

ADDENDUM

Date April 19, 2024

To Prospective Bidders

Re Addendum No. 1 to the Construction Documents for:

DDPC – IF&W Building Window Replacement
Dorothea Dix Psychiatric Campus
Bangor ME
Project No. 23113
BGS Project No. 3666

This Addendum forms a part of the Contract Documents and modifies the original Construction Documents dated March 28, 2024. Acknowledgement of receipt of this Addendum is explicitly implied by the submission of a Bid.

This Addendum consists of three pages, the Pre-Bid Meeting Attendance Form, Specification Sections Table of Contents, 001113, 004321, 012100, 014339, 028213, 028333, and 099000 and drawings as listed on page three.

Harriman



Mark D. Lee, AIA
Principal

INFORMATION AVAILABLE TO BIDDERS

1. Pre-Bid Meeting Attendance Form.

QUESTION AND ANSWERS

- Q1. What needs to happen with the existing metal window security grilles?
A1. The (8) existing grilles will be removed prior to window replacement scope start and will not be reinstalled.
- Q2. What happens to existing screens, blinds and storm windows?
A2. The removal and disposal of all existing window screens, blinds and storm windows to be included in this Scope. The Contractor is entitled to the salvage of these removed elements. The Contractor is responsible for any interior jamb or head finish repair as a result of the removals.
- Q3. Some of the existing windows are frosted. Do the replacement windows need to be frosted too?
A3. No.
- Q4. Does the white window paint need to be cleaned off the exterior brick, stone, and/or stucco?
A4. Yes. See Specification Section 028333 – PAINT REMOVAL issued with this Addendum.
- Q5. The 'G' window in the lower-level Electrical room will be hazardous to access.
A5. See drawing sheet A10-1 revised and reissued with this Addendum.
- Q6. It was recommended that a mockup would be a good way to explore, develop and review a final window installation for approval.
A6. Specifications Section 014339 – MOCKUPS issued with this Addendum.
- Q7. Is the paint on these metal trim profiles lead? How does that get handled?
A7. Lead paint testing was done on a sampling of locations. See hazardous materials report in specification. The Contractor should assume all locations contain lead and include Scope to properly remove existing paint from interior window locations as needed.
- Q8. Does the replacement window unit assembly need to include an interior stop?
A8. Yes. This should be considered millwork. Contractor to provide profile options for Architects' review and approval. Finish Grade Poplar, painted to match interior window finish.
- Q9. Are tempered windows required in the stairs.
A9. Yes. The (4) 'B' windows located in the stairwells should have tempered glazing. Additionally, all windows located at the basement level should have tempered glazing.

Q10. It was observed that some of the windows were cottage style versus the double hung shown in the drawings.

A10. (12) reverse cottage operable units (taller sash on the top with equal daylight openings top and bottom).

Q11. It was observed that some of the windows were hopper style versus the fixed casement shown in the drawings.

A11. The 'G' and 'H' style windows will be fixed double hung units as drawn and noted.

CHANGES TO SPECIFICATIONS

1. TABLE OF CONTENTS
 - a. Revised and reissued with this Addendum.
2. SECTION 001113 – NOTICE TO CONTRACTORS
 - a. Revised and reissued with this Addendum.
3. SECTION 004321 – ALLOWANCE FORM
 - a. Issued with this Addendum.
4. SECTION 012100 – ALLOWANCES
 - a. Issued with this Addendum.
5. SECTION 014339 – MOCKUPS
 - a. Issued with this Addendum.
6. SECTION 028213 – LEAD PAINT AND RELATED WORK
 - a. Revised and reissued with this Addendum.
7. SECTION 028333 – PAINT REMOVAL
 - a. Issued with this Addendum.
8. SECTION 099000 – PAINTING
 - a. Revised and reissued with this Addendum.

DRAWINGS REVISED AND REISSUED WITH THIS ADDENDUM, DATED 04-19-2024:

1. DRAWING A10-1 – EXISTING FLOOR PLANS
2. DRAWING A20-1 – EXISTING ELEVATIONS
3. DRAWING A55-1 – WINDOW SCHEDULE AND DETAILS

PRE-BID MEETING ATTENDANCE FORM

Please print legibly

Project Name: DDPC – IF&W Window Replacement

HA Project No.: 23113

BGS Project No: 3666

	NAME	COMPANY	BUSINESS PHONE	E-MAIL
1.	Jim Wain	Nichols Construction	207-497-0048	jim@nicholsge.com
2.	Zach Burrell	Benchmark Construction	207-831-1421	krice@benchmarkconstruction.com
3.	Larry Dearborn	Refine	207-949-7867	ldearborn@refine.company
4.				
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12.				
13.				

DOROTHEA DIX PSYCHIATRIC CAMPUS
IF&W BUILDING
WINDOW REPLACEMENT
BANGOR, MAINE
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Dorothea Dix Psychiatric Center, Building Suvey Findings. Dated October 19, 2022.

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00 11 13
Notice to Contractors

DDPC - IF&W Window Replacement

BGS #: 3666

The Bureau of General Services (BGS) is conducting a competitive bid process for the Window Replacement Project at the IF&W Building in Bangor, Maine.

The former "IF&W" building is located on the western edge of the Dorothea Dix Psychiatric Center Campus in Bangor. The four story masonry building has 140 windows. The associated Scope includes full removal of existing window, replacement of rough opening blocking, installation of new windows and repair of interior returns. Work is estimated to begin in June of 2024

The contract shall designate the Substantial Completion Date on or before
(6) *six months after contract is awarded* , and the Contract Final Completion Date on or before
(9) *months after contract is awarded*.

1. Submit bids on a completed Contractor Bid Form (section 00 41 13) provided in the Bid Documents, include bid security when required, and scan each item as an attachment to an email addressed to: BGS.Architect@Maine.gov, so as to be received no later than **2:00:00 p.m. on May 9, 2024**. The email subject line shall be marked "**Bid for DDPC - IF&W Window Replacement**".

Bid submissions will be opened and read aloud at the time and date noted above at the Bureau of General Services office, accessible as a video conference call. Those who wish to participate in the call must submit a request for access to BGS.Architect@Maine.gov.

Any bid received after the noted time will not be considered a valid bid and will remain unopened. Any bid submitted by any other means will not be considered a valid bid. In certain circumstances, the Bureau of General Services may require the Bidder to surrender a valid paper copy of the bid form or the bid security document. The Owner reserves the right to accept or reject any or all bids as may best serve the interest of the Owner.

2. Questions and comments on the *bid opening process* shall be addressed to: Joseph H. Ostwald, Director, Division of Planning, Design & Construction, Bureau of General Services, 77 State House Station, Augusta, Maine 04333-0077, BGS.Architect@Maine.gov.
3. Questions and comments regarding the *project* design specifications or drawings shall be directed in writing to the Consultant during the bid period prior to the question and comment deadline of 5:00 p.m. on *April 30, 2024*.

The contact for project related questions to be included in the Addendum are to be addressed to BGS.Architect@Maine.gov with the project name and BGS number in the subject line. The Addendum, if required, will be issued by 5:00 on May 2, 2024.

00 11 13
Notice to Contractors

4. Bid security is required on this project.
The Bidder shall include a satisfactory Bid Bond (section 00 43 13) or a certified or cashier's check for 5% of the bid amount with the completed bid form submitted to the Owner. The Bid Bond form is available on the BGS website.
or
 Bid security is not required on this project.
5. Performance and Payment Bonds are required on this project.
If noted above as required, or if any combination of Base Bid and Alternate Bids amounts selected in the award of the contract exceeds \$125,000.00, the selected Contractor shall furnish a 100% contract Performance Bond (section 00 61 13.13) and a 100% contract Payment Bond (section 00 61 13.16) in the contract amount to cover the execution of the Work. Bond forms are available on the BGS website.
or
 Performance and Payment Bonds are not required on this project.
6. Filed Sub-bids *are not required* on this project.
7. Pre-qualified General Contractors are utilized on this project.
insert the company name, city and state for each
or
 Pre-qualified General Contractors are not utilized on this project.
8. An on-site pre-bid conference (*mandatory* or *optional*) will be conducted for this project. The pre-bid conference is intended for General Contractors. Subcontractors and suppliers are welcome to attend. Contractors who arrive late or leave early for a mandatory meeting may be prohibited from participating in this meeting and bidding.
Original: April 10, 2024 at 10:00am

Secondary: April 23, 2024 at 11:00am. This pre-bid conference is mandatory for all contractors who did not attend the original pre-bid conference.

The group will meet and sign-in at the Dorothea Dix Psychiatric Campus main entrance parking lot located at 656 State Street, Bangor, then proceed to the IF&W site.

or
 An on-site pre-bid conference will not be conducted for this project.

00 11 13
Notice to Contractors

9. Bid Documents - full sets only - will be available on or about *April 18, 2024* and may be obtained as a *downloadable PDF at no cost on the BGS website. Website link from:*

<https://www.maine.gov/dafs/bgs/business-opportunities>

Invitation for Bids

10. Bid Documents may be examined at:

AGC Maine

188 Whitten Road

Augusta, ME 04330

Phone 207-622-4741 Fax 207-622-1625

Construction Summary

734 Chestnut Street

Manchester, NH 03104

Phone 603-627-8856 Fax 603-627-4524

DOCUMENT 004321 - ALLOWANCE FORM

1.1 BID INFORMATION

- A. Bidder: _____.
- B. Project Name: DDPC - IF&W Window Replacement.
- C. Project Location: Dorothea Dix Psychiatric Campus, Bangor, Maine.
- D. Owner: Bureau of General Services (BGS)
- E. Owner Project Number: 3666
- F. Architect: Harriman
- G. Architect Project Number: 23113

1.2 BID FORM SUPPLEMENT

- A. This form is required to be attached to the Bid Form.
- B. The undersigned Bidder certifies that Base Bid submission to which this Bid Supplement is attached includes those allowances described in the Contract Documents and scheduled in Section 012100 "Allowances."

1.3 SUBMISSION OF BID SUPPLEMENT

- A. Respectfully submitted this ____ day of _____, 2024.
- B. Submitted By: _____ (Insert name of bidding firm or corporation).
- C. Authorized Signature: _____ (Handwritten signature).
- D. Signed By: _____ (Type or print name).
- E. Title: _____ (Owner/Partner/President/Vice President).

END OF DOCUMENT 004321

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
 - 1. Lump-sum allowances.
 - 2. Unit-cost allowances.
 - 3. Quantity allowances.
 - 4. Contingency allowances.
- C. Related Requirements:
 - 1. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.
 - 2. Section 014000 "Quality Requirements" for procedures governing the use of allowances for field testing by an independent testing agency.

1.3 DEFINITIONS

- A. Allowance: A quantity of work or dollar amount included in the Contract, established in lieu of additional requirements, used to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.

1.4 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection, or purchase and delivery, of each product or system described by an allowance must be completed by the Owner to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

1.5 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

1.6 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.7 LUMP-SUM ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight[,], and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
 - 1. If requested by Architect, retain and prepare unused material for storage by Owner. Deliver unused material to Owner's storage space as directed.

1.8 UNIT-COST ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
 - 1. If requested by Architect, retain and prepare unused material for storage by Owner. Deliver unused material to Owner's storage space as directed.

1.9 QUANTITY ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
 - 1. If requested by Architect, retain and prepare unused material for storage by Owner. Deliver unused material to Owner's storage space as directed.

1.10 CONTINGENCY ALLOWANCES

- A. Use the contingency allowance only as directed by Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
- C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit.
- D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

1.11 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, required maintenance materials, and similar margins.
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other markups.
 - 3. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of Work has changed from what could have been foreseen from information in the Contract Documents.

4. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1: Lump-Sum Allowance: Include the sum of \$5,000.00 for additional interior millwork, such as window stops and extension, as required by the unique window opening return conditions in the building.
 1. This allowance includes material, receiving, handling, and installation costs, and Contractor overhead and profit.
- A. Allowance No. 2: Lump-Sum Allowance: Include the sum of \$5,000.00 for (2) window installation mockups as specified in Section 014339 'Mockups'.
 1. This allowance includes material, receiving, handling, and installation costs, and Contractor overhead and profit.
- B. Allowance No. 3: Lump-Sum Allowance: Include the sum of \$5,000.00 for spray foam cavity insulation for installation in window return assemblies as required.
 1. This allowance includes material, receiving, handling, and installation costs, and Contractor overhead and profit.
- C. Allowance No. 4: Contingency Allowance: Include a contingency allowance of \$10,000.00 for use according to Owner's written instructions.

END OF SECTION 012100

SECTION 014339 - MOCKUPS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Integrated exterior mockups.
- B. Related Requirements:
 - 1. Section 014000 "Quality Requirements" for quality assurance requirements for aesthetic and workmanship mockups specified in other Sections.

1.2 ALLOWANCES

- A. See Section 012100 "Allowances" for description of allowances affecting items specified in this Section.

1.3 DEFINITIONS

- A. Integrated Exterior Mockups: Mockups of the exterior envelope constructed on-site as part of permanent construction, consisting of multiple products, assemblies, and subassemblies.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Meet with Owner Representative, Architect, testing and inspecting agency representative, window manufacturer's representative, and installers of major systems whose Work is included in integrated exterior mockups.
 - 2. Review locations and extent of mockups.
 - 3. Review and finalize schedule for mockups, and verify availability of materials, personnel, equipment, and facilities needed to complete mockups and maintain schedule for the Work.

1.5 ACTION SUBMITTALS

- A. Shop Drawings: For integrated exterior mockups.
 - 1. Include plans, elevations, sections, and attachment details.
 - 2. Indicate manufacturer and model number of individual components, subassemblies, and assemblies.
 - 3. Include site location drawing indicating orientation of mockup.
 - 4. Revise and resubmit Shop Drawings to reflect approved modifications in details.

- B. Delegated Design Submittal: For temporary structural supports for mockups not attached to building structure, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.6 QUALITY ASSURANCE

- A. Build mockups to do the following:
 - 1. Verify selections made under Sample submittals.
 - 2. Demonstrate aesthetic effects.
 - 3. Demonstrate the qualities of products and workmanship.
 - 4. Demonstrate acceptable coordination between components and systems including details of existing conditions to remain and new elements.
 - 5. Perform preconstruction testing, such as window air- and water-leakage testing.
- B. Fabrication: Before fabricating or installing portions of the Work requiring mockups, build mockups for each form of construction and finish required. Use materials and installation methods as required for the Work.
 - 1. Build mockups of size indicated.
 - 2. Build mockups in location indicated or, if not indicated, as directed by Architect.
 - 3. Employ supervisory personnel who will oversee mockup construction. Employ workers who will be employed to perform same tasks during the construction at Project.
 - 4. Demonstrate the proposed range of aesthetic effects and workmanship.
 - 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work. Demolish and remove mockups when directed by the Owner or Architect unless otherwise indicated.
- C. Notifications:
 - 1. Notify Architect and Owner's Representative seven days in advance of the dates and times when mockups will be constructed.
 - 2. Allow seven days for initial review and each re-review of each mockup.
- D. Approval: Obtain Architect's and Owner Representative's approval of mockups before starting fabrication or construction of corresponding Work.
 - 1. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
 - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing (via an ASI or Proposal Request).
 - 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.7 COORDINATION

- A. Coordinate schedule for construction of mockups, so construction, testing, and review of mockups do not impact Project schedule.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Mockup Testing Performance Requirements: Perform tests using design pressures and performance criteria indicated for assemblies and products that are specified in other Sections and incorporated into integrated exterior mockups.

2.2 INTEGRATED EXTERIOR MOCKUPS

- A. Construct integrated exterior mockups according to approved mockup Shop Drawings. Construct mockups to demonstrate constructability, coordination of trades, and sequencing of Work; and to ensure materials, components, subassemblies, assemblies, and interfaces integrate into a system complying with indicated performance and aesthetic requirements.
- B. Build integrated exterior mockups using installers and construction methods that will be used in completed construction.
- C. Use specified products that have been approved by Architect. Coordinate installation of materials and products specified in individual Specification Sections that include Work included in integrated exterior mockups.
- D. The Work of integrated exterior mockups includes, but is not limited to, the following:
 - 1. Masonry paint removal.
 - 2. Existing stone window sills. Existing steel relieving angles. Cavity thermal insulation.
 - 3. Through-wall flexible flashing.
 - 4. Joint sealants.
 - 5. Existing interior formed metal window returns. Existing wood and/or formed metal sills. New wood sills. Aluminum clad wood windows and associated components as specified in the bid documents.
- E. Interior paint removal. Photographic Documentation: Document construction of integrated exterior mockups with photographs in accordance with Section 013200 "Progress Documentation." Provide photographs showing details of interface of different materials and assemblies.
 - 1. Document testing procedures, including water leakage and other deficiencies. Photograph modifications to component interfaces intended to correct deficiencies.
- F. Provide and document modifications to construction details and interfaces between components and systems required to properly sequence the Work, or to pass performance testing requirements. Obtain Architect's approval for modifications.
- G. Retain approved mockups constructed in place, if instructed by Architect. Incorporate fully into the Work.

PART 3 - EXECUTION

3.1 TESTING OF INTEGRATED EXTERIOR MOCKUPS

- A. Integrated Exterior Mockup Testing Services: Perform the following tests in the following order:
- B. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and installations, including connections, and also to observe testing for the following systems and assemblies.
- C. Aluminum clad wood windows as specified in Section 085214 "Metal Clad Windows".
- C. Integrated exterior mockup will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.

END OF SECTION 014339

SECTION 028213 - LEAD PAINT AND RELATED WORK

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. General provisions of the Contract, including General and Supplementary Conditions and Other Abatement Specification Sections, apply to the work of each of the Specification Sections.
- B. This section addresses abatement of lead paint related activities required for the replacement of the exterior windows only.

1.2 PROJECT SCOPE-OF-WORK

- A. Provide labor, materials, and equipment to complete the work specified of this Section including, removal and lawful transport and disposal of lead containing material (LCM).
- B. All lead removal work is to be completed in accordance with the requirements set forth herein. The scope-of-work includes the removal, transport, and disposal of designated LCM in the IF&W Building, Dorothea Dix Psychiatric Center, Bangor, Maine. All work is to be completed in accordance with the schedules stated herein, in the Contract Documents, and as designated by the Owner. All work is to be completed in strict accordance with applicable local, state, and federal codes and regulations and the requirements stated in this specification and Contract Documents.
- C. It is essential that all work be phased and scheduled as required to facilitate Owner's window replacement.
- D. Reference full inspection reports for discussions and additional information and limitations of Owner survey.
- E. The work areas have or may have other regulated or hazardous materials present that are not covered in the Section including but not limited to polychlorinated biphenyl (PCB)-containing materials, mercury, guano, mold contamination, other hazardous materials, and universal waste. Contractor's OSHA-competent person shall also inspect the workplace for other potential hazardous building material during the work. If encountered during the work immediately notify Owner's Representative. Use only qualified, trained workers to remove, package, transport, and dispose (or recycle) of such material in strict compliance with all local, State, and Federal requirements.

1.3 WORK SCHEDULES

- A. All work shall be completed in accordance with the schedule requirements as indicated by the Owner and as stated in the Contract Documents.
- B. All work shall be strictly coordinated and scheduled by the Contractor as indicated by and approved by the Owner, the Architect, the Owner's industrial hygiene consultant (IH Consultant), and the General Contractor. Work is to be phased as required to facilitate Owner operations, general occupancy of the site, and general construction activity. Contractor must provide proposed daily schedules to Owner and IH Consultant for each phase of work and each Owner work request. Adequate advance notice shall be provided to the Owner and the IH Consultant prior to any

schedule changes. Start and completion dates for the work and specific phasing requirements not otherwise specified herein shall be submitted to Owner and IH Consultant for approval. Contractor shall update all State and EPA notifications and permits as needed for schedule modifications.

1.4 CONTRACTOR ESTIMATES

- A. Estimates: Contractor shall conduct necessary field measurements and site review as deemed necessary by Contractor to delineate the scope of work and site conditions prior to submittal of bid. Contractor shall note on bid any discrepancies between Contractor field measurements and listings of work stated herein. It is the responsibility of the Contractor to verify all project information and site conditions as necessary to satisfy the Contractor as to the requirements of the work for each specific phase of the project. The Contractor must notify the Owner and the IH Consultant of any conflicting information or clarifications required for the preparation of any bids, estimates, and submittal documentation.

1.5 EXISTING CONDITIONS

- A. Prior to commencement of work, inspect areas in which work shall be performed. Prepare a listing and photographs of damage to structure, surfaces, finishes, insulations, and equipment that could be misconstrued as damage resulting from the work. The contractor is responsible for all damage to equipment, furnishings, finishes and building surfaces in the work area and adjacent caused by the Contractor during the course of abatement and general housecleaning. Contractor is responsible for completing all repairs to damaged items/surfaces caused by the work. In addition, Contractor must fully repair all tape, adhesive, and other staining and damage to meet or exceed existing conditions.

1.6 POTENTIAL LEAD HAZARD

- A. Work involving lead-containing components, as indicated in the lead removal specification, may generate lead dust and debris, and could therefore pose a potential health hazard to both workers and other building occupants. Because lead is a cumulative and persistent toxic substance and because lead-caused health effects may result from low levels of exposure over prolonged periods of time, engineering controls and good work practices must be used to minimize employee exposure to lead. Therefore, workers must be made to realize the seriousness of non-approved procedures and their consequences.
- B. During the course of the LCM removal or other related work, if workers or other tradespeople encounter and/or disturb existing lead-containing components, then appropriate safety and worker protection measures will be taken to ensure protection from potential lead exposure. These safety measures shall include those procedures contained herein, as applicable, and any additional controls not originally necessary. Safety measures shall be in accordance with all federal, state, and local regulations. Complete, and coordinate with Owner as applicable, all communication of hazards in strict accordance with 29 CFR 1926 and other applicable State and federal regulations for lead, asbestos, PCB, mercury, fluorescent light bulbs, and other anticipated hazards. The Contractor shall coordinate with the Owner and the IH Consultant to review all existing inspection records and testing results as needed.

1.7 CONTRACTOR USE OF PREMISES

- A. General: The Contractor shall limit his use of the site to the work indicated, so as to allow for Owner operations and general construction activity. Confine operations at the site to the specified

work areas of the Specification. Take all precautions necessary to protect the site, buildings, any occupants, and surrounding areas from work-related hazards during the construction period. Maintain building in a safe and structurally sound condition throughout the work. Maintain access to the public and other trades in designated areas (for example, stairwells) as indicated herein and as otherwise noted by Owner. Provide additional barriers and site security as needed to accommodate such access. Use care to prevent damage to existing surfaces during installation of solid barriers, critical barriers, and primary isolation barriers.

- B. Install solid barriers to prevent unauthorized access and visibility from adjacent, public, or Owner-occupied areas as designated by Owner and using materials and construction methods approved by Owner.

1.8 STOP WORK

- A. The Contractor's Site Supervisor shall stop work and shall not proceed until corrective measures are implemented in the event that any of the below occur:
 - 1. Failure to work in accordance with state and federal regulations or this plan.
 - 2. Area monitoring results that exceed the contaminant specific OSHA Action Level for Lead of $30 \mu\text{g}/\text{m}^3$.
 - 3. Personnel exposure monitoring results that exceed the OSHA eight (8) hour time-weighted average (TWA) of $50.0 \text{ ug}/\text{m}^3$ of air for Lead.
 - 4. Other potential safety, health and environmental emergencies, and changes in conditions of the work as required.
- B. Complete all corrective work with no change in the Contract Price if elevated airborne lead concentrations or other conditions resulting in stop work were caused by Contractor activities or compliance deficiencies.

1.9 PROJECT COORDINATION

- A. Site Supervisor: Provide a full-time Site Supervisor who is experienced in administration and supervision of lead paint removal projects including work practices, protective measures for building and personnel, disposal procedures, etc. This person is the Contractor's Representative responsible for compliance with the specification and all applicable federal, state, and local regulations.
 - 1. Experience and Training: The Site Supervisor must have completed a course at an EPA Training Center or equivalent certificate course in lead abatement procedures and have had a minimum of five (5) years on-the-job training in similar lead paint abatement procedures.
 - 2. Accreditation/Qualifications: The Site Supervisor is to be (1) a Competent Person as required by OSHA in 29 CFR 1926.62
- B. Project Manager: Provide a qualified and experienced project manager to perform administrative and project management responsibilities and to serve as Contractor management point of contact in addition to the project supervisor.
- C. Pre-Construction Conference: An initial progress meeting, recognized as "Pre-Construction Conference" shall be convened by Owner with Contractor prior to the start of work for each phase.

This meeting shall be held to review the scope of work, scheduling, coordination, and contractor plan of action and submittals and other applicable items.

- D. Daily Log: Maintain at the work area a daily log documenting the dates and time of but not limited to, the following items:
1. Visitations; authorized and unauthorized
 2. Daily sign-in sheet for all personnel entering and leaving the work area (name, certification, expirations).
 3. Special or unusual events, i.e., barrier breaching, equipment failures, accidents
 4. Documentation of the following:
 - a) Supervisor's daily inspections and exposure monitoring test results.
 - b) Work progress each day for each work area.
 - c) Removal of waste material (number and type of containers) from each work area.
 - d) Removal of waste from site including a copy of the accompanying waste shipment record.
 - e) Decontamination of work area and equipment.
 - f) Final inspection and air clearance results; and
 - g) Documentation of containment removal and final general housecleaning activity.
 5. Complete and maintain a daily log in accordance with applicable State and federal record keeping requirements. Provide access to logs to the Owner and IH Consultant at all times and provide copies of logs with the submittal package in accordance with the construction submittal requirements.

1.10 STANDARDS

- A. Applicability of Standards: It is the Contractor's responsibility to complete all work in accordance with (or exceeding) all applicable industry standards and guidelines. Except where Contract Documents include more stringent requirements, all applicable construction industry standards have the same force and effect as if bound or copied directly into Contract Documents. Applicable construction standards are made a part of the Contract Documents by reference. Where compliance with an industry standard is required, comply with the most current standards in effect as of date of Contract Documents.
- B. Conflicting Requirements: Where compliance with two or more standards is specified, and they establish different or conflicting requirements for minimum quantities or quality levels, the most stringent requirement shall be enforced, unless the Contract Documents indicate otherwise. Refer to the Owner and IH Consultant any requirements that are different or conflicting; outline the more stringent requirement before proceeding.
- C. Comply with applicable standards including, but not limited to, American National Standards Institute (ANSI) standards and American Society for Testing and Materials (ASTM) standards.

1.11 CODES, REGULATIONS, AND STANDARDS

- A. Adhere to work practices and procedures set forth in applicable codes, regulations and standards related to work. Obtain permits, licenses, inspections, and similar documentation, as well as payments and similar requirements associated with codes, regulations, and standards. Update permits, as necessary.
- B. The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, State, and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is

responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, State, and local regulations. The Contractor shall hold Owner, Owner's Project Management Consultant, and IH Consultant harmless for failure to comply with any applicable work, hauling, disposal, safety, health, or other regulation on the part of himself, his employees, or his subcontractors.

C. All work performed under this contract shall comply with applicable provisions, including most current versions, and not limited to the listed and all other applicable local, state, and federal codes and regulations.

D. Federal Requirements: which govern lead paint related work or hauling, and disposal of lead waste materials include but are not limited to the following:

1. Code of Federal Regulations

- i. 29 CFR 1910, "Occupational Safety and Health Standards" (General Industry Standards)
- ii. 29 CFR 1910.20, "Access to Employee Exposure and Medical Records"
- iii. 29 CFR 1910.134, "Respiratory Protection"
- iv. 29 CFR 1926.59, "Hazard Communication"
- v. 29 CFR 1926, "Safety and Health Regulations for Construction" (Construction Industry Standards)
- vi. 29 CFR 1926.62 "Lead-Construction"
- vii. 40 CFR 117, "Determination of Reportable Quantities for Hazardous Substances"
- viii. 40 CFR 122, "EPA Administered Permit Program: The National Pollutant Discharge Elimination System"
- ix. 40 CFR 172, "Hazardous Waste Transportation"
- x. 40 CFR 261, "Identification and Listing of Hazardous Waste"
- xi. 40 CFR 262, "Standards Applicable to Generators of Hazardous Waste"
- xii. 40 CFR 263, "Standards Applicable to Transporters of Hazardous Waste"
- xiii. 40 CFR 268, "Land Disposal Restrictions"
- xiv. 40 CFR Part 745, EPA Lead Renovation, Repair and Painting (RRP) Rule

2. Occupational Safety and Health Administration OSHA Booklet 3126 "Working with Lead in the Construction Industry."

3. National Institute for Occupational Health and Safety

- i. NIOSH Method 7082, "Lead"

F. Maine Department of Environmental Protection: which govern lead paint related work or hauling, and disposal of lead waste materials include but are not limited to the following:

1. Chapter 424 Lead Management Regulations

1.12 DEFINITIONS

A. General Definitions: Definitions contained in this Section are not necessarily complete but are general to the extent that they are not defined more explicitly elsewhere in the Contract Documents.

1. Directed: Terms such as "directed", "requested", "authorized", "selected", "approved", "required", and "permitted" mean "directed by Owner's representative", "requested by the "IH Consultant", and similar phrases. However, no implied meaning shall be interpreted to extend the IH Consultant's responsibility into the Contractor's area of construction supervision.
2. Approve: The term "approved," where used in conjunction with the Owner, Owner's Project Management Consultant, or the IH Consultant's action on the Contractor's submittals, applications, and requests, is limited to the responsibilities and duties of the IH Consultant as indicated in the Contract Documents. Such approval or acceptances do not express or claim any certification of completeness, compliance, or approval of programs and documentation, including but not limited to review of analytical results, historical information, and interpretations. Such approval shall not release the Contractor from responsibility to fulfill Contract Document requirements, unless otherwise provided in the Contract Documents.
3. Furnish: The term "furnish" is used to mean "supply and deliver to the project site, ready for unloading, unpacking, assembly, installation, and similar operations."
4. Install: The term "install" is used to describe operations at project site including the actual "unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations."
5. Provide: The term "provide" means "to furnish and install, complete and ready for the intended use."
6. Installer: An "Installer" is an entity engaged by the Contractor, either as an employee, subcontractor, or sub- subcontractor for performance of a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged in performing.
7. IH Consultant: This is the entity employed or engaged as industrial hygiene consultant as described in the Contract Documents. All references to Owner's Consultant, Air Monitoring Consultant, or Consultant with regard to lead paint related work in the Contract Documents in all cases refer to the IH Consultant. The IH Consultant shall represent Owner during work and until final payment is due. The Owner representative may also constitute other people representing Owner, other than the IH Consultant or consultant, as indicated by Owner. Owner's instructions to the Contractor shall be made directly to the Contractor or forwarded through the IH Consultant.
8. Site Supervisor: This is the Contractor's Representative at the work site. This person shall be the Competent Person required by OSHA in 29 CFR 1926.62 and licensed Site Supervisor/Foreman as required by the State. Provide licensed supervisor at each individual work site during work.

B. Definitions – Lead related:

1. The term “Lead-Based Paint” (LBP) is identified as paint or other surface coating such as varnish, sealer or stain containing lead in any detectable amount.
2. The term "Incidental Removal or Disturbance of Lead-Based Paint" indicates one or more of the following operations:
3. Scraping, hand sanding, or otherwise removing loose LBP from existing surfaces scheduled to remain in place.
4. The term “Demolition of LCM” refers to cutting, drilling, abrading, demolishing, or otherwise disturbing building elements coated with LBP or containing lead.
5. The term “Lead-Containing Materials” (LCM) is identified as construction debris coated with lead-based paint or other materials containing lead, such as x-ray shielding.
6. The term "Critical Barrier" indicates the perimeter of the enclosure within which lead disruption/removal work takes place. Critical Barriers may include existing floor, wall, and ceiling structures, as well as constructed partitions, closures, and seals.
7. The term "Project Site" indicates the limits of the Project Site as indicated on drawings or by provisions of this specification.
8. The term "Work Area" indicates the area within the Critical Barrier.
9. The term “Action Level” means exposure to an airborne concentration of lead of 30 micrograms per cubic meter of air calculated as an 8-hour time-weighted average (TWA).
10. The term “Exposure Assessment” means a determination of employee exposures for a given task measured by air monitoring. The Assessment must meet the criteria for objective data as outlined in the OSHA Lead in Construction Standard (29 CFR 1926.62).
11. The term “OSHA PEL” stands for the Permissible Exposure Limit established by the Occupational Safety and Health Administration for lead exposure. The OSHA PEL refers to an airborne concentration of lead of 50 micrograms per cubic meter of air calculated as an 8-hour time-weighted average (TWA).
12. The abbreviation “TCLP” stands for Toxicity Characteristic Leaching Procedure and refers to one of the tests to determine if waste is considered a Hazardous Waste or non-hazardous solid waste.
13. The term “Hazardous Waste” refers to a listed waste or any solid or liquid waste with one or more of the following characteristics: toxic, corrosive, flammable, explosive, combustible, oxidizer, pyrophoric, unstable (reactive) or water - reactive.
14. The term “Non-Hazardous Waste” refers to any solid or liquid waste not exhibiting characteristics of Hazardous Waste.

1.13 SUBMITTAL REQUIREMENTS

- A. Submittal Schedule: The Contractor shall provide submittals as specified herein including (1) Preconstruction Submittal Documentation prior to start of work and (2) Project Closeout Submittals within 25 days upon completion of on-site work. Submit ongoing submittals as required herein and as specified by the Owner and IH Consultant. Provide at the job site a copy of all current submittal packages and related documentation. Ongoing submittals shall also be submitted during the work as required to update the Pre-construction and Closeout submittals including, but not limited to:
- B. Exposure Assessment Documentation
- C. All information used to document previous employee exposure assessments, if available. If not available, conduct an initial exposure assessment at the start of the project.
- D. Written Compliance Plan: Submit a Written Compliance Plan incorporating all requirements in the OSHA Lead in Construction Standard. Also indicate type of containment and method of liquid waste capture to be established if water is utilized for removal.
- E. Health and Safety Requirements: Submit to OWNER the following information for each employee that will conduct lead disturbance on the job site:
 - 1. Respiratory Protection Program.
 - 2. Proof of current fit test for respirator that will be worn on Project Site.
 - 3. Proof of medical surveillance for respirator usage and lead work.
- F. Proof of lead awareness training
- G. Prepare a written schedule for each operation expected to disturb/remove LCM, indicating the following:
 - 1. Type of work to be performed, such as cutting, demolition, paint removal, or other action.
 - 2. Location of work to be performed.
 - 3. Proposed starting date and time.
 - 4. Proposed working hours.
 - 5. Proposed duration.

1.14 TEMPORARY FACILITIES

- A. General: Provide temporary connection to existing building utilities or provide temporary facilities as required to complete work. The owner must approve all connections to utilities and facility components. Provide temporary portable water and power sources for all exterior work as indicated and coordinated with Owner, as applicable.
- B. Water Service:

1. Temporary Water Service Connection: Provide hot and cold water to the Work Area. Provide a qualified and experienced licensed plumber as necessary to complete all water service work in conformance with applicable building codes and regulations.
2. All connections to the Owner's water system shall include back-flow protection. Monitor for leaks and repair or replace as needed.
3. Water Hoses: Employ suitable heavy-duty abrasion-resistant hoses to provide water into each work area and to each Decontamination Unit.

C. Electrical Service:

1. General: Provide a qualified and experienced licensed electrician to complete all electrical service work. Comply with applicable OSHA, NEMA, NECA, UL and other industry standards and governing regulations for materials and layout of temporary electric service. Provide adequate temporary power to the Work Area sized and equipped to accommodate all electrical equipment required for completion of the work and related testing and inspections. Provide temporary electrical panels as needed sized and equipped to accommodate all electrical equipment and lighting required by the work. Connect temporary panel to existing building electrical system. Protect with circuit breaker or fused disconnect. Locate temporary panel outside of the work area and in a location acceptable to Owner. Equip all circuits for any purpose entering the Work Area with ground fault circuit interrupters (GFCI).
2. Lamps and Light Fixtures: Provide appropriate temporary work area lighting. Protect lamps with guard cages or tempered glass enclosures where fixtures are exposed to breakage by construction operations.

D. First Aid: Comply with governing regulations and recognized recommendations within the construction industry. Provide appropriate first aid supplies.

E. Fire Extinguishers: Provide appropriate fire extinguishers for temporary offices, storage, work areas and other portions of the site occupied or used by the Contractor for the work.

F. Execution: Use qualified tradesmen for installation of temporary services and facilities. Locate temporary services and facilities where they shall serve the entire project adequately and result in minimum interference with the performance of the Work. Coordinate all such work with Owner. Require that tradesmen be licensed as required by local authorities. Relocate, modify, and extend services and facilities as required during the course of work so as to accommodate the entire work of the project.

PART 2 – PRODUCTS (NO APPLICABLE)

PART 3 – EXECUTION

3.1 HEALTH AND SAFETY REQUIREMENTS

A. General: Determine employee exposure to lead in air as required in OSHA Lead in Construction Standard.

B. Exposure Assessment: If the Contractor has made a previous Exposure Assessment that is representative of the task to be performed on-site, the Contractor may rely on this data and determine

the need for personal protective equipment and work practice controls based upon this data, if approved by OWNER.

C. Job requirements: When the Contractor does not have an Exposure Assessment or the Assessment is determined to be insufficient, the Contractor must conduct personal air monitoring in accordance with the OSHA Lead in Construction Standard and follow the requirements below which are outlined by job task until monitoring determines otherwise:

1. Manual demolition, scraping, sanding, heat gun application, power tool cleaning with HEPA dust collection system, spray painting with LCM:

i. Use of 1/2 mask respirator with HEPA filters.

ii. PPE.

iii. Medical surveillance.

iv. Use of changing room.

v. Use of handwashing facilities.

vi. Provision of lead awareness training.

2. Using lead mortar, lead burning, rivet busting, power tool cleaning without HEPA collection, cleaning up with dry expendable abrasives, removing or relocating enclosure:

vii. Loose fitting PAPR with HEPA or supplied air respirator.

viii. PPE.

ix. Medical surveillance.

x. Use of changing room.

xi. Use of handwashing facilities.

xii. Provision of lead awareness training.

3.2 Preparation

A. General: Prepare Work Areas in a manner that will protect Owner's personnel and property, and the visiting public, from contact with LCM. Prior to beginning work, confirm starting date and time with Owner. Do not begin work that will disturb LCM without Owner's approval.

B. Preparing Building Exteriors: Ensure adequate measures are in place to limit airborne lead content below the Action Level of 30 ug/m³ (micrograms per cubic meter) adjacent to the Work Area.

1. Erect barricades and install warning tape or signs as necessary to prevent inadvertent exposure of passersby to LCM in all forms, including, but not necessarily limited to dust, particles, and fumes.

2. Completely cover grounds and vegetation with minimum 6-mil thick polyethylene sheets with joints between sheets lapped and taped; with one edge taped to adjacent building surfaces below area of work; and with free ends secured in position with stakes, tie-down lines, or weights. Cover sufficient ground area to capture wind-blown chips, dust, and particles.

3.3 WORK PRACTICES

- A. General: Perform any removal, demolition, or disturbance of LCM in compliance with the following requirements:
 1. Restrict access to Work Area to essential personnel.
 2. Use moist-removal methods and/or HEPA vacuuming where applicable. Do not oversaturate the Work Area.
 3. Any debris generated must be cleaned up immediately before it can be tracked into other areas.
 4. Remove contaminated clothing and personal protective equipment before leaving the Work Area, or Work Area enclosure, as applicable.
 5. If the Action Level is exceeded outside the Work Area, discontinue work, and modify Critical Barrier, or perform other modifications of methods or materials as required to reduce the lead contamination below the Action Level.
 6. Prohibit eating, drinking, and smoking in the Work Area.

3.4 DISPOSAL

- A. Lead Painted Demolition Debris and Lead Paint Chips: Prior to removal of waste from the site, coordinate Toxicity Characteristic Leaching Procedure (TCLP) testing of LCM waste with IH Consultant. Allow two weeks for testing results. If TCLP testing shows the waste to be nonhazardous, the waste can be disposed of as normal construction demolition debris. If waste is classified as Hazardous or has not been TCLP tested, comply with the following requirements:
 1. Collect and place solid and liquid waste in DOT approved containers.
 2. Store waste containers in a secure area (preferably a locked room at the project site). Set containers securely on a hard surface. Do not stage containers on lawns, dirt piles, gravel drives, areas with mud or basement areas with no elevator access.
 3. Ensure that soil, ground water, and drains or sewers within the storage area are protected from possible contamination. Keep containers secure and tightly closed at all times, except when adding waste.
 4. Keep lead waste segregated from other waste. Do not co-mingle waste. **DO NOT MIX LIQUID AND SOLID WASTE.**
 5. Use an authorized hazardous waste transporter to haul waste to a hazardous waste facility.
 6. Follow all record-keeping, chain-of-custody and reporting requirements including a copy of the hazardous waste manifest.

7. Accurately measure and weigh the volume of each container or load of waste removed from the site. Submit records of waste volumes to OWNER and IH CONSULTANT.
8. Special attention shall be given to the time of storage, amount of material stored at any one time, use of proper containers and personnel training.
9. Provide appropriate notifications to regulatory agencies if there is a release to the environment exceeding the CERCLA reporting requirements (e.g., lead --1 pound).
10. Any evidence of improper storage shall be cause for immediate shutdown of the project until corrective action is taken.
11. Provide legal transportation of the waste to the disposal landfill, and complete or obtain all required licenses, manifests, landfill slips, or other forms. Copies of all forms or licenses, and the signed original of the Waste Manifest for each waste load, shall be given to the IH CONSULTANT or OWNER.

END OF SECTION 028213

SECTION 028333 – PAINT REMOVAL

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. In general, the Contractor shall supply all labor, materials, equipment, temporary protection, tools and appliances necessary for the proper completion of the work in this Section, as required in the Specifications, in accordance with good work practice. The work under this Section generally includes the following:
- B. Coordinate removal of paint coatings with Section 02 83 20. Removal of the paint coatings shall be performed with a chemical stripper.
- C. Collect all run off from paint removal operations.
- D. Rinse all wall surfaces where coatings have been removed with neutralizer prior to performing masonry repairs. Coordinate masonry repairs and repointing with Section 04 91 00.
- E. Upon completion of all masonry repairs, recoat the stripped wall areas.
- F. Coordinate removal of all existing paint coatings with Section 02 83 20.
- G. Clean and restore all areas affected by the work.

1.2 JOB CONDITIONS

- A. The Contractor shall supply, install and maintain all barriers, protection, warning lines, lighting and personnel required to segregate the work area(s) and to prevent damage to the buildings, their occupants and the surrounding landscaped and paved areas. All applicable OSHA and D.L.W.D. requirements shall be observed by the Contractor.
- B. The existing brick masonry, wood windows and other items as indicated on the Contract Drawings are coated with varying levels of lead paint. The Contractor is cautioned that the buildings must remain open at all times. Submit a proposed containment schedule to prevent lead paint chips from migrating into the building. The Contractor shall perform all abatement in strict accordance to Local, State and Federal Laws.
- C. Liquid materials such as solvents and adhesives shall be stored and used away from open flames, sparks, and excessive heat.
- D. The Contractor shall provide and equip as much labor force as is necessary to complete the project within the Contract period and in accordance with the Contract Documents without sacrificing workmanship quality.
- E. The Contractor shall coordinate with the maintenance staff the daily shutdown of all air intake units in the work areas or possibly affected by the construction fumes, odors or air-borne debris. The Contractor will install plastic sheeting and duct tape over the removed equipment opening

prior to initiating work each day. The plastic sheeting shall be removed by the Contractor at the end of each work day.

- F. All debris, dust and dirt, shall be swept clean from all exterior and interior surfaces affected by the work. Any interior finishes and floors which are damaged, soiled or affected by the work shall be cleaned, repaired or replaced by the Contractor with a system equal in color, texture, and finish at no additional cost to the Owner.
- G. Any open ducts, grills, thermostats, electric boxes or similar fixtures and items which can be soiled or affected by the work shall be masked, protected and cleaned by the Contractor at no additional cost to the Owner.
- H. Masonry cleaning area is limited to the window openings.

1.3 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
 - 1. SOCIETY FOR PROTECTIVE COATINGS (SSPC) – SSPC 05-03
 - a. Guide to SSPC – VIS 2 Standard Method of Evaluating Degree of Rusting on Painted Steel Surfaces
 - 2. Painted Steel Surfaces
 - a. Guide to SSPC - VIS 3 Guide and Reference Photographs for Steel Surfaced
 - 3. Prepared by Power and Hand-Tool Cleaning
 - a. SSPC – SP1 Solvent Cleaning
 - b. SSPC – SP 3 Power Tool Cleaning
 - c. SSPC – SP11 Power Tool Cleaning to Bare Metal

1.4 PACKAGING, LABELING AND STORAGE

- A. Paints shall be in sealed containers that legibly show the contract specification number, designation name, formula or specification number, batch number, color, quantity, date of manufacture, manufacturer's formulation number, manufacturer's directions including any warnings and special precautions, and name and address of manufacturer. Pigmented paints shall be furnished in containers not larger than 5 gallons. Paints and thinners shall be stored in accordance with the manufacturer's written directions, and as a minimum, stored off the ground, under cover, with sufficient ventilation to prevent the buildup of flammable vapors, and at temperatures between 40 to 95oF. Volatile liquids will not be stored on site without prior approval from the Owner.

PART 2 - PRODUCTS

2.1 PAINT STRIPPER AT MASONRY SURFACES

- A. Paint stripper for brick masonry surfaces shall be a product that is safe for historic masonry, can remove multiple layers of latex and oil based paints, and will cling to vertical and irregular surfaces. As noted in the Test Area section of this specification, the selection of the product to be utilized for the masonry coating stripper is subject to the results of the mock up.

- B. Based on paint stripper trials the following products or similar will be considered. Note that the intent of this project is to utilize as mild of a stripper as possible, Therefore, the Heavy Duty Paint Strippers will only be considered if acceptable results are not able to be achieved by environmentally friendly products in the mock up phase.
 - 1. Safety Peel 1, EnviroKlean by Pro-So-Co Corporation
 - 2. 505 Special Coatings Stripper, by Diedrich Technologies
 - 3. Peel Away Smart Strip Pro, by Dumond Chemical
 - 4. Peel Away Smart Strip 1 HD, by DumondChemical
 - 5. Peel Away 1, by DumondChemical
 - 6. 606/606X Caustic Multi-Layer Paint Remover by Diedrich Technologies
 - 7. Sure Klean Heavy Duty Paint Stripper, SureKlean by Pro-So-Co Corporation
- C. Multiple applications and variable dwell times will be required as part of the mock up phase, and shall be repeated until acceptable results are achieved.
- D. Accessories such as laminated paper (for installation over select stripper materials), and neutralizer shall be provided as recommended by the manufacturer.
- E. Phenolphthalein for pH testing of cleaned masonry surfaces.

PART 3 - EXECUTION

3.1 GENERAL

- A. Surfaces to receive paint shall meet the requirements established by the manufacturer of the paint and these specifications.
- B. Surfaces to receive paint shall be examined and work shall not be started until defects have been corrected.
- C. Verify that all sealants have cured for the specified time prior to applying new coatings.
- D. Spaces in which painting is being done shall be properly identified with "Wet Paint" signs or closed to traffic until paint is dry.
- E. Install polyethylene sheeting below areas of work and on all building openings.
- F. Provide adequate ventilation.

3.2 WORKMANSHIP

- A. Employ skilled mechanics to ensure the very best workmanship. Quality workmanship is required. Materials to be applied by craftsmen experienced in the use of the particular product involved.
- B. All surfaces shall be properly smoothed. All surfaces shall be properly prepared, clean and dry when a coating is applied. Any bare or abraded spots in base coats shall be touched up before next coat is applied.

- C. Protection against fire shall be taken and all oily rags or waste must be removed from the building each day.

3.3 ENVIRONMENTAL CONDITIONS:

- A. Air and surface temperatures shall be a minimum of 40oF during the stripping process of the masonry coatings, and remain a minimum of 40oF for 24 hours after completion of the stripping to prevent freezing of water in the masonry.
- B. Wind velocity shall be less than 15 MPH for exterior stripping and painting with no visible atmospheric dust.
- C. Salamanders and open fires are prohibited from the work site.

3.4 SURFACE PREPARATION AT MASONRY SURFACES

- A. Prior to use of approved chemical stripper, remove all loose paint and efflorescence from the wall surfaces utilizing approved paint scrapers, putty knives or stiff bristle brushes. If damage to the brick masonry is observed from scraping operations, a softer brush such as synthetic fiber brush shall be used.
- B. Brush, roll, or spray apply the approved chemical stripper to the wall surface. Follow the application requirements recommended by the manufacturer.
- C. After the stripper has been on the masonry for the approved dwell time, peel of the laminate paper if applicable and rinse the stripper off of the wall utilizing a pressure of 300 – 500 psi, maximum. Supplement the rinsing with a wood or plastic scraper.
- D. When all paint is removed, or no additional paint is sufficiently softened to be removed without additional stripper reapplication, test the pH of the masonry and apply neutralizer if required. Rinse the neutralizer with water and retest the masonry. Masonry shall have a pH of 7 to be approved for recoating, and several neutralization cycles may be required to achieve thispH.
- E. A minimum of one pH test shall be taken per every 50 sf of paint stripping and recorded on an Elevation Drawing. Prior to the start of the masonry recoating, the Engineer shall review all stripped masonry and perform additional pH spot testing.
- F. Upon completion of the paint removal, all walls shall be allowed to dry completely prior to repointing and repainting operations.

3.5 SURFACE PREPARATION AT METAL SURFACES

- A. If existing painted surfaces exhibit any of the following: peeling, staining, chalking, cross-grain cracking (alligatoring), cracking, chipping or flaking. Existing paint may remain if it does not possess any of these deficiencies. Removal of these deficiencies may be performed by the means specified in this Section and as allowed by applicable law. Well adhered paint is paint that can not be removed by any of the specified or allowable methods without damage to the wood and that does not exhibit any of the deficiencies described above.

- B. At existing wood to be repainted, the Contractor shall achieve an acceptable substrate for subsequent paint materials by completely remove peeling, rust stained, alligatoring (cross-grain cracking), cracking, chipped, flaking or otherwise poorly adhered paint by means specified below. Adhere to all lead abatement procedures in strict accordance to Local, State and Federal Laws. An acceptable substrate is defined as follows:
1. Unless otherwise removed to bare metal, acceptable substrate includes existing paint coatings that remain adhered uniformly and tightly to the wood and that are prepared properly for repainting by cleaning of dirt and chalk and are dulled by sanding as specified below. Transitions between existing coating(s) or to bare wood shall be smooth and may not affect the appearance or performance of subsequent paint coatings.
 2. All substrates must be reviewed and accepted by the Engineer prior to the application of new materials.
- C. The removal of peeling, alligatoring (cross-grain cracking), cracking, chipped, flaking or otherwise poorly adhered paint down to acceptable substrate may be achieved by biodegradable gel-based paint stripper, heat, or mechanical means (or combination thereof); refer to specific removal requirements below.
- D. Heat methods shall not char or leave surfaces unsuitable for paint coatings. Lightly hand sand all surfaces for the acceptance of paint coatings. Removal by Mechanical means: (at metal surfaces)
1. Methods permitted are limit to orbital sanders and belt sanders; rotary drill attachments, water blasting and sand blasting methods are specifically prohibited.
 2. Mechanical removal shall not alter original thickness or profiles of existing metal components or components shall be replaced. Mechanical removal shall be limited to flat surfaces.
 3. Orbital sanders shall be used in small circulate motions.
 4. Sandpaper shall be limited to medium grit, open-coat aluminum oxide type.
 5. Mechanical methods shall not leave surfaces unsuitable for paint coatings. Lightly hand sand all surfaces for the acceptance of paint coatings.
 6. Preparation of all acceptable substrates including bare metal shall include:
 - a. The requirements specified are minimal. Comply also with the application instructions of the paint manufacturer.
 - b. Remove all surface contamination including mildew and chalk, or residue from paint strippers by washing with approved cleaner. Rinse thoroughly and allow to dry. Remove any oil or grease with a water-based degreasing cleaner approved by the paint manufacturer.
 - c. Removal of Fungus and Mold: Wash existing coated surfaces with a solution composed of 3 ounces (2/3 cup) trisodium phosphate, 1 ounce (1/3 cup) household detergent, 1 quart 5 percent sodium hypochlorite solution and 3 quarts of warm water. Rinse thoroughly with fresh water.
 - d. Surfaces shall be free from dust and other deleterious. Do not use water to clean uncoated wood. Wet sand to roughen the entire area of previously coated wood surfaces as required by the paint manufacturer. Sand wood prior to painting/priming if grain has been raised by use of strippers or cleaners.
 - e. Cracks and Nailheads: Set and putty stop nailheads and putty cracks after the prime coat has dried.
 - f. Sand, fill, and treat minor defects to render them smooth. Lightly sand surface to roughen the entire area of previously coated wood surfaces as required by the paint manufacturer.
 - g. After cleaning the surface thoroughly and prior to painting, seal joints as specified in Section 07900 – Joint Sealants and as shown on the Contract Drawings.

- h. Sand to roughen the entire area of previously coated wood surfaces as required by the new paint manufacturer.
 - i.
 - j. Wipe previously painted surfaces to receive new coatings clean with a clean, dry cloth saturated with mineral spirits. Allow surface to dry. Wiping shall immediately precede the application of the first coat.

- E. Preparation of Metal Surfaces
 - 1. All metal surfaces to receive primer/coating applications shall be clean, dry and free of oil, grease and other contaminants.
 - 2. Existing and New Ferrous Surfaces
 - a. Shop-coated Surfaces and Small Areas That Contain Rust, Mill Scale and Other Foreign Substances: Solvent clean in accordance with the Steel Structures Painting Council guidelines to remove oil, grease and salts. Comply with SSPC-SP1 and SSPC-SP3. Use inhibitor as recommended by coating manufacturer to prevent premature rusting.
 - b. Surfaces with More Than 20% Rust, Mill Scale, and Other Foreign Substances: Surfaces shall be reviewed by the Engineer after performing SSPC-SP3 to determine if a more severe surface preparation procedure may be required.
 - 3. Galvanized Surfaces
 - a. Existing Galvanized Surfaces with Only Dirt and Zinc Oxidation Products: Clean with solvent, steam, or non-alkaline detergent solution in accordance with the Steel Structures Painting Council guidelines SSPC- SP 1 and SSPC-SP3 surface sanding to achieve adequate bond with new cold galvanizing compound. If the galvanized metal has been passivated or stabilized, the coating shall be completely removed by brush-off abrasive blast or other treatment, or the surface shall be primed with a primer which is specifically recommended by the paint manufacturer for use on passivated or stabilized galvanized steel.
 - b. Galvanized With Severe Deteriorated Coating or Severe Rusting: Prepare to comply with SSPC-SP11 to remove existing coating.

- F. Items not to be painted which are in contact with or adjacent to painted surfaces shall be removed or protected prior to surface preparation and painting operations. Surfaces to be painted shall be clean before applying paint or surface treatment. Oil and grease shall be removed with clean cloths and cleaning solvents prior to mechanical cleaning. Cleaning solvents shall be of low toxicity with a flashpoint in excess of 100oF. Cleaning shall be programmed so that dust and other contaminants will not fall on wet, newly painted surfaces. Before painting, the Contractor shall remove hardware accessories, plates, and similar items or provide ample protection of such items. Upon completion of each space, the Contractor shall replace above items.

3.6 CLEAN-UP

- A. Prior to acceptance of the painting work covered in this section, the Contractor shall perform a thorough clean-up of the work site, building surfaces, landscaping, etc. Any plantings or other items damaged shall be repaired or replaced to the satisfaction of and at no additional cost to the Owner.

END OF SECTION 028333

SECTION 099000 - PAINTING (MPI STANDARDS)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Surface preparation and application of paint systems on interior and exterior substrates:
 - a. Wood.
- B. Related Requirements:
 - 1. Section 064600 'Wood Trim'.

1.3 DEFINITIONS

- A. MPI Gloss Level 1: Not more than five units at 60 degrees and 10 units at 85 degrees, according to ASTM D523.
- B. MPI Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D523.
- C. MPI Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D523.
- D. MPI Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D523.
- E. MPI Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D523.
- F. MPI Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D523.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include preparation requirements and application instructions.
 - 2. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
 - 3. Indicate VOC content.
- B. Samples: For each type of topcoat product.
- C. Samples for Initial Selection: For each type of topcoat product.

- D. Samples for Verification: For each type of paint system and each color and gloss of topcoat.
 - 1. Submit Samples on rigid backing, 8 inches (200 mm) square.
 - 2. Apply coats on Samples in steps to show each coat required for system.
 - 3. Label each coat of each Sample.
 - 4. Label each Sample for location and application area.
- E. Product List: Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in the Exterior Painting Schedule to cross-reference paint systems specified in this Section. Include color designations.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Paint: 5 percent, but not less than 1 gal. (3.8 L) of each material and color applied.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C).
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.7 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F (10 and 35 deg C).
- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Benjamin Moore & Co.
 - 2. Valspar; a brand of The Sherwin-Williams Company.
 - 3. Sherwin-Williams Company (The).
- B. Source Limitations: Obtain paint from single source from single manufacturer.

2.2 PAINT PRODUCTS

- A. MPI Standards: Provide products complying with MPI standards indicated and listed in its "MPI Approved Products List."
- B. Material Compatibility:
 - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each coat in a paint system, provide products recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
- C. Colors: As selected by Architect from manufacturer's full range.
- D. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction and, the following VOC limits.
 - 1. Flat Paints and Coatings: 50 g/L.
 - 2. Nonflat Paints and Coatings: 150 g/L.
 - 3. Primers, Sealers, and Undercoaters: 200 g/L.
- E. Low-Emitting Materials: Interior paints and coatings shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers".

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - 1. Wood: 15 percent.
 - 2. Portland Cement Plaster: 12 percent.
 - 3. Gypsum Board: 12 percent.
- C. Portland Cement Plaster Substrates: Verify that plaster is fully cured.
- D. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
- E. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Wood Substrates:
 - 1. Scrape and clean knots. Before applying primer, apply coat of knot sealer recommended in writing by topcoat manufacturer for exterior use in paint system indicated.
 - 2. Sand surfaces that will be exposed to view, and remove sanding dust.
 - 3. Prime edges, ends, faces, undersides, and backsides of wood.
 - 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.

3.3 INSTALLATION

- A. Apply paints in accordance with manufacturer's written instructions and recommendations in "MPI Manual."
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
 - 3. Paint both sides and edges of exterior doors and entire exposed surface of exterior door frames.
 - 4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
 - 5. Primers specified in the Painting Schedule may be omitted on items that are factory primed or factory finished if compatible with intermediate and topcoat coatings and acceptable to intermediate and topcoat paint manufacturers.
- B. Tint undercoats same color as topcoat, but tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 FIELD QUALITY CONTROL

- A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
 - 1. Contractor shall touch up and restore painted surfaces damaged by testing.
 - 2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written instructions, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written instructions.

3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
 - 1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
 - 2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
 - 3. Allow empty paint cans to dry before disposal.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 PAINTING SCHEDULE

- A. Exterior Wood Substrates: Wood Sill.
 - 1. Latex over Latex Primer System MPI EXT 6.3L:
 - a. Prime Coat: Primer, latex for exterior wood, MPI #6.
 - b. Intermediate Coat: Latex, exterior, matching topcoat.
 - c. Semigloss Topcoat: Latex, exterior, semigloss (MPI Gloss Level 5), MPI #11.
 - 1) Match existing exterior trim color.
- B. Interior Wood Substrates: Wood Sill.
 - 1. Latex System:
 - a. Prime Coat: Primer, latex, for interior wood, MPI #3.
 - b. Intermediate Coat: Latex, interior, matching topcoat.
 - c. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5), MPI #54.
 - 1) Match color of new window sash
- C. Interior Gypsum Board and Plaster Substrates:
 - 1. Latex over Latex Sealer System:

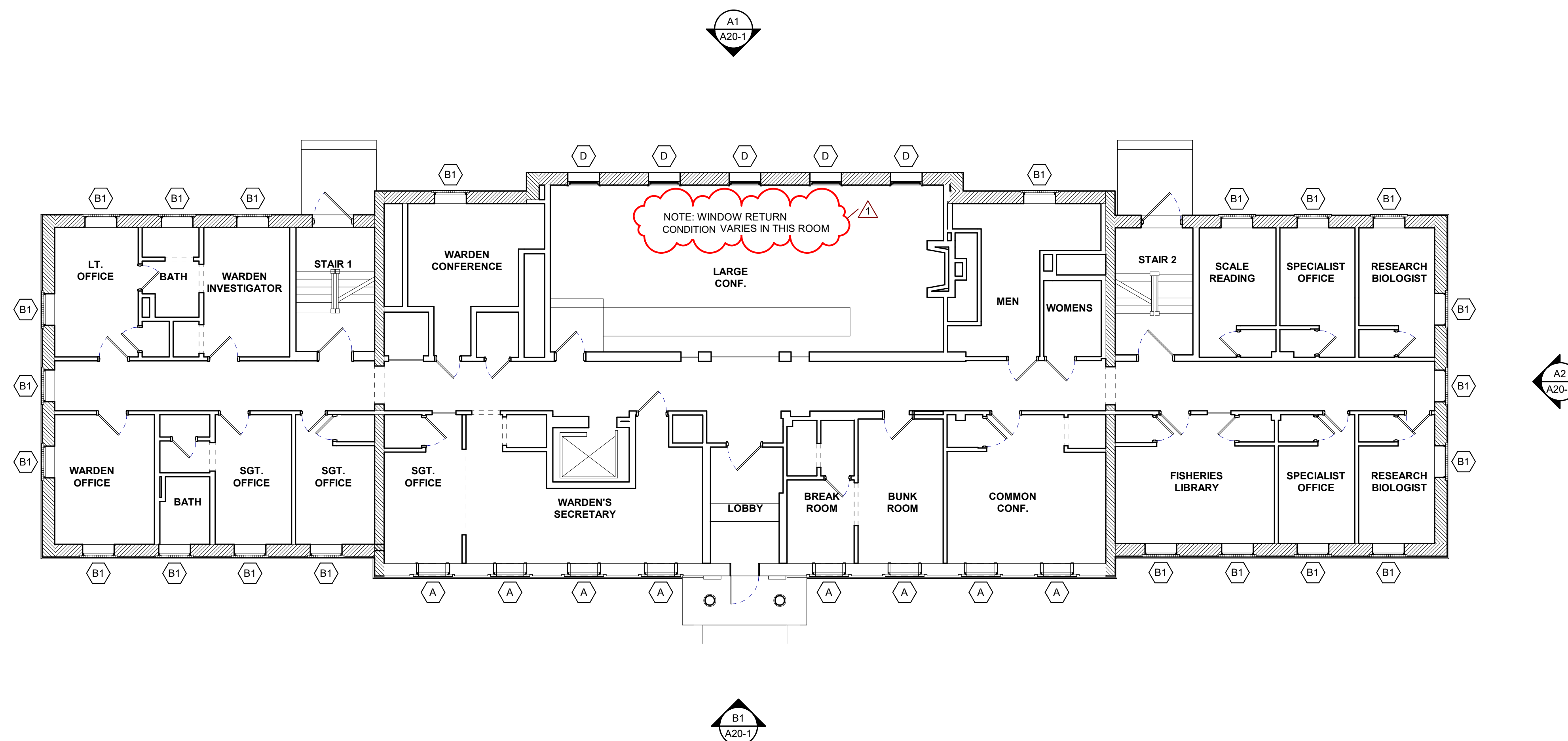
- a. Prime Coat: Interior latex primer sealer. MPI# 50
 - b. Intermediate Coat: Matching topcoat. MPI# 53
 - c. Topcoat: Interior, latex, match existing finish. MPI# 53
2. Latex over Alkyd Primer System (for Plaster Only):
- a. Prime Coat: Interior alkyd primer sealer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Interior, latex, match existing finish.

END OF SECTION 099000

DDPC IF&W BUILDING WINDOW REPLACEMENT

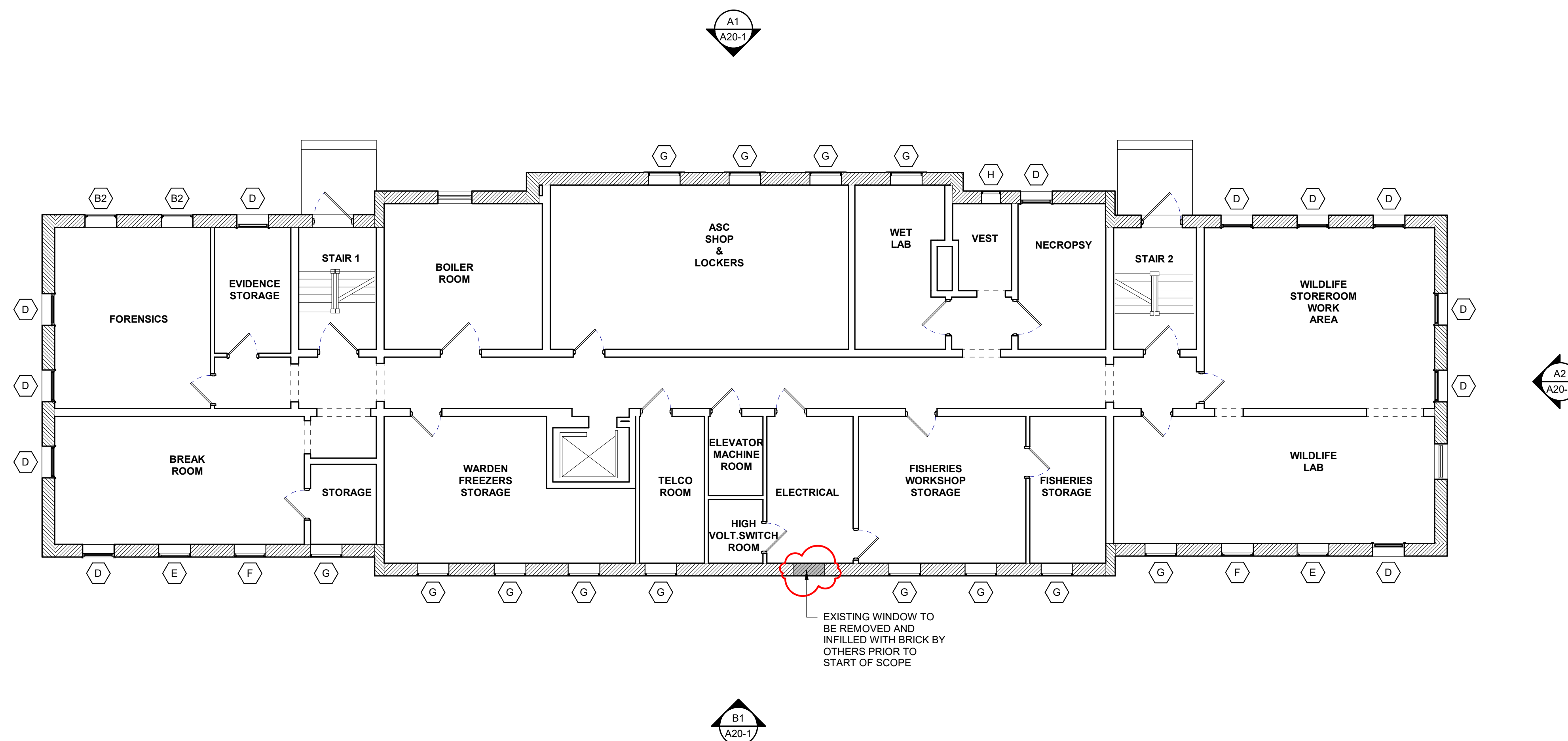
BANGOR, MAINE

Harriman Project No. 23113



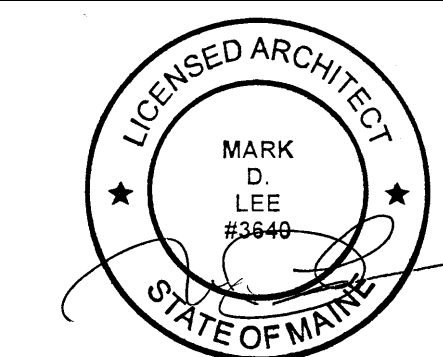
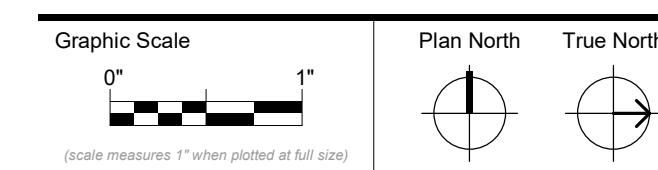
B1 EXISTING FIRST FLOOR PLAN

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



A1 EXISTING BASEMENT FLOOR PLAN

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



CONSTRUCTION DOCUMENTS

MARCH 28, 2024

Revision Date	Revision Description
4-19-2024	ADDENDUM 1

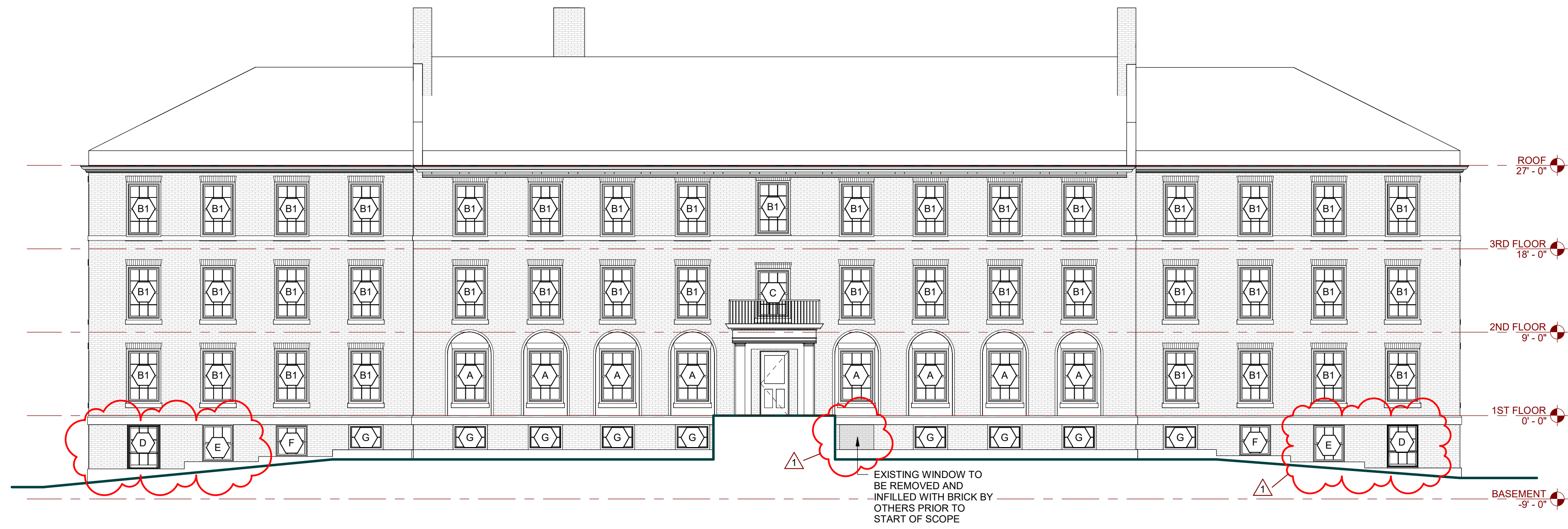
Drawn by: KLS

EXISTING FLOOR PLANS

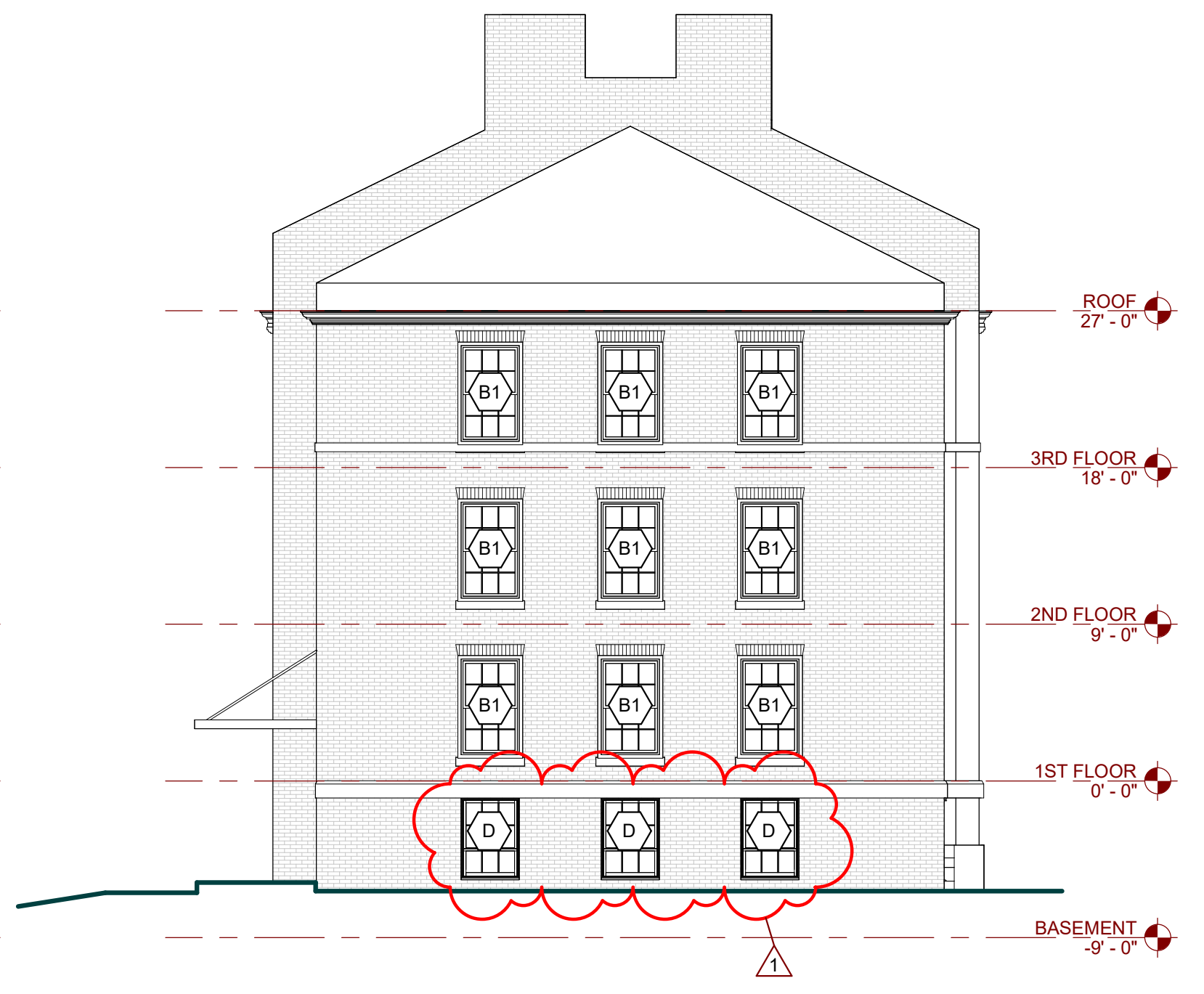
DDPC IF&W BUILDING WINDOW REPLACEMENT

BANGOR, MAINE

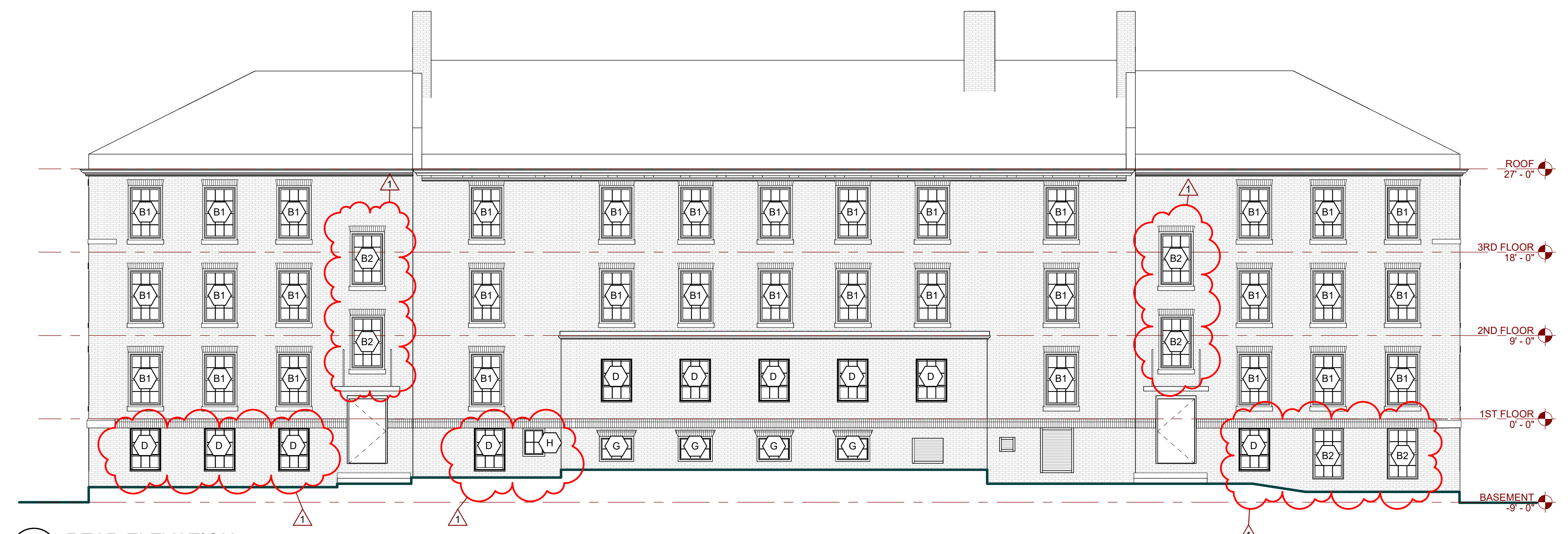
Harriman Project No. 23113



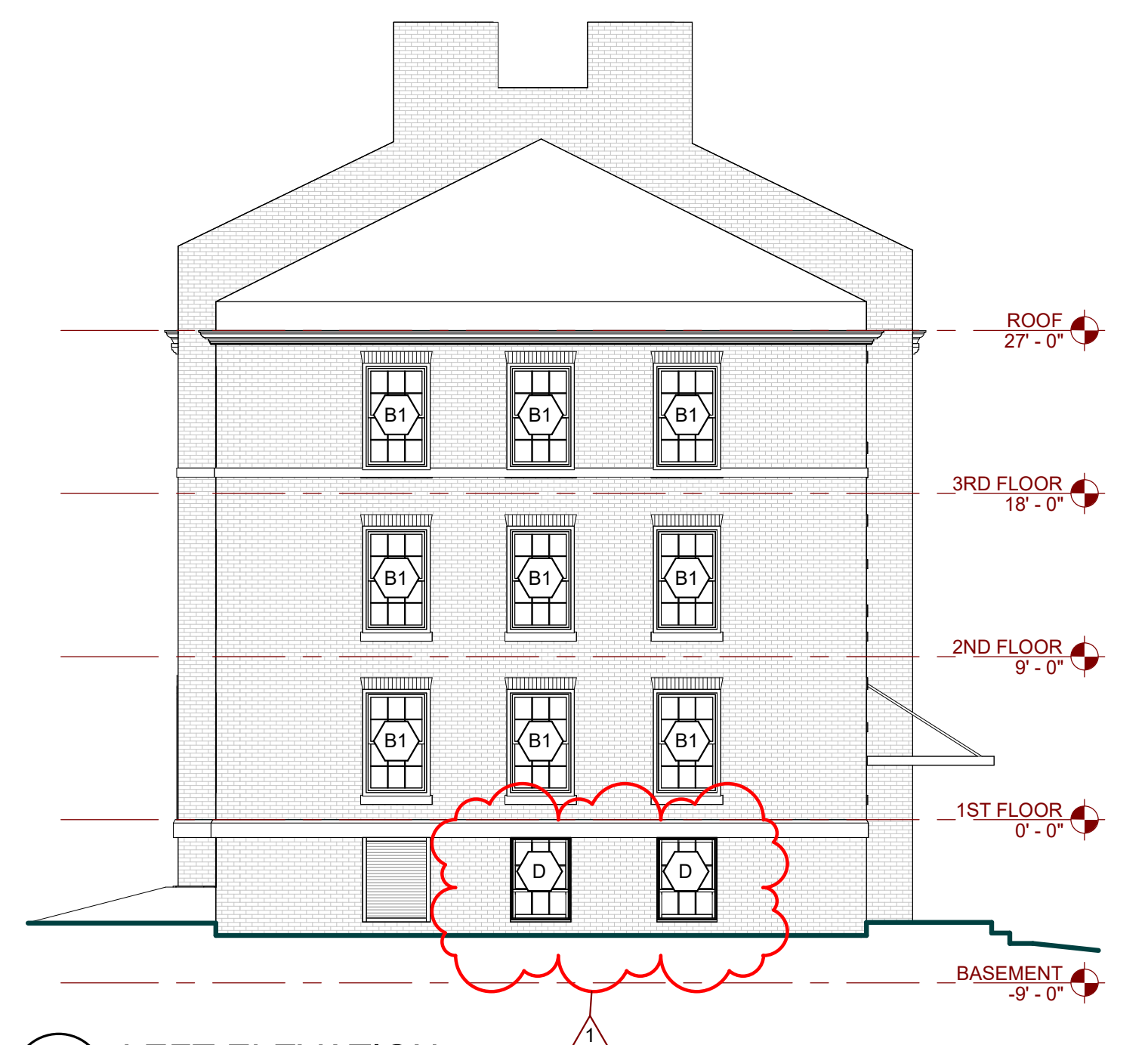
B1 FRONT ELEVATION
SCALE: 1/8" = 1'-0"



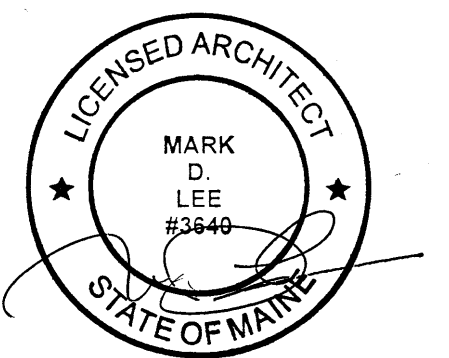
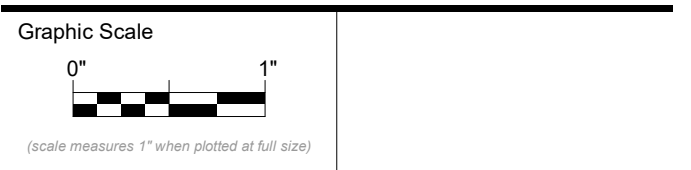
B2 RIGHT ELEVATION
SCALE: 1/8" = 1'-0"



A1 REAR ELEVATION
SCALE: 1/8" = 1'-0"



A2 LEFT ELEVATION
SCALE: 1/8" = 1'-0"



CONSTRUCTION DOCUMENTS

MARCH 28, 2024

Revision Date	Revision Description
4-19-2024	ADDENDUM 1

Drawn by: KLS

EXISTING ELEVATIONS

REPLACEMENT WINDOW SCHEDULE

NOTE: ALL DIMENSIONS AND COUNTS TO BE FIELD VERIFIED BY CONTRACTOR PRIOR TO WINDOW PROCUREMENT.

MARK	TYPE	WIDTH (±)	HEIGHT (±)	GLAZING	COUNT
A	DOUBLE HUNG	3' - 6"	5' - 6"	LOW-E	8
B1	DOUBLE HUNG	3' - 4"	5' - 6"	LOW-E	93
B2	DOUBLE HUNG	3' - 4"	5' - 6"	LOW-E, TEMPERED	6
C	DOUBLE HUNG	3' - 4"	5' - 0"	LOW-E	1
D	REVERSE COTTAGE	3' - 4"	4' - 8"	LOW-E, TEMPERED	17
E	DOUBLE HUNG	3' - 4"	4' - 0"	LOW-E, TEMPERED	2
F	DOUBLE HUNG	3' - 4"	3' - 4"	LOW-E, TEMPERED	2
G	FIXED DOUBLE HUNG	3' - 4"	2' - 4"	LOW-E, TEMPERED	13
H	FIXED DOUBLE HUNG	2' - 0"	2' - 8"	LOW-E, TEMPERED	1

TYPICAL WINDOW:

BASIS OF DESIGN: MARVIN ULTIMATE G2 ALUMINUM CLAD

FINISH: INTERIOR EXTERIOR HARDWARE GLAZING TYPE

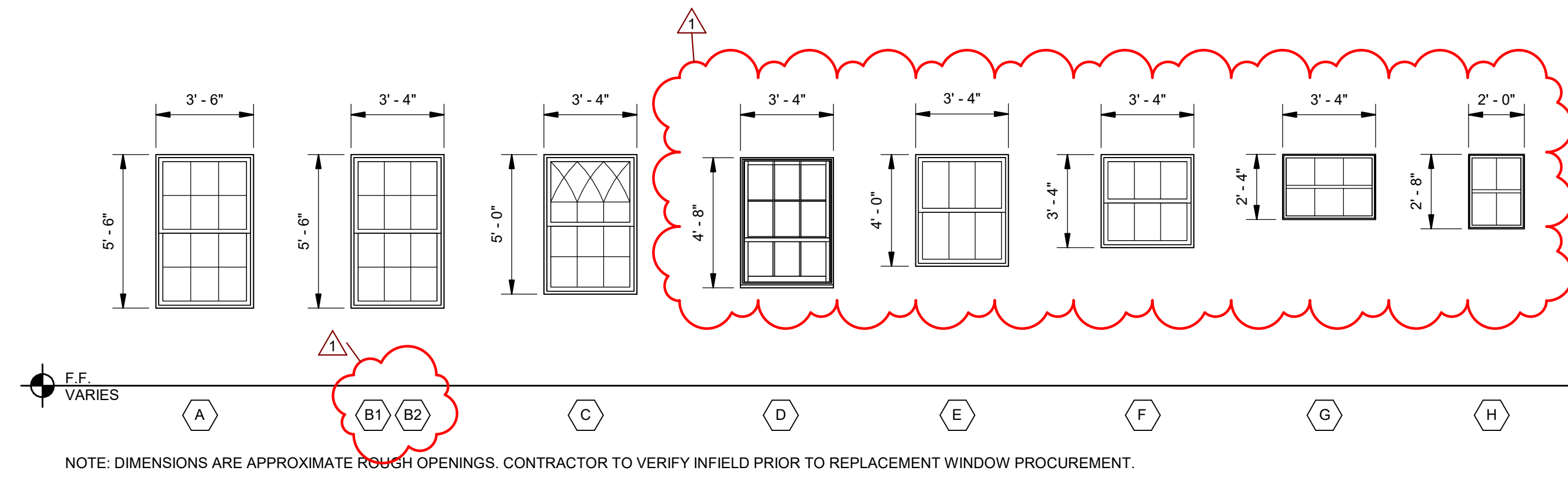
U-FACTOR SHGC ACCESSORIES LIMITERS

SCREEN

WOOD, WHITE ALUMINUM CLAD, WHITE BRUSHED NICKEL

MANUF. STANDARD 2-PANE, LOW-E TEMPERED AS NOTED 0.43 MAX 0.58 MAX

AT ALL OPERABLE WINDOWS TOP & BOTTOM SASH W/ MAINTENANCE OVERRIDE TOOL FULL, INCLUDE ON ALL OPERABLE



GENERAL WINDOW NOTES:

- DIMENSIONS INDICATED ARE APPROXIMATE. EXACT DIMENSIONS SHALL BE VERIFIED IN FIELD BY CONTRACTOR PRIOR TO REPLACEMENT WINDOW PROCUREMENT.
- SEE ELEVATIONS FOR WINDOW TYPE LOCATION.
- WINDOW MANUFACTURER TO PROVIDE ALL METAL TRIM EXTRUSIONS, MULLION COVERS AND EXPANDERS AS INDICATED.
- BLOCKING SHOWN IN DETAILS IS ASSUMED. CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS AND REPLACE ALL DAMAGED OR ROTTEN BLOCKING. ALL EXISTING BLOCKING IN GOOD CONDITION AND SUITABLE FOR WINDOW ANCHORAGE SHALL REMAIN.
- FLASHING, SEALANT, AND BLOCKING NOTES APPLY TO ALL DETAILS WHETHER SPECIFICALLY NOTED OR NOT.
- CONTRACTOR TO PROVIDE FULL WINDOW INSTALLATION MOCKUP FOR ARCHITECT AND OWNER APPROVAL PRIOR TO FULL MOBILIZATION. LOCATION T.B.D. BY ARCHITECT AND OWNER DURING PRE-CONSTRUCTION KICK-OFF SITE MEETING.
- EXISTING WINDOW SURROUND CONDITIONS VARY. DETAILS SHOWN ARE APPROXIMATE AND MAY NEED TO BE MODIFIED PER SPECIFIC EXISTING FIELD CONDITIONS. CONTRACTOR TO COORDINATE WITH ARCHITECT FOR EACH CONDITION.
- EXISTING EXTERIOR PAINT COVERAGE ON EXPOSED MASONRY TO BE REMOVED PER SPECIFICATIONS.
- EXISTING METAL SECURITY GRILLES WILL BE REMOVED BY OTHERS PRIOR TO START OF WINDOW REPLACEMENT SCOPE.
- SOME EXISTING WINDOWS HAVE FROSTED GLAZING. THIS FEATURE WILL NOT BE REPLICATED IN THE REPLACEMENT WINDOWS IN THE SAME LOCATION.
- THE EXISTING PAINT FINISH ON INTERIOR METAL CLAD SILLS AND RETURNS CONTAINS LEVELS OF LEAD. SEE MATERIAL ASSESSMENT REPORT PROVIDED BY OWNER. PAINT TO BE REMOVED PER SPECIFICATIONS. METAL CLAD RETURN AND SILL SURFACES TO BE PAINTED.

C3 HEAD DETAIL @ STUCCO

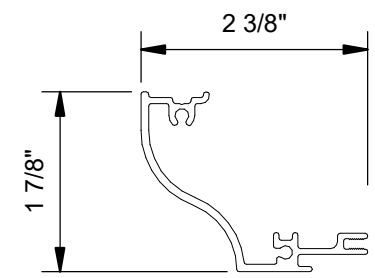
SCALE: 3" = 1'-0"

C4 HEAD DETAIL @ BRICK

SCALE: 3" = 1'-0"

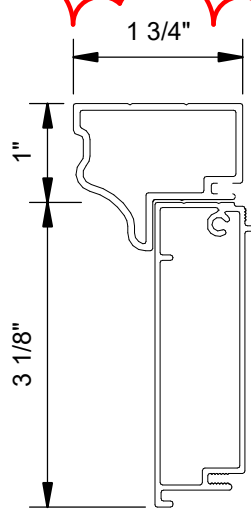
ALUMINUM EXTERIOR CLAD TYPICAL CASING

BASIS OF DESIGN: MARVIN THORNTON (A1443)



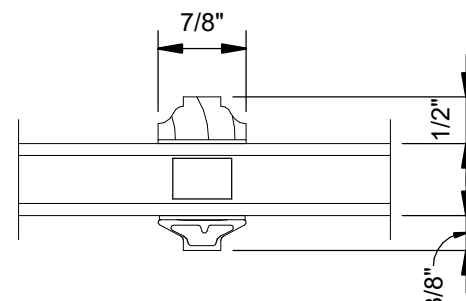
ALUMINUM EXTERIOR CLAD SPECIAL CASING FOR 'C' WINDOW

BASIS OF DESIGN: MARVIN POTTER (SIM.) 2-PARTS: FLAT CASING (A2754) SUBJECT TO CHANGE PER CONFIRMED FIELD CONDITION EDGE CASING (A1445)



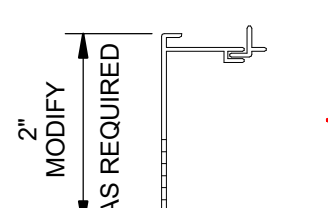
DIVIDED LITE W/ SPACER

BASIS OF DESIGN: MARVIN #22



EXTRUDED SUBSILL (GRANITE)

BASIS OF DESIGN: MARVIN SILL EXTENSION (A88078) MODIFY IN-FIELD PER MANUF. AS REQ.



B3 JAMB DETAIL @ STUCCO

SCALE: 3" = 1'-0"

B4 JAMB DETAIL @ BRICK

SCALE: 3" = 1'-0"

A3 SILL DETAIL @ STUCCO

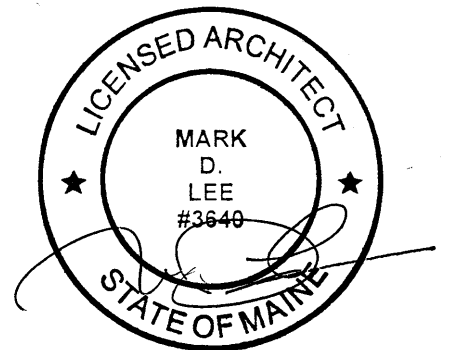
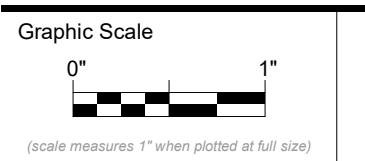
SCALE: 3" = 1'-0"

A4 SILL DETAIL @ BRICK

SCALE: 3" = 1'-0"

A2 WINDOW ACCESSORY DETAILS

SCALE: 6" = 1'-0"



CONSTRUCTION DOCUMENTS

MARCH 28, 2024

Revision Date	Revision Description
4-19-2024	ADDENDUM 1

Drawn by: KLS

WINDOW SCHEDULE AND DETAILS