCKS, FOREIGN MATERIALS, ETC. TO AVOID DAMAGE TO CONDUITS.
7. ALL UNDERGROUND CONDUITS SHALL BE AS SHOWN ON THE CONDUIT SCHEDULE, ENCASED IN CONCRETE, UNLESS OTHERWISE INDICATED ON DRAWINGS.
8. ALL UNDERGROUND CONDUITS SHALL BE RIGID PVC SCHEDULE 40, ENCASED IN CONCRETE, UNLESS OTHERWISE INDICATED ON DRAWINGS.
9. SEAL ALL CONDUIT JOINTS AND ALL AROUND EACH CONDUIT AT ALL WALL PENETRATIONS.
10. ALL DUCTS SHALL BE CAPPED DURING CONCRETE POURING AND LEFT CAPPED UNTIL CABLE PULLING BEGINS.
11. ALL CONDUIT SHALL BE SLOPED @ 3"/100' MINIMUM TO DRAIN.
12. INDICATED DIMENSIONS FOR THE SPACING OF CONDUIT IN THE DUCT BANKS ARE MINIMUMS. RIGID PLASTIC SPACERS AT INTERVALS OF 10'-0" OR LESS ARE RECOMMENDED FOR DUCT BANKS ENCASED IN CONCRETE.



1 TYPICAL ELECTRICAL/TELECOM TRENCH SECTION
NOT TO SCALE

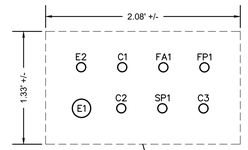
CONDUIT SPACING WHEN USING SPACERS

CONDUIT SIZE	CONDUIT SIZE O.D.	STANDARD CONDUIT SEPARATIONS
4"	4.50"	℄ TO ℄
		HOR. 7 1/2"
		VERT. 7 1/2"
		* E.O.C. 5 1/4"
5"	5.50"	HOR. 8 9/16"
		VERT. 8 9/16"
		* E.O.C. 5 3/4"

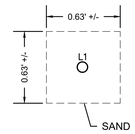
* DENOTES ℄ OF CONDUIT TO EDGE OF CONCRETE

CONDUIT & CONDUCTOR SCHEDULE

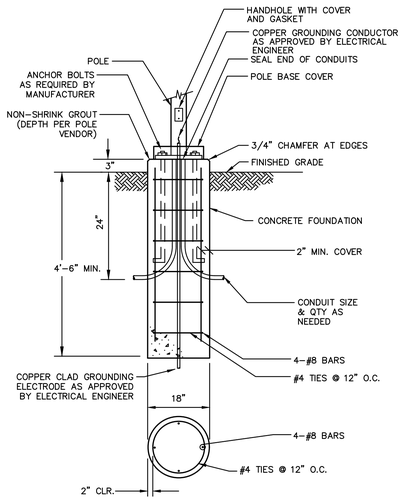
CONDUIT	SIZE	TYPE	CABLE SIZE	CONDUIT USE DESCRIPTION
E1	2.5"	PVC	-	BESS POWER
E2	1.0"	PVC	-	BESS AUX POWER
C1	1.0"	PVC	-	BESS CONTROLS
C2	1.0"	PVC	-	BESS COMMS
FA1	1.0"	PVC	-	FIRE ALARM
SP1	1.0"	PVC	-	SPARE CONDUIT
FP1	1.0"	PVC	-	FIRE ALARM
C3	1.0"	PVC	-	SPARE CONDUIT
L1	1.5"	PVC	-	SITE LIGHTING



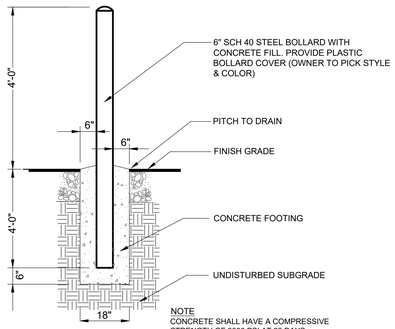
SECTION A ES101



SECTION B ES101

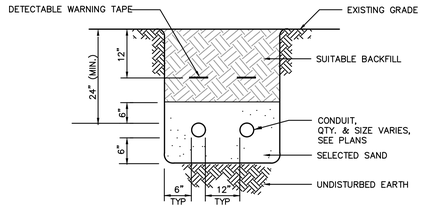


18" DIAMETER - 3" AFG POLE TOP
2 CONCRETE BASE FOUNDATION DETAIL
NOT TO SCALE



NOTE
CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.

3 BOLLARD DETAIL
NOT TO SCALE



4 TYPICAL POWER / TELECOM TRENCH DETAIL
NOT TO SCALE

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FFF PROJECT NO: 2248

ORIGINATION DATE: 10/23/26
SCALE: AS NOTED
DRAWN BY: WRB
CHECKED BY: FPW

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:

ELECTRICAL SITE DETAILS

SHEET NO:

ES201

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ACCESS CONTROL SYSTEM LEGEND

ACP	MASTER ACCESS CONTROL PANEL
DC	MAGNETIC MONITORING CONTACT
DRB	DOOR RELEASE BAR **
EPT	ELECTRIC POWER TRANSFER **
CR	CARD READER
EL	ELECTRIC LOCK
###	DOOR TAG, # = DOOR NUMBER

SUBSCRIPT DEFINITION

XTR = EXISTING TO REMAIN DEVICE

CCTV LEGEND

RECESSED CEILING MOUNTED CAMERA AND ENCLOSURE

WALL MOUNTED CAMERA AND ENCLOSURE

NONE = FIXED FIELD OF VIEW CAMERA
180 = 180-DEGREE FIELD OF VIEW CAMERA
270 = 270-DEGREE FIELD OF VIEW CAMERA
360 = 360-DEGREE FIELD OF VIEW CAMERA
XTR = EXISTING TO REMAIN CAMERA

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT *
C	COUNTER HEIGHT
CLG	CEILING MOUNTED
CUH	CABINET UNIT HEATER *
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN *
EHH	ELECTRICAL HANDHOLE
EMH	ELECTRICAL MANHOLE
FB	FAN BOX *
FIBO	FURNISHED AND INSTALLED BY OWNER/OTHERS
HOA	HAND-OFF-AUTO SELECTOR SWITCH
HP	HORSEPOWER
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MD	MOTORIZED DOOR **
MH	MOUNTING HEIGHT
NTS	NOT TO SCALE
OD	OVERHEAD DOOR **
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
PC	PLUMBING CONTRACTOR
PUH	PROPELLER UNIT HEATER *
RF	RETURN FAN *
RTU	ROOF TOP UNIT *
SF	SUPPLY FAN *
THH	TELECOMMUNICATIONS HANDHOLE
TMH	TELECOMMUNICATIONS MANHOLE
TYP	TYPICAL
VP	VANDAL PROOF
WUH	WALL MOUNTED UNIT HEATER *
*	EQUIPMENT PROVIDED BY MECHANICAL TRADE, WIRED BY ELECTRICAL TRADE
**	EQUIPMENT PROVIDED BY DOOR HARDWARE TRADE, WIRED BY ELECTRICAL TRADE

SECURITY TRADE NOTES

SEC-1 ALL SECURITY RELATED WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES AND THE CURRENT NATIONAL ELECTRICAL CODE (NEC) BY SECURITY CONTRACTORS LICENSED AS AND IF REQUIRED BY THE STATE IN WHICH THE WORK IS PERFORMED.

SEC-2 THE SECURITY CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT PRIOR TO INSTALLING ANY CONDUIT AND/OR CABLE. IF REQUIREMENTS DIFFER FROM THOSE INDICATED, OR IF ADDITIONAL EQUIPMENT IS REQUIRED BY CODE, INFORM THE ENGINEER.

SEC-3 MOUNTING HEIGHTS GIVEN FOR ALL DEVICES (CARD READERS, CAMERAS, ETC,) AND SECURITY EQUIPMENT ARE TO THE CENTERLINE OF THE PANEL OR JUNCTION BOX USED TO MOUNT THE DEVICE, UNLESS OTHERWISE NOTED.

SEC-4 COORDINATE FINAL LOCATIONS OF SECURITY DEVICES AND OTHER EQUIPMENT WITH REFLECTED CEILING PLANS AND ALL OTHER TRADE DRAWINGS PRIOR TO INSTALLATION.

SEC-5 PROVIDE AND ENSURE FIREPROOFING OF ALL CONDUIT, CABLING AND ANY OTHER SECURITY DEVICES THROUGH FIRE RATED MEMBRANES, BARRIERS, OR ASSEMBLIES.

SEC-6 PROVIDE PULL STRINGS IN ALL CONDUIT SYSTEMS LEFT FOR USE BY OTHERS.

SEC-7 PROVIDE EXPANSION FITTINGS IN CONDUIT RISERS FROM ALL EXTERIOR UNDERGROUND CONDUITS TO FIXED EQUIPMENT OR CONDUIT FITTINGS AND PROVIDE FLEXIBLE CONNECTIONS TO ANY EQUIPMENT SUBJECT TO SETTLEMENT OR FROST HEAVES.

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY TO ALL RIST-FROST-SHUMWAY ENGINEERING, INC., DRAWINGS AND TRADES ASSOCIATED WITH THOSE DRAWINGS INVOLVED ON THIS PROJECT:

G-1 RIST-FROST-SHUMWAY ENGINEERING, INC., WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND/OR THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE GUIDANCE OF RIST-FROST-SHUMWAY ENGINEERING, INC., WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE DISCOVERED OR ALLEGED.

G-2 ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS INCLUDING, BUT NOT LIMITED TO: NFPA, IBC, UL, SMACNA, OSHA, AND NEC.

G-3 THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL PROTECT THE WORK SITE, SURROUNDING AREAS AND OCCUPANTS FROM DAMAGE AND INJURY.

G-4 THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE CONTRACT DOCUMENTS. ALL DRAWINGS OF ANY PARTICULAR TRADE SHALL BE USED IN CONJUNCTION WITH DRAWINGS OF ALL OTHER TRADES TO COORDINATE ALL CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED WORK. ANY PROPOSED CHANGES, VARIATIONS OR SUBSTITUTIONS MUST BE REVIEWED AND ACCEPTED BY THE ENGINEER PRIOR TO IMPLEMENTATION.

G-5 ALL DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN INTENT AND EXTENT OF THE WORK. THEY SHALL BE CONSIDERED PARTLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR ROUGHING-IN MEASUREMENTS OR TO SERVE AS SHOP DRAWINGS.

G-6 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS (AS-BUILT OR OTHERWISE) BEFORE COMMENCING FABRICATION, AND/OR ORDERING MATERIALS.

G-7 DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS OTHERWISE INDICATED.

G-8 INFORMATION ON THESE DRAWINGS PERTAINING TO AS-BUILT CONSTRUCTION AND OTHER EXISTING CONDITIONS HAVE BEEN OBTAINED FROM OTHER DOCUMENTATION OR BY FIELD INVESTIGATION. (SEE GENERAL AND SUPPLEMENTAL CONDITIONS FOR LISTING). THIS INFORMATION IS PROVIDED FOR THE CONTRACTOR'S BENEFIT IN PERFORMANCE OF THE WORK.

G-9 IN THE EVENT THE CONTRACTOR ENCOUNTERS MATERIAL REASONABLY BELIEVED TO BE HAZARDOUS WHICH HAS NOT BEEN RENDERED HARMLESS, THE CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO THE OWNER AND ARCHITECT/ENGINEER IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED UNTIL WRITTEN VERIFICATION BY THE OWNER THAT THE MATERIAL HAS BEEN REMOVED OR OTHERWISE BEEN RENDERED HARMLESS.

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STATE HOUSE PANDEMIC / MITIGATION PROJECT

MONTPELIER, VT

FF PROJECT NO:
2248

ORIGINATION DATE: **10/23/26**
SCALE: **NO SCALE**
DRAWN BY: **DWR**
CHECKED BY: **BER**

ISSUE LOG:

25% DESIGN DEVELOPMENT	
50% DESIGN DEVELOPMENT	02/13/2026
75% DESIGN DEVELOPMENT	05/01/2026
75% DD SET/OWNER REV.	05/29/2026
100% DD SET	10/23/2026

SHEET CONTENTS:
SECURITY LEGENDS, NOTES & ABBREVIATIONS

SHEET NO:
SEC001

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10/22/2026 4:13:13 PM

KEYED NOTES

1. CCTV CAMERA LOCATION. MOUNT CAMERA ON SURFACE OF CURTAIN WALL MULLION SYSTEM USING MANUFACTURER RECOMMENDED HARDWARE AND METHODS. COORDINATE INSTALLATION WITH ELECTRICAL AND TELECOM CONTRACTORS AND ARCHITECT.
2. EXISTING TO REMAIN CAMERA LOCATION. COORDINATE RECONFIGURATION OF CAMERA FIELD OF VIEW AND PROGRAMMING WITH OWNER.
3. COLLOCATE MOUNTING OF CARD READER ON BOLLARD WITH DOOR OPERATOR BUTTON. COORDINATE OPERATION OF DOOR ACCESS CONTROL AND DOOR OPERATOR WITH OWNER.
4. MOUNT NEW ACCESS CONTROL SYSTEM EXPANSION ENCLOSURE AT 60" AFF. CONNECT NEW MODULES IN NEW ENCLOSURE TO EXISTING INTELLIGENT CONTROLLER MODULE IN EXISTING ACCESS CONTROLLER HEADEND USING MANUFACTURER RECOMMENDED WIRING AND METHODS.
5. DESIGN INTENT IS FOR DOORS TO CONNECT TO NEW ACCESS CONTROL EXPANSION PANEL AND PROGRAMMED TO A LOCK/UNLOCK SCHEDULE (NO CARD READER ACCESS CONTROL OF THESE DOORS).

DRAWING NOTES

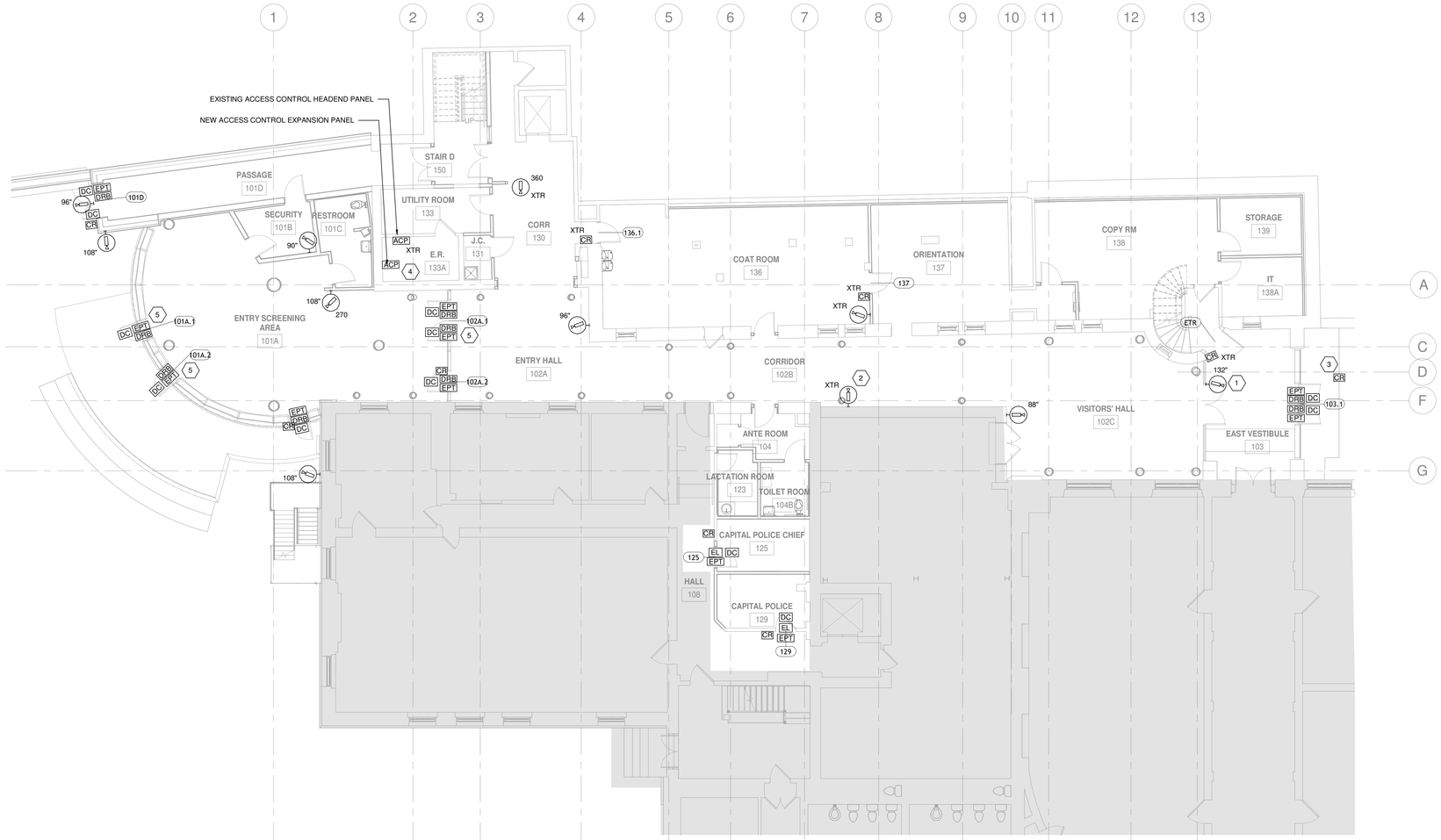
A. REFER TO ARCHITECTURAL DRAWINGS, DETAILS AND ELEVATIONS FOR LOCATION AND MOUNTING HEIGHT OF ALL DEVICES PRIOR TO INSTALLATION.

B. ACCESS CONTROL DOORS AND DEVICES CABLING SHALL ROUTE TO EXISTING ACCESS CONTROL HEADEND PANEL (ACP) LOCATED IN E. R. ROOM 133A ON THIS LEVEL. PROVIDE ADDITIONAL ENCLOSURES, PANEL MODULES AND POWER SUPPLY COMPONENTS AS NECESSARY TO CONNECT AND SUPPORT NEW ACCESS CONTROLLED DOORS.

C. COORDINATE ACCESS CONTROL FUNCTION AND PROGRAMMING ON ANY DOORS WITH DOOR OPERATORS WITH OWNER AND DOOR CONTRACTOR.

D. ELECTRIC HARDWARE AT ALL ACCESS CONTROLLED DOORS SHALL BE REMOTELY POWERED FROM ACCESS CONTROL HEADEND PANEL.

E. CATEGORY 6 CABLE AND DATA OUTLETS AT CCTV CAMERA LOCATIONS PROVIDED BY TELECOM CONTRACTOR. COORDINATE EXACT LOCATION AND PLANNED COVERAGE PROFILE OF EACH CAMERA WITH ARCHITECT AND OWNER BEFORE INSTALLATION. PROVIDE ALL NECESSARY MANUFACTURER RECOMMENDED MOUNTING HARDWARE FOR EACH CAMERA LOCATION BASED ON CAMERA TYPE, WALL TYPE, AND STRUCTURAL ELEMENTS AT MOUNTING LOCATION.



1 LEVEL 1 SECURITY PLAN
1/8" = 1'-0"

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SHEET CONTENTS:

LEVEL 1 SECURITY PLAN

SHEET NO:

SEC121

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TELECOMMUNICATIONS SYSTEM LEGEND

#T #T/#D #T/#D/#C	TELEPHONE/DATA/CABLE OUTLET LOCATION. (T=TELEPHONE,D=DATA C=CABLE) MH=18"AFF, UON. DOUBLE GANG OUTLET BOX WITH 1"C TO SPACE ABOVE ACCESSIBLE CEILING. PROVIDE SINGLE GANG PLASTER RING. # INDICATES TOTAL NUMBER OF JACKS AND CABLES REQUIRED. (#)"=MOUNTING HEIGHT ABOVE FINISH FLOOR
	SUBSCRIPT DEFINITIONS CLG = CEILING MOUNT WAO OR DEVICE S = CCTV CAMERA RELATED DATA OUTLET LOCATION XRL = EXISTING DEVICE, RELOCATED DURING PROJECT
	FLOOR MOUNTED 2 POST EQUIPMENT RACK
	WALL MOUNTED EQUIPMENT RACK
WAP	PROVIDE TWO (2) CATEGORY 6 CABLES WITH 10' SERVICE COIL TERMINATED AT LOCATION FOR WIRELESS ACCESS POINT.

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT *
C	COUNTER HEIGHT
CLG	CEILING MOUNTED
CUH	CABINET UNIT HEATER *
DN	DOWN
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN *
EHH	ELECTRICAL HANDHOLE
EMH	ELECTRICAL MANHOLE
FB	FAN BOX *
FIBO	FURNISHED AND INSTALLED BY OWNER/OTHERS
HOA	HAND-OFF-AUTO SELECTOR SWITCH
HP	HORSEPOWER
LOR	LOCATED ON ROOF
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MD	MOTORIZED DOOR **
MH	MOUNTING HEIGHT
NTS	NOT TO SCALE
OD	OVERHEAD DOOR **
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
PC	PLUMBING CONTRACTOR
PUH	PROPELLER UNIT HEATER *
RF	RETURN FAN *
RTU	ROOF TOP UNIT *
SF	SUPPLY FAN *
SPCP	SEWAGE PUMP CONTROL PANEL
S/S	START/STOP PUSH BUTTONS
S. STL	STAINLESS STEEL
THH	TELECOMMUNICATIONS HANDHOLE
TMH	TELECOMMUNICATIONS MANHOLE
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VP	VANDAL PROOF
WPCP	WELL PUMP CONTROL PANEL
WG	WIRE GUARD
WUH	WALL MOUNTED UNIT HEATER *
*	EQUIPMENT PROVIDED BY MECHANICAL TRADE, WIRED BY ELECTRICAL TRADE
**	EQUIPMENT PROVIDED BY DOOR HARDWARE TRADE, WIRED BY ELECTRICAL TRADE

TELECOMMUNICATION TRADE NOTES

T-1 ALL TELECOMMUNICATION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES AND STANDARDS, INCLUDING ALL ANSI/TIA/EIA STANDARDS RELATED TO TELECOMMUNICATION CABLING SYSTEMS AND THE CURRENT NATIONAL ELECTRICAL CODE (NEC). ALL WORK SHALL BE PERFORMED BY CERTIFIED/REGISTERED TELECOMMUNICATION TECHNICIANS AND RELATED ELECTRICAL WORK SHALL BE PERFORMED BY ELECTRICIANS LICENSED BY THE STATE IN WHICH THE WORK IS PERFORMED.

T-2 THE TELECOMMUNICATION CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT PRIOR TO INSTALLING ANY CONDUIT AND/OR CABLE. IF TELECOMMUNICATION REQUIREMENTS DIFFER FROM THOSE INDICATED, OR IF ADDITIONAL EQUIPMENT IS REQUIRED BY CODE, INFORM THE ENGINEER.

T-3 ALL TELECOMMUNICATION HORIZONTAL CABLING CIRCUITS FROM THE MDF/IDF TO THE WALL OUTLET SHALL BE A SINGLE HOMERUN WITH NO SPLICES. CABLING LENGTH SHALL NOT EXCEED 295'(90M).

T-4 MOUNTING HEIGHTS GIVEN FOR ALL TELECOMMUNICATION DEVICES ARE TO THE CENTERLINE OF THE JUNCTION BOX USED TO MOUNT THE DEVICE, UNLESS OTHERWISE NOTED.

T-5 REMOVE AND DISPOSE OF EXISTING TELECOMMUNICATION EQUIPMENT AND ASSOCIATED BOXES, CONDUIT AND CABLING WHERE INDICATED OR WHERE LOCATED ON OR WITHIN WALLS AND CEILINGS BEING DEMOLISHED OR ALTERED AS A RESULT OF THIS CONTRACT, UNLESS OTHERWISE INDICATED. IT IS NOT THE INTENT OF THESE DRAWINGS TO INDICATE ALL ELECTRICAL ITEMS TO BE REMOVED.

T-6 CABLING INDICATED ON DRAWINGS IS SCHEMATIC IN NATURE AND SHALL NOT BE CONSIDERED TO BE POINT-TO-POINT, UNLESS OTHERWISE NOTED.

T-7 EXISTING TELECOMMUNICATION ITEMS THAT REMAIN SHALL BE PROTECTED AND RETERMINATED IF NECESSARY, TO ENSURE CONTINUED OPERATION.

T-8 PROVIDE AND ENSURE PROPER FIREPROOFING OF ALL TELECOMMUNICATION CONDUITS AND CABLING THROUGH FIRE RATED ASSEMBLIES.

T-9 PROVIDE PULL STRINGS IN ALL CONDUIT SYSTEMS LEFT FOR USE BY OTHERS.

T-10 MOUNTING HEIGHT FOR TELECOMMUNICATION DEVICES LOCATED ON WALLS ABOVE FINTUBE SHALL BE 4" FROM TOP OF FINTUBE ENCLOSURE TO CENTERLINE OF TELECOMMUNICATION DEVICE.

T-11 ALL COMPONENTS SHOWN ON RISER, BUT NOT SHOWN ON PLANS OR SPEC OR VICE VERSA SHALL BE INCLUDED AS IF LISTED IN ALL DOCUMENTS.

T-12 CABLE ROUTING SHALL BE COORDINATED WITH OTHER TRADES. CABLES SHALL ALSO BE ACCESSIBLY ROUTED PARALLEL TO BUILDING COLUMN LINES, AND ALL BENDS SHALL BE 90 DEGREES AND MUST ADHERE TO CABLE BEND RADIUS LIMITATIONS, PER STANDARDS OUTLINED IN THE WRITTEN SPECIFICATION.

T-13 CONTRACTOR TO VERIFY ALL MEASUREMENTS PRIOR TO INSTALLATION OF NEW EQUIPMENT CABLING.

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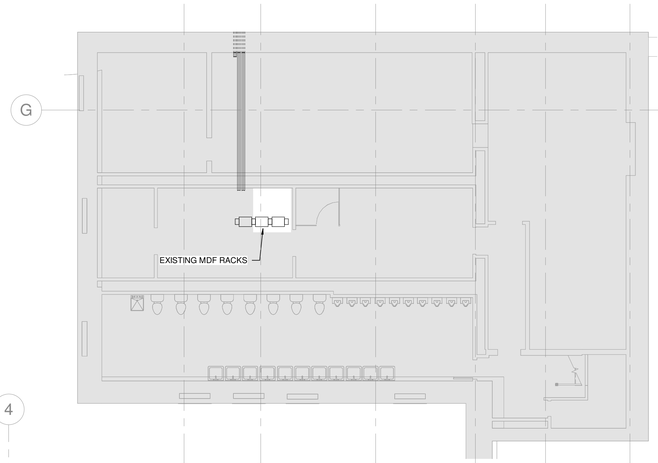
TELECOM LEGENDS, NOTES & ABBREVIATIONS

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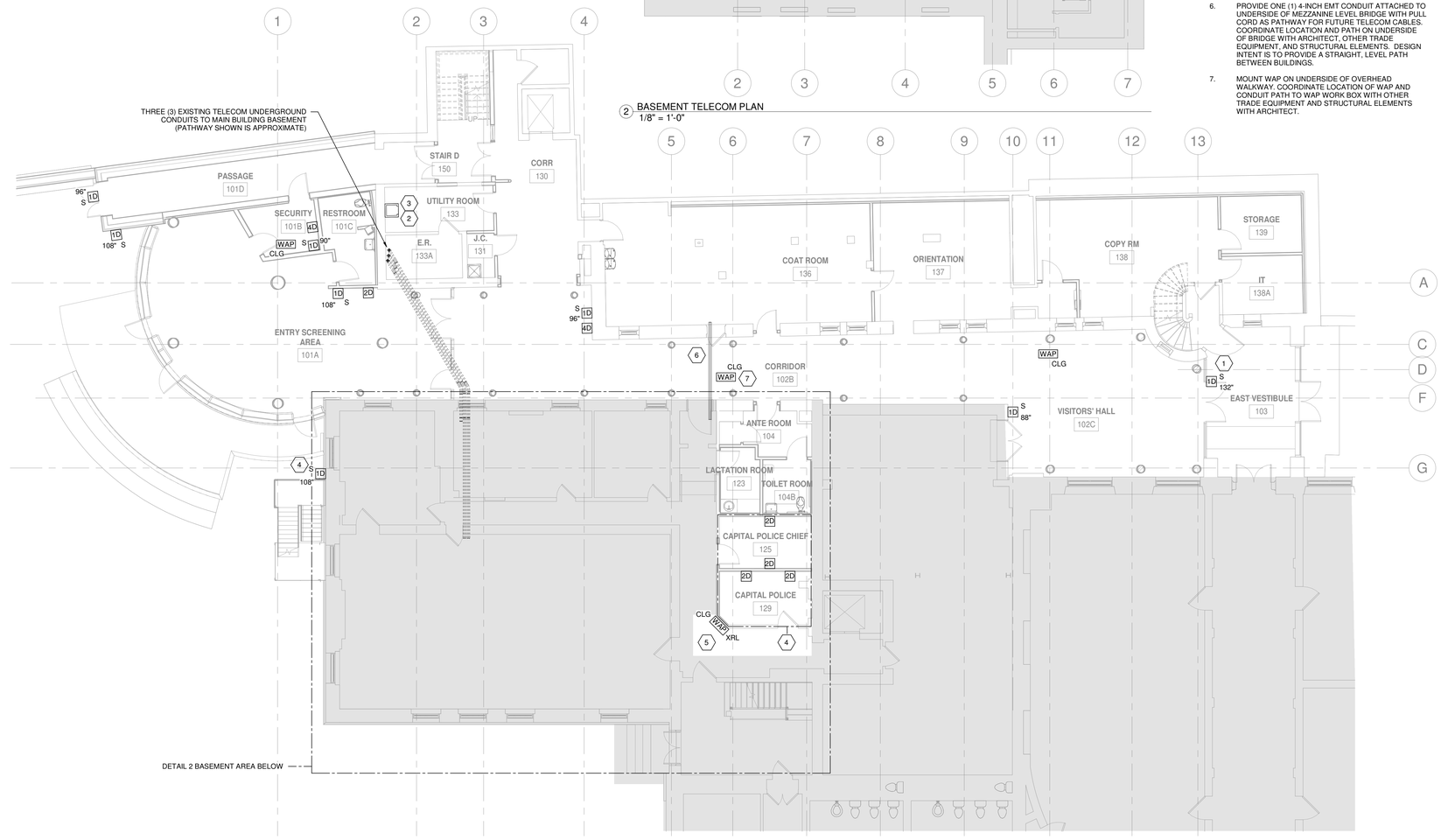
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2 BASEMENT TELECOM PLAN
1/8" = 1'-0"



1 LEVEL 1 TELECOM PLAN
1/8" = 1'-0"

KEYED NOTES

1. CCTV CAMERA DATA OUTLET. ROUTE CABLE THROUGH CURTAIN WALL MULLION SYSTEM TO LOCATION. TERMINATE CATEGORY 6 CABLE WITH CATEGORY 6 MALE RJ45 PLUG FOR DIRECT CONNECTION TO CAMERA NETWORK PORT. COORDINATE INSTALLATION WITH SECURITY CONTRACTOR AND ARCHITECT.
2. NEW WALL MOUNT IDF CABINET. MOUNT IDF CABINET AT 66" AFF TO BOTTOM EDGE AND IN LOCATION ON WALL SUCH THAT THE UNIT WILL SWING OPEN AT LEAST 90 DEGREES WITHOUT OBSTRUCTION. THIS IDF SHALL HAVE ONE (1) 24-STRAND INDOOR/OUTDOOR RISER RATED ARMORED OM3 FIBER CABLE CONNECTING IT TO THE EXISTING MDF RACKS LOCATED ON THE BASEMENT LEVEL OF THE MAIN BUILDING. THE FIBER CABLE SHALL USE THE EXISTING UNDERGROUND CONDUIT THAT STUBS UP IN THE ADJACENT ELECTRICAL ROOM 133A AS THE PATH TO THE MAIN BUILDING BASEMENT.
3. UNLESS OTHERWISE NOTED, ALL NEW WORK AREA OUTLETS (WAO) IN PROJECT SCOPE AREAS SHALL HAVE THEIR CATEGORY 6 DATA CABLES RUN TO AND TERMINATED IN THIS IDF.
4. WORK AREA OUTLET LOCATION SHALL HAVE ITS CATEGORY 6 DATA CABLES RUN TO AND TERMINATED IN EXISTING BASEMENT LEVEL MDF.
5. EXISTING CEILING MOUNT WIRELESS ACCESS POINT (WAP) DE-INSTALLED DURING DEMOLITION. CONNECT WAP TO EXISTING CATEGORY 6 DATA OUTLET WITH NEW CATEGORY 6 LINECORD. RE-MOUNT WAP ON CEILING AT LOCATION AS SHOWN IN DRAWING. COORDINATE INSTALLATION WITH OWNER.
6. PROVIDE ONE (1) 4-INCH EMT CONDUIT ATTACHED TO UNDERSIDE OF MEZZANINE LEVEL BRIDGE WITH PULL CORD AS PATHWAY FOR FUTURE TELECOM CABLES. COORDINATE LOCATION AND PATH ON UNDERSIDE OF BRIDGE WITH ARCHITECT, OTHER TRADE EQUIPMENT, AND STRUCTURAL ELEMENTS. DESIGN INTENT IS TO PROVIDE A STRAIGHT, LEVEL PATH BETWEEN BUILDINGS.
7. MOUNT WAP ON UNDERSIDE OF OVERHEAD WALKWAY. COORDINATE LOCATION OF WAP AND CONDUIT PATH TO WAP WORK BOX WITH OTHER TRADE EQUIPMENT AND STRUCTURAL ELEMENTS WITH ARCHITECT.

DRAWING NOTES

A. REFER TO ARCHITECTURAL DRAWINGS, DETAILS AND ELEVATIONS FOR LOCATION AND MOUNTING HEIGHT OF ALL DEVICES PRIOR TO INSTALLATION.

B. WIRELESS ACCESS POINTS (WAP'S) AND MOUNTING HARDWARE OWNER FURNISHED, CONTRACTOR INSTALLED. COORDINATE EXACT LOCATION AND MOUNT REQUIRED OF EACH WAP WITH OWNER.

C. PROVIDE DOUBLE GANG DEEP WORK BOX WITH SINGLE GANG REDUCER/MUD RING FOR ALL WAO LOCATIONS UNLESS OTHERWISE NOTED. FROM WORK BOX TO NEAREST ACCESSIBLE CEILING PLENUM, J-HOOK SUPPORT, OR CABLE TRAY, PROVIDE MINIMUM 1-INCH EMT CONDUIT WITH BUSHINGS. USING CODE COMPLIANT FIRESTOP SYSTEM AND FOLLOWING MANUFACTURER INSTRUCTIONS AND RECOMMENDATIONS, FIRESTOP ALL MEMBRANE AND THROUGH-WALL OR FLOOR PENETRATIONS AS NECESSARY TO RETURN PENETRATED BARRIER TO ORIGINAL FIRE RATING. CONDUIT, WORK BOX, PULL STRING AND FIRESTOP BY ELECTRICAL CONTRACTOR.

D. PROVIDE PROPERLY SIZED J-HOOK CABLE PATHWAY SUPPORT INFRASTRUCTURE ABOVE ACCESSIBLE CEILINGS. J-HOOK FILL SHALL NOT EXCEED 70% AND UNSUPPORTED CABLE SPANS SHALL NOT EXCEED 48". CABLES SHALL NOT LIE ON CEILINGS OR DRAPE OVER PIPES, DUCTS, OR OTHER ABOVE-CEILING EQUIPMENT OR STRUCTURE. ATTACH J-HOOKS TO WALLS OR CEILING STRUCTURAL DECK WITH MANUFACTURER RECOMMENDED HARDWARE AND METHODS.

E. PROVIDE APPROPRIATELY SIZED EMT CONDUITS FOR TELECOM CABLE PATHWAYS ACROSS HARD CEILINGS SPANS GREATER THAN 60 INCHES OR IN EXPOSED CEILING AREAS. CONDUIT FILL RATIO SHALL NOT EXCEED 40% FOR CONDUIT LENGTHS EQUAL TO OR GREATER THAN SIXTY INCHES (60"), 34% FOR CONDUIT SECTIONS WITH UP TO AGGREGATE TOTAL OF 90-DEGREES BEND, AND 27% FOR CONDUIT SECTIONS WITH UP TO AGGREGATE TOTAL OF 180-DEGREE BEND. PROVIDE BUSHINGS ON EACH END OF CONDUIT. USING CODE COMPLIANT FIRESTOP SYSTEM AND FOLLOWING MANUFACTURER INSTRUCTIONS AND RECOMMENDATIONS, FIRESTOP ALL MEMBRANE AND THROUGH WALL OR FLOOR PENETRATIONS AS NECESSARY TO RETURN PENETRATED BARRIER TO ORIGINAL FIRE RATING. CONDUITS, SLEEVES, PULL STRINGS, AND FIRESTOP BY ELECTRICAL CONTRACTOR.

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SHEET CONTENTS:

LEVEL 1 TELECOM PLAN

SHEET NO:

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