SAMPLE CONTRACT: TO BE COMPLETED UPON CONTRACT AWARD

TOWN OF LONGMEADOW, MASSACHUSETTS

OWNER-CONTRACTOR AGREEMENT
FOR PUBLIC BUILDING CONSTRUCTION OR RENOVATION

THIS AGREEMENT made this _____ day of _____ in the year Two Thousand and eighteen, between TBD, with a usual place of business at TBD, hereinafter called the CONTRACTOR, and the Town of Longmeadow, Massachusetts acting by its Town Manager and/or Select Board, with a usual place of business at 20 Williams Street, Longmeadow, MA 01106, hereinafter called the OWNER.

The CONTRACTOR and the OWNER, for the consideration hereinafter named, agree as follows:

1. Scope of Work

The Contractor shall furnish all labor, materials, equipment and insurance to perform all work required for the project known as Town of Longmeadow, Storrs Library Window Replacement, in strict accordance with the Contract Documents and all related Drawings and Specifications per IFB packet, ATTACHMENT A: Invitation for Bid (IFB) for Storrs Library Window Replacement, Town of Longmeadow Massachusetts, dated June 21, 2018 per bid documentation project NO. TOL-8-005 prepared by Hill Engineers, Architects, Planners. The said Documents, Specifications, Drawings and any general supplementary conditions are incorporated herein by reference and are made a part of this Agreement.

2. Contract Price

The Owner shall pay the Contractor for the performance of this Agreement, subject to additions and deductions provided herein, in current funds, the sum of $TBD___ per bid price proposal specifications, ATTACHMENT B, signed TBD, and dated TBD.
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3. Commencement and Completion of Work and Liquidated Damages

It is agreed that time is of the essence of this Agreement. The Contractor shall commence and prosecute the work under this Agreement upon execution hereof and shall obtain Substantial Completion by November 10, 2018, the Substantial Completion date.

A. Definition of Term: The Term "Substantial completion" shall mean the date certified by the Owner when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner may occupy the project, or designated portion(s) thereof, for the use for which it is intended.

B. Time as Essential Condition: It is understood and agreed that the commencement of and substantial completion of the work are essential conditions of this Agreement. It is further agreed that time is of the essence for each and every portion of the Contract Documents wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the Contract Documents any additional time is allowed for the completion of any work, the new time fixed by such extension shall be of the essence of this Agreement. It is understood and agreed that the times for the completion of the work are reasonable, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

C. Progress and Completion: Contractor shall commence work promptly upon execution of this Agreement and shall prosecute and complete the work regularly, diligently and uninterruptedly at such a rate of progress as will insure Substantial Completion within the stipulated number of calendar days.

D. Liquidated Damages: It is expressly agreed between the Contractor and the Owner that the Contractor will be responsible for all damages which may arise due to the Contractor's failure to substantially complete the work within the above specified time. If the Contractor shall neglect, fail or refuse to complete the work within the specified number of days, or any extension thereof authorized by the Owner, Contractor agrees, as a part of the consideration for the execution of this Contract by the Owner, to pay the Owner the amount specified herein, not as a penalty, but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the Contractor shall be in default of Substantial completion after the date specified in the Agreement. Due to the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain, said amount is agreed to be the amount of damages which the Owner would sustain, and said amount shall be retained from time to time by the Owner from current periodic estimates. The amount of liquidated damages shall be $250.00 per calendar day per following the date required for substantial completion.

4. Performance of the Work

A. Direction of the Work: The Contractor shall supervise and direct the Work, using his best skills and attention which shall not be less than such state of skill and attention generally rendered by the contracting profession for projects similar to the Project in scope, difficulty and location. The Contractor shall maintain adequate supervisory personnel at the project site during the performance of the Work. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Agreement.

B. Responsibility for the Work: (1) The Contractor shall be responsible to the Owner for the acts and omissions of his employees, Subcontractors and their agents and employees, and other persons performing any of the Work under a contract with the Contractor. This obligation shall also extend to the presence on the Site of suppliers of materials or equipment, their employees, contractors, and agents engaged in the work.

(2) The Contractor shall not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Owner in its administration of the Agreement, or by inspections, tests or approvals required or performed by persons other than the Contractor.

C. Permits and Fees: Unless otherwise expressly provided, the Contractor shall secure and pay for all permits and fees, licenses and inspections necessary for the proper execution and completion of the Work which are customarily secured after execution of the Agreement and which are legally required at the time the bids are received, and the same shall at all times be the property of the Owner and shall be delivered to the Owner upon completion of the Project. Permits that would be obtained from the Town of Longmeadow Building Department shall be provided at no charge to the Contractor.

D. Notices, Compliance With Laws: (1) The Contractor shall give all notices and comply with all federal, state and local laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the Work. The Contractor shall provide the Owner with reproductions of all permits, licenses and receipts for any fees paid. The Owner represents that it has disclosed to the Contractor all orders and requirements known to the Owner of any public authority particular to this Agreement.

(2) If the Contractor observes that any of the Contract Documents are at variance with applicable laws, statutes, codes and regulations in any respect, he shall promptly notify the Owner in writing, and any necessary changes shall be accomplished by appropriate modification.

(3) If the Contractor performs any Work which he knows or should know is contrary to such laws, ordinances, rules and regulations, and without such notice to the Owner, he shall assume full responsibility therefore and shall bear all costs attributable thereto.

(4) In the performance of the Work, the Contractor shall comply with all applicable federal, state and local laws and regulations including those relating to workplace and employee safety. The Contractor shall notify the Owner immediately of any conditions at the place of the work which violate said laws and regulations and shall take prompt action to correct and eliminate any such violations.

E. Project Superintendent: The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site at all times during the progress of the Work. The superintendent shall represent the Contractor and all communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be so confirmed on written request in each case.

F. Progress Schedule: The Contractor, immediately after being awarded the Contract, shall prepare and submit for the Owner's information an estimated progress schedule for the Work. The progress schedule shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

G. Drawings, Specifications and Submittals:

(1) The Contractor shall maintain at the site for the Owner one record copy of all Drawings, Specifications, Addenda, Change Orders and other Modifications, and "As-Built" Drawings and Specifications in good order and marked currently to record all changes made during construction, and approved Shop Drawings, Product Data and Samples. These shall be delivered to the Owner upon completion of the Work.

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

(3) The Contractor shall not relieved of responsibility for any deviation from the requirements of the Contract Documents by the Owner's approval of Shop

Drawings, Product Data or Samples unless the Contractor has specifically informed the Owner in writing of such deviation at the time of submission and the Owner has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples by the Owner's approval thereof.

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

(5) No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the submittal has been approved by the Owner. All such portions of the Work shall be in accordance with approved submittals.

H. Protection of the Work and Owner's Property: The Contractor shall at all times safely guard the Owner's property from injury or loss in connection with this Agreement. He shall at all times safely guard and protect his own work, and that of adjacent property from damage. The Contractor shall replace or make good any such damage, loss or injury. The Contractor shall clean the work area and restore it to its original condition upon completion of the work.

(6) The Contractor shall comply with applicable OSHA, State and municipal regulations and requirements for services and facilities in the performance of all requirements of this contract. OSHA safety requirements shall be adhered to for all personnel performing construction, reconstruction, alteration, remodeling or repair of any building or public works project.

I. Quality of the Work: The Contractor shall perform the work in a good, workmanlike manner. The Contractor hereby guarantees that the entire work constructed by him under the Agreement will meet fully all requirements thereof as to quality of workmanship and materials. The Contractor hereby agrees to make at his own expense any repairs or replacements made necessary by defects in materials or workmanship supplied to him that become evident within one (1) year after the date of the final payment, and to restore to full compliance with the requirements set forth herein any part of the work constructed hereunder, which during said one (1) year period is found to be deficient with respect to any provisions of the Contract Documents. The Contractor also agrees to hold the Owner harmless from claims of any kind arising from damage due to said defects. The Contractor shall make all repairs and replacements promptly upon receipt of written orders for same from the Owner. If the Contractor fails to make the repairs and replacements promptly, the Owner may do the work and the Contractor shall be liable to the Owner for the cost thereof.

J. Warranty: The Contractor guarantees to Owner that all materials incorporated into the work will be new unless otherwise specified or agreed. Prior to final payment, the Contractor shall deliver to the Owner all manufacturers' warranties, together with such endorsements or assignments as are necessary to ensure to the Owner the full rights and benefits of such warranties.

5. Equal Employment Opportunity

The Contractor is directed to comply with all applicable State Laws, Ordinances, Bylaws, and rules and regulations regarding affirmative action/equal employment opportunity requirements. Failure of the Contractor to comply with any such law, rule or regulation shall constitute grounds for the Owner to terminate the Agreement.

6. Site Information Not Guaranteed; Contractor's Investigation

All information given in the Contract Documents relating to subsurface and other conditions, natural phenomena, existing pipes, and other structures is from the best sources at present available to the Owner. All such information is furnished only for the information and convenience of the Contractor and is not guaranteed.

It is agreed and understood that the Owner does not warrant or guarantee that the subsurface or other conditions, natural phenomena, existing pipes, or other structures encountered during construction will be the same as those indicated in the Contract Documents.

Contractor has familiarized himself with the nature and extent of the Contract Documents, work, locality, and with all local conditions and federal, state, and local laws, rules, ordinances, and regulations that in any manner may affect costs, progress, or performance of the work. Contractor has made, or has caused to be made, examinations, investigations, and tests and studies of such reports and related data in addition to those referred to in the paragraph above as he deems necessary for the performance of the work at the Contract Price, within the Contract Time, and in accordance with the other Terms and Conditions of the Contract Documents; and no additional examinations, tests, investigations, reports, and similar data are or will be required by the Contractor for such purposes.

Contractor has correlated the results of all such observations, examinations, investigations, tests, reports, and data with the Contract Documents. Contractor has given the Owner written notice of all conflicts, errors, or discrepancies that he has discovered in the Contract Documents, and the resolution thereof by the Owner is acceptable to the Contractor.

It is further agreed and understood that the Contractor shall not use or be entitled to use any of the information made available to him or obtained in any examination made

by him in any manner as a basis of or ground for any claim or demand against the Owner, arising from or by reason of any variance which may exist between the information made available and the actual subsurface conditions or other conditions or structures actually encountered during the construction work, except as may otherwise be expressly provided for in the Contract Documents.

7. Project Architect or Engineer

There is ___X_____ is a project architect-engineer for this project who is Mr. Jamie Reinhardt of Hill-Engineers, Architects, Planners, Inc of Dalton, MA 01226. Except as otherwise indicated in the Contract Documents, the Architect/Engineer shall be a representative of the Owner and the Contractor shall direct all communications, questions and comments on the work and the performance thereof to the Architect/Engineer. Except as otherwise provided, the Architect/Engineer shall have all the authority of the Owner set forth in the Contract Documents. In general, the Architect/Engineer shall have the authority to review the performance of the work, reject work which is defective or otherwise does not comply with the Contract Documents and to order the Contractor to remedy defective work and take such actions which are necessary to make the work conform to the Contract Documents.

8. Wage Rates

Prevailing Wage Rates as determined by the Commissioner of the Department of Labor and Workforce Development under the provisions of Massachusetts General Laws, Chapter 149, Section 26 to 27H, as amended, apply to this project. It is the responsibility of the Contractor to provide the Town with certified payrolls and to comply with all requirements of the above-cited statutes.

The schedules of prevailing wage rates are included in the Contract Documents.

9. Payments to the Contractor

Within fifteen (15) days after receipt from the Contractor of a periodic estimate requesting payment of the amount due for the preceding month, the Owner shall have fifteen (15) days to make payment for:

A. The work performed during the preceding month.

B. The materials not incorporated in the Work but delivered and suitably stored at the site (or at some location agreed upon in writing) to which the Contractor has title, or to which a Subcontractor has title and has authorized the Contractor to transfer title to the Owner.

C. Less the following retention items:

1. A retention based on an estimate of the fair value of the Owner's claims against the Contractor.

2. A retention for direct payments to Subcontractors, if any, based on demands for same in accordance with the provisions of Section 39F of Chapter 30 of the General Laws.

3. A retention not exceeding five percent (5%) of the approved amount of the periodic payment.

D. After the receipt of a periodic estimate requesting final payment and within sixty-five (65) days after the Contractor fully completes the Work, or substantially completes the Work so that the value of the Work remaining to be done is, on the estimate of the Owner, less than 1% of the original Contract Price, or substantially completes the Work and the Owner takes possession or occupancy, whichever occurs first, the Owner shall pay the Contractor the entire balance due on the Contract less:

1. A retention based on an estimate of the fair value of the Owner's claims against the Contractor and of the cost of completing the incomplete and unsatisfactory items of work.

2. A retention for direct payments to Subcontractors, if any, based on demands of same in accordance with the provisions of Section 39F of Chapter 30 of the General Laws, or based on the record of payments by the Contractor to the Subcontractors under this Contract if such record of payment indicates that the Contractor has not paid Subcontractors as provided in Section 39F of Chapter 30 of the General Laws.

If the Owner fails to make payment as herein provided, there shall be added to each such payment, daily interest at the rate of 3 percentage points above the rediscount rate than charged by the Federal Reserve Bank of Boston, commencing on the first day after said payment is due, and continuing until the payment is delivered or mailed to the Contractor; provided that no interest shall be due, in any event, on the amount of a periodic estimate for final payment until fifteen (15) days after receipt of such a periodic estimate by the Owner as provided in the first paragraph of this Article. The Contractor agrees to pay to each subcontractor a portion of any such interest paid in accordance with the amount due each subcontractor.

The Owner may make changes in any periodic estimate submitted by the Contractor and the payment due on said periodic estimate shall be computed in accordance with the changes so made, and such changes and any requirements for a corrected periodic estimate shall not affect the due date for the periodic payment or the date for the commencement of interest charges on the amount of the periodic payment computed in accordance with the changes made, as provided herein; provided further, that the Owner

may, within seven (7) days after receipt, return to the Contractor for correction, any periodic estimate which is not in acceptable form or which contains computations not arithmetically correct, and in that event, the date of receipt of such periodic estimate shall be the date of receipt of the corrected periodic
estimate in proper form and with arithmetically correct computations. The date of receipt of a periodic estimate received on a Saturday shall be the first working day thereafter.

E. Changes in the Work: No changes in the work covered by the approved Contract Documents shall be made without prior written approval of the Owner. Charges or credits for the work covered by the approved change shall be determined by one or more, or a combination of the following methods:

(a) Unit bid prices previously approved.

(b) An agreed lump sum.

(c) The actual cost of:

(1) Labor.

(2) Materials entering permanently into the work.

(3) The ownership or rental cost of construction equipment during the time of use on the extra work.

(4) Power and consumable supplies for the operation of power equipment.

(5) Wages to be paid.

The undersigned agrees that for any extra work, the contract price shall be increased by the actual cost of the work in place plus_____ percent of the actual cost of work added to cover all profit and overhead for the General Contractor's work, OR plus _____ percent of the actual cost added to cover all profit and overhead for the Subcontractor's work. The fee shall be compensation to cover the cost of supervision, overhead, bond, profit and any other general expenses.

F. Claims for Additional Costs: If the Contractor wishes to make a claim for an increase in the Contract Sum, he shall give the Owner written notice thereof within twenty days after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property. No such claim shall be valid unless so made. Any change in the Contract Sum resulting from such claim shall be authorized by Change Order.

10. Final Payment, Effect

The acceptance of final payment by the Contractor shall constitute a waiver of all claims by the Contractor arising under the Agreement.

11. Contract Documents

The Contract Documents consist of the following, together with this Agreement:

Invitation to Bid
Instructions to Bidders
This Contract Form
Bid Form
100% Labor & Materials Payment Bond
100% Performance Bond
Non-Collusion Certificate
Tax Compliance Certificate
Clerk's Certificate of Corporate Vote
Certificate of Insurance
General Conditions
Supplementary General Conditions
General Requirements
Specifications and Addenda
Contract Drawings
Schedule of Prevailing Wages

12. Terms Required By Law

This Agreement shall be considered to include all terms required to be included in it by the Massachusetts General Laws, and all other laws, as though such terms were set forth in full herein.

13. Indemnification

The Contractor shall indemnify and hold harmless the Owner from and against any and all claims, damages, losses, and expenses, including attorney's fees, arising out of the performance of this Agreement when such claims, damages, losses, and expenses are caused, in whole or in part, by the acts, errors, or omissions of the Contractor or his employees, agents, subcontractors or representatives.

14. Insurance

The Contractor shall purchase and maintain such insurance as will protect both the Owner and the Contractor from claims which may arise under the Agreement, including operations performed for the named insured by independent contractors and general inspection thereof by the named insured. In addition, the Contractor shall require its

subcontractors to maintain such insurance. Coverage shall be 1,000,000.00 aggregate provided for:

.1 claims under workers' or workmen's compensation, disability benefit and other applicable employee benefit acts;

.2 claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

.3 claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

.4 claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by any other person;

.5 claims for damages, including damages to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom; and

.6 claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

.7 claims involving contractual liability applicable to the Contractor's obligations

The limits of liability for coverage required under the preceding paragraph shall be as required by the Owner.

Except for Workmen's Compensation, all liability coverage shall name the Town of Longmeadow as an additional insured and shall provide for 30 days prior written notice to the Town of any modification or termination of coverage provided thereby. The Contractor shall provide the Owner with appropriate certificate(s) of insurance evidencing compliance with this provision prior to the commencement of any work under this Agreement.

15. Notice

All notices required to be given hereunder shall be in writing and delivered to, or mailed first class to, the parties' respective addresses stated above. In the event that immediate notice is required, it may be given by telephone or facsimile, but shall, to the extent possible, be followed by notice in writing in the manner set forth above.

16. Termination

A. Each party shall have the right to terminate this Agreement in the event of a failure of the other party to comply with the terms of the Agreement. Such termination shall be effective upon seven days' notice to the party in default and the failure within that time of said party to cure its default.

B. The Owner shall have the right to terminate the Agreement without cause, upon ten (10) days' written notice to the Contractor. In the event that the Agreement is terminated pursuant to this subparagraph, the Contractor shall be reimbursed in accordance with the Contract Documents for all Work performed up to the termination date, and for all materials or equipment not incorporated in the Work, but delivered and suitably stored at the site. Payment for material or equipment stored at the site shall be conditioned upon submission by the Contractor of bills of sale or such other evidence as is satisfactory to Owner to establish the Owner's title to such material or equipment or otherwise protect the Owner's interests.

17. Miscellaneous

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

B. Assignment: The Contractor shall not assign or transfer any of its rights, duties or obligations under this Agreement without the written approval of the Owner.

C. Governing Law: This Agreement shall be governed by and construed in accordance with the law of the Commonwealth of Massachusetts.

D. Safety and Protection: Protection of the Work and Owner’s Property: The Contractor shall at all times safely guard the Owner’s property from injury or loss in connection with this Agreement. The contractor shall at all times safely guard and protect their own work, and that of adjacent property from damage. The Contractor shall replace or make good any such damage, loss or injury. The Contractor shall clean the work area and restore it to its original condition upon the completion of the work. The Contractor shall comply with all applicable OSHA, State and municipal regulations and requirements for services and

facilities in the performance of all requirements of this contract. OSHA safety requirements and training certification shall be adhered to for all personnel working on Town property.

E. By its signature hereon, the Contractor certifies, under the pains and penalties of perjury, that it has complied with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

SECTION 01 10 00

SUMMARY

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Contract description.

B. Work by Owner.

C. Contractor's use of site.

D. Work sequence.

E. Owner occupancy.

F. Specification Conventions.

1.2 CONTRACT DESCRIPTION

A. Work of the Project includes:

1933 Building - removal of storm windows, interior sashes, concealed sash weights and appurtenances and existing wood and metal window track appurtenances in their entirety. Provide aluminum clad replacement double hung and awning windows. See schedule at the end of this Section.

1993 Building - removal of interior sashes, concealed balancers and appurtenances and existing wood/metal/vinyl window track appurtenances in their entirety. Provide aluminum clad replacement double hung and awning windows. See schedule at the end of this Section.

B. Regulated material: Refer to Section 02 08 10 and test data.

C. Work of the Contract is identified in the Bid Section of the specifications.

1.3 WORK BY OWNER

A. The Owner will award a contract for the project commencing on the date established in the post-bid conference.

B. Owner will remove and retain possession of the following items before start of work:
1. None.

1.4 CONTRACTOR'S USE OF SITE

A. Access to Site: Shall be instructed by the Owner.

B. Emergency Building Exits During Construction: Shall be coordinated with the approval by the Owner.

C. Construction Operations: Shall be instructed by the Owner.

D. Time Restrictions for Performing Interior Work: Shall be instructed by the Owner.

E. Utility Outages and Shutdown: Shall be coordinated with the approval by the Owner.

1.5 WORK SEQUENCE

A. Construct Work to accommodate Owner's occupancy requirements during construction period, coordinate construction schedule and operations with the Owner/Architect.

1.6 OWNER OCCUPANCY

A. The Owner will occupy the premises during the entire period of construction.

B. Cooperate with Owner to minimize conflict, and to facilitate Owner's operations.

C. Contractor to comply with the Town noise ordinance. With the agreement by the Town, the building may be opened and or closed outside of the scheduled/posted Library hours. Contractor is reminded that the building will remain in operation and will work with the Librarian and Longmeadow representative to minimize disruption and to coincide with scheduled events.

1.7 SPECIFICATION CONVENTIONS

A. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words “shall be” are included by inference where a colon (:) is used within sentences or phrases.

END OF SECTION

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Coordination and project conditions.

B. Preconstruction meeting.

C. Progress meetings.

D. Cutting and patching.

E. Special procedures.

1.2 COORDINATION AND PROJECT CONDITIONS

A. Coordinate scheduling, submittals, and Work of various sections of Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements.

B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.

C. Coordinate space requirements, supports, and installation of electrical Work indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

D. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion.

E. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 PRECONSTRUCTION MEETING

A. Architect/Engineer will schedule meeting after Notice of Award.

B. Attendance Required: Owner, Architect/Engineer, and Contractor.

C. Agenda:
   1. Submission of executed bonds and insurance certificates.

2. Distribution of Contract Documents.
3. Submission of list of Subcontractors, list of products, schedule of values, and progress schedule.
4. Designation of personnel representing parties in Contract, Owner, and Architect/Engineer.
5. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
6. Scheduling.

D. Contractor shall record minutes and distribute copies within two days after meeting to participants, with copy to Architect/Engineer, Owner, and those affected by decisions made.

1.4 PROGRESS MEETINGS

A. Schedule and administer meetings throughout progress of the Work at maximum bi-monthly intervals.

B. Attendance Required: Job superintendent, major subcontractors and suppliers, Owner, Architect/Engineer, as appropriate to agenda topics for each meeting.

C. Contractor shall record minutes and distribute copies within two days after meeting to participants, with copy to Architect/Engineer, Owner, and those affected by decisions made.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.1 CUTTING AND PATCHING

A. Employ skilled and experienced installer to perform cutting and patching.

B. Execute cutting, fitting, and patching to complete Work.

C. Execute work by methods to avoid damage to other Work, and to provide proper surfaces to receive patching and finishing.

D. Restore Work with new products in accordance with requirements of Contract Documents.

E. Maintain integrity of construction; completely seal voids.

F. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit.

G. Identify hazardous substances or conditions exposed during the Work to Architect/Engineer for decision or remedy.

3.2 SPECIAL PROCEDURES

A. Materials: As specified in product sections; match existing with new products and salvaged products for patching and extending work.

B. Employ skilled and experienced installer to perform alteration work.

C. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.

D. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.

E. Remove debris and abandoned items from area and from concealed spaces.

F. Prepare surface and remove surface finishes to permit installation of new work and finishes.

G. Remove, cut, and patch Work in manner to minimize damage and to permit restoring products and finishes to original condition.

H. Refinish existing visible surfaces to remain in renovated rooms and spaces, to renewed condition for each material, with neat transition to adjacent finishes.

I. Where new Work abuts or aligns with existing, provide smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance.

J. When finished surfaces are cut so that smooth transition with new Work is not possible, terminate existing surface along straight line at natural line of division and submit recommendation to Architect/Engineer for review.

K. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.

L. Finish surfaces as specified in individual product sections.

END OF SECTION

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Submittal procedures.

B. Construction progress schedules.

C. Product data.

D. Shop drawings.

E. Samples.

F. Certificates.

G. Manufacturer's instructions.

1.2 SUBMITTAL PROCEDURES

A. Transmit each submittal with separate transmittal identifying the product.

B. Identify Project, Contractor, subcontractor and supplier; pertinent drawing and detail number, and specification section number, appropriate to submittal.

C. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.

D. Schedule submittals to expedite Project, and deliver to Architect/Engineer. Coordinate submission of related items.

E. For each submittal for Architect/Engineer review, allow one (1) week excluding delivery time to and from Contractor.

F. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of completed Work.

G. Allow space on submittals for Contractor and Architect/Engineer review stamps.

H. When revised for resubmission, identify changes made since previous submission.

I. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.

J. Submittals not requested will not be recognized or processed.

K. Provide Architect with Contractor's overnight delivery account number so that Architect may return reviewed submittal by overnight service.

1.3 CONSTRUCTION PROGRESS SCHEDULES

A. Submit preliminary outline Schedules within (10) ten days after date of established in Notice to Proceed for coordination with Owner's requirements. After review, submit detailed schedules within (10) ten days modified to accommodate revisions recommended by Architect/Engineer and by Owner.

B. Submit revised Progress Schedules every (2) weeks.

C. Distribute copies of reviewed schedules to Project site file, subcontractors, suppliers, and other concerned parties.

D. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.

1.4 PRODUCT DATA

A. Product Data: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.

B. Submit number of copies Contractor requires, plus two copies Architect/Engineer will retain.

C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.

D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

E. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

1.5 SHOP DRAWINGS

A. Shop Drawings: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.

B. When required by individual specification sections, provide shop drawings signed and sealed by professional engineer responsible for designing components shown on shop drawings.
   1. Include signed and sealed calculations to support design.

2. Submit drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
3. Make revisions and provide additional information when required by authorities having jurisdiction.

C. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

D. See Drawings for additional requirements, photograph.

1.6 SAMPLES

A. Samples: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.

B. Samples For Selection as Specified in Product Sections:
1. Submit to Architect/Engineer for aesthetic, color, or finish selection.
2. Submit samples of finishes from full range of manufacturers' standard colors, textures, and patterns for Architect/Engineer selection.

C. Submit samples to illustrate functional and aesthetic characteristics of Products, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

D. Include identification on each sample, with full Project information.

E. Submit number of samples specified in individual specification sections; Architect/Engineer will retain (2) two samples.

F. Reviewed samples which may be used in the Work are indicated in individual specification sections.

1.7 CERTIFICATES

A. When specified in individual specification sections, submit certification by manufacturer, installation/application subcontractor, or Contractor to Architect/Engineer, in quantities specified for Product Data.

B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect/Engineer.

1.8 MANUFACTURER'S INSTRUCTIONS

A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, adjusting, and finishing, to Architect/Engineer for delivery to Owner in quantities specified for Product Data.

B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

END OF SECTION

SECTION 01 60 00

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Products.

B. Product delivery requirements.

C. Product storage and handling requirements.

D. Product options.

E. Product substitution procedures.

F. Equipment electrical characteristics and components.

1.2 PRODUCTS

A. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise.

B. Do not use materials and equipment removed from existing premises, except as specifically permitted by Contract Documents.

C. Furnish interchangeable components from same manufacturer for components being replaced.

1.3 PRODUCT DELIVERY REQUIREMENTS

A. Transport and handle products in accordance with manufacturer's instructions.

B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.

C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

A. Store and protect products in accordance with manufacturers' instructions.

B. Store with seals and labels intact and legible.

C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.

D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

E. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.5 PRODUCT OPTIONS

A. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for any manufacturer not named in accordance with the following article.

1.6 PRODUCT SUBSTITUTION PROCEDURES

A. Substitutions may be considered when a product becomes unavailable through no fault of Contractor.

B. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.

C. Substitution Submittal Procedure:
1. Submit Shop Drawings, Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.

END OF SECTION

SECTION 01 70 00

EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Closeout procedures.

B. Final cleaning.

C. Protecting installed construction.

D. Project record documents.

E. Spare parts and maintenance products.

F. Maintenance service.

1.2 CLOSEOUT PROCEDURES

A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect/Engineer's review.

B. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

1.3 FINAL CLEANING

A. Execute final cleaning prior to final project assessment.

B. Clean interior surfaces exposed to view and; remove temporary labels.

C. Clean equipment and fixtures to sanitary condition with cleaning materials appropriate to surface and material being cleaned.

D. Remove waste and surplus materials, rubbish, and construction facilities from the project area.

1.4 PROTECTING INSTALLED CONSTRUCTION

A. Protect installed Work and provide special protection where specified in individual specification sections.

B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.

C. Protect finished floors from traffic, dirt, wear, damage, or movement of heavy objects.

1.5 PROJECT RECORD DOCUMENTS

A. Maintain on site one set of the following record documents; record actual revisions to the Work:
   1. Drawings.
   2. Specifications.
   3. Addenda.
   4. Change Orders and other modifications to the Contract.
   5. Reviewed Shop Drawings, Product Data, and Samples.
   6. Manufacturer's instruction for assembly, installation, and adjusting.

B. Ensure entries are complete and accurate, enabling future reference by Owner.

C. Store record documents separate from documents used for construction.

D. Record information concurrent with construction progress, not less than weekly.

E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
   1. Manufacturer's name and product model and number.
   2. Product substitutions or alternates utilized.
   3. Changes made by Addenda and modifications.

F. Record / Shop Drawings: Legibly mark each item to record actual construction including:
   1. Field changes of dimension and detail.
   2. Details not on original Contract drawings.

G. Submit documents to Architect/Engineer with claim for final Application for Payment.

1.6 SPARE PARTS AND MAINTENANCE PRODUCTS

A. Furnish spare parts, maintenance, and extra products in quantities specified in individual specification sections.

B. Deliver to and place in location as directed by Owner; obtain receipt prior to final payment.

1.7 MAINTENANCE SERVICE

A. Furnish service and maintenance of all components installed for (1) one year from date of Substantial Completion.

B. Examine system components at frequency consistent with reliable operation. Clean, adjust, and lubricate as required.

C. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by manufacturer of original component.

END OF SECTION

SECTION 02 0810

LEAD-CONTAINING PAINT

The General Contractor shall be made aware that lead-containing paint may be present on the architectural components that will be impacted by renovation activities on this project. However, lead abatement of these components in accordance with Massachusetts Department of Public Health (DPH) 105 CMR 460.000 Regulations shall not be required for performance of the work outlined therein. The General Contractor shall be required to comply with the Occupational Safety and Health Administration (OSHA) "Lead in Construction Standard at 29 CFR 1926.62 as well as properly dispose of all material that contains lead in accordance with applicable Massachusetts Department of Environmental Protection (DEP) and federal Environmental Protection Agency (EPA) Regulations. The General Contractor may elect to perform testing to confirm the presence of lead containing materials at their own discretion. However, all costs associated with additional testing and compliance with OSHA and other applicable regulations shall be borne by the General Contractor. No additional compensation shall be granted for any engineering control methods employed by the General Contractor for compliance with OSHA or other applicable requirements. Prior to the start of the work, the General Contractor shall be required to provide a written description detailing the means and methods to achieve compliance with the provisions outlined herein regarding disturbance and disposal of lead-containing materials.

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SECTION 02081 - DISTURBANCE OF LEAD-CONTAINING MATERIALS

PART 1.0 - GENERAL

1.1 GENERAL PROVISIONS

A. Drawings and general provisions of the Contract, including Parts I, II and III, Division 1, as listed in the TABLE OF CONTENTS apply to the work of this SECTION.

B. Equality of material, article, assembly or system other than those named or described in this Section shall be determined in accordance with the provisions of the CONTRACT AND GENERAL CONDITIONS.

C. The Contractor shall refer to other Sections of the Specifications for work, which may impact the sequence, or the work of this Section. Examine all Drawings and all other Sections of the Specifications for requirements of related sections affecting the work of this Section.

1.2 DEFINITIONS

A. The following definitions shall be applicable to this Section:

"Owner": Refers to the TOWN OF LONGMEADOW

"Contractor": Refers to the General Contractor who has been awarded the overall contract for renovation work outlined by the Contract Documents. Any reference to Contractor shall also mean all subcontractors who work on the project.

1.3 DESCRIPTION OF WORK

A. The Contractor shall be made aware that lead-containing paint may be present on several components in the building which will be impacted by renovation activities on this project. However, lead abatement of these components shall not be required for performance of the renovation work outlined therein.

NOTE: *The building is not considered a residence, therefore, abatement of lead-containing components will not be required as per Massachusetts Department of Public Health (DPH) "Child Lead Poisoning and Prevention Regulations. However, if the Contractor deems that removal of the lead paint will be an appropriate "engineering control" for compliance with their OSHA program, then such removal shall be performed at the Contractor's own expense in accordance with applicable requirements. No additional compensation shall be granted for any engineering control methods employed by the Contractor for compliance with this Section, OSHA or other applicable requirements.*

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B. The Contractor and all subcontractors' shall be required to comply with all aspects of OSHA 29 CFR 1926.62 "Lead In Construction Regulations" with regards to disturbance of these materials when performing their work. It shall be the sole responsibility of each Contractor for compliance with OSHA including all costs associated with, but not limited to;

- Development and implementation of a Lead Compliance Program.
- Development and implementation of a Respiratory Program.
- Development and implementation of a Medical Monitoring Program.
- Development and implementation of a Hazard Communication Program.
- Performance of any lead testing required on the project.
- Performance of any Negative Exposure Assessments required.
- Providing all medical examinations required.
- Providing all equipment required (including appropriate PPE)
- Providing all engineering controls and associated work practices.
- Disposing of all demolition material in accordance with local, state and federal regulations

C. The Contractor shall be made aware that the Owner has performed a limited lead survey at the site but 100% testing of all painted surfaces to confirm the presence of lead paint was not performed in the building. Due to the age of the building and previous painting history, the Contractor shall assume any paint not tested to be lead containing and comply with this Section and OSHA Regulations accordingly. Refer to Attachment A of this Section that summarizes any testing performed by the Owner.

D. The Contractor may elect to perform additional testing to confirm the presence of lead containing materials in the building at their own discretion. However, all costs associated with additional testing and compliance with this Section shall be borne by the Contractor. In addition, any lead testing performed by the Owner as referenced under Attachment A was provided for informational purposes to the Contractor. The Contractor may choose to agree with these results or perform their own testing to confirm lead content at their own expense. However, any variations of results between the Owner's testing and the Contractors shall not warrant a Change in Scope. The Contractor shall be responsible for compliance with OSHA and applicable regulations regardless if the Owner's testing results conflict with any testing performed by the Contractor.

E. OSHA 29 CFR 1926.62 regulates activities that disturb the lead paint by the use of manual techniques. Regulated activities include abrasive blasting, welding, and cutting, burning on structures, manual scraping or sanding, and manual demolition of structures. The work practices described in this Section are intended to adequately protect the workers from exposure to lead containing paint (LCP), provide a safe workplace, and protect the environment. However, it shall be the Contractors responsibility to comply with this Section as well as any other provisions/requirements outlined by OSHA and other applicable regulations.

F. Materials and Equipment: The work of this Section, without limiting the generality thereof, includes the furnishing of labor, materials, tools, equipment, services and incidentals necessary to safely accomplish tasks which will disturb lead containing paint.

G. Approvals and Inspections: Temporary facilities, work procedures, equipment, materials, services, and agreements must fully comply with EPA, OSHA, and NIOSH recommendations, standards and guidelines, as well as any other applicable federal, state, and local regulations. Where there exists an overlap of these regulations and guidelines, the most stringent shall apply.

H. Disposal: The Contractor shall dispose of demolition debris and associated materials in accordance with Part 3.6 of this Section.

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1.4 DEFINITIONS

A. Action Level: Action Level as defined by OSHA 29 CFR 1926.62 shall refer to employee exposure, without regard to the use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air (30 ug/m^3) calculated as an 8-hour time-weighted average (TWA).

B. Competent Person: Competent Person shall refer to a person who is capable of identifying existing and predictable lead hazards in the surroundings or working conditions and who has authorization to take prompt corrective measures to eliminate them.

C. HEPA Filter: HEPA Filter shall refer to a filter capable of filtering out monodispersive particles of 0.3 microns or greater diameter from a body of air at 99.97 percent efficiency or greater.

D. Lead Containing Paint (LCP): LCP shall refer to paint found to contain lead in any concentration or paint assumed to contain lead as indicated in this Section.

E. Permissible Exposure Limit (PEL): PEL shall refer to employee exposure, without regard to the use of respirators, to an airborne concentration of lead of 50 micrograms per cubic meter of air (50 ug/m^3) calculated as an 8 hour time-weighted average.

1.5 PERMITS AND INSPECTIONS

A. Notifications/Approvals: The Contractor shall make, in proper and timely fashion, any necessary notifications to relevant Federal, State, and local authorities and shall obtain and comply with the provisions of all permits or applications required by the work specified, as well as make all required submittals required under these auspices. The Contractor shall indemnify the Owner, their representatives and agents from, and pay for claims resulting from failure to adhere to these provisions. The costs for permits, applications, and the like, are to be assumed by the Contractor.

B. Fees, Permits and Licenses: The Contractor shall pay licensing fees, royalties, and other costs necessary for the use of any copyrighted or patented product, design, invention, or processing the performance of the job specified in this Section. The Contractor shall be solely responsible for costs, damages or losses resulting from any infringement of these patent rights or copyrights. The Contractor shall hold the Owner and Consultant harmless from any costs, damages, and losses resulting from any infringement of these patent rights or copyrights. If the Specification requests the use of any product, design, invention, or process that requires a licensing fee or royalty fee for use in the performance of the job, the Contractor shall be responsible for the fee or royalty and shall disclose the existence of such rights.

C. Contractor shall be responsible for costs for licensing requirements and notification requirements and other fees related to the ability to perform the work in this Section. The Contractor shall be responsible for securing necessary permits for work under this Section, including removal, materials usage, or any other permits required to perform the specified work.

1.6 SUBMITTALS

A. Pre-Construction Submittals: Prior to the commencement of the required work, the Contractor shall provide the following to the Consultant for approval:

1. Written Lead Compliance Program in accordance with OSHA 29 CFR 1926.62
2. A written description detailing the means and methods to achieve compliance with the OSHA standard as well as the provisions outlined herein.
3. A written description detailing the means and methods for properly disposing of all demolition debris in accordance with local, state and federal regulations.

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B. Post-Construction Submittals: Final payment to the Contractor shall not be made unless the following items are submitted to the Consultant for approval.

1. Original Copy of Waste Disposal Manifests acknowledging disposal of any hazardous, regulated and/or non-hazardous waste material from the project showing delivery date, quantity, and appropriate signature of landfill's authorized representative.

1.7 QUALITY CONTROL/ASSURANCE

A. Training Requirements: Workers who will have the potential of lead exposure shall have proof of successfully completing a training course which covers the topics required by 29 CFR 1926.62. Contractors are also advised that training in other areas may be required by OSHA and are responsible to ensure that all training requirements for appropriate trades and procedures are met.

B. Specified Supervisor Qualifications: The Contractor shall specify an on-site Supervisor or Competent Person who is fully qualified in all aspects of safe work practices and procedures with lead containing materials, and have (or will have) completed a training course within the previous year prior to the commencement of lead related work. The lead training course will cover all topics required by 29 CFR 1926.62 as well as training in relevant federal, state and local regulatory requirements, procedures and standards (including 454 CMR 22.00), supervisory techniques, and proper disposal procedures.

C. Site Specific Written Compliance Program: The program will be evaluated to ensure the elements required by 29 CFR 1926.62(e)(2)(iii) (A)-(I) are specific to the conditions at the job site.

D. Respiratory Protection Program: The Contractor must provide for review a written respiratory protection program in accordance with 29 CFR 1920.103 if respiratory protection is to be worn during this project.

E. Fit Test Records: If respiratory protection is to be worn as part of this project, records of successful respirator fit testing performed by a qualified individual within the previous 12 months, for each employee to be used on this project with the employee's name and social security number with each record.

F. Medical Surveillance: The Contractor shall provide biological monitoring to workers who have the potential of lead exposure. This monitoring shall be performed in accordance with 29 CFR 1926.62. If workers are expected to exceed the action level for more than 30 days in any consecutive 12 months the Contractor shall institute a medical surveillance program in accordance with 29 CFR 1926.62. A laboratory approved by OSHA shall conduct Blood lead level sampling and analysis.

1.8 CODES AND STANDARDS

A. Work shall conform to the standards set by applicable federal, state and local laws, regulations, ordinances, and guidelines in such form in which they exist at the time of the work on the contract and as may be required by subsequent regulations.

B. In addition to any detailed requirements of the Specification, the Contractor shall at his own cost and expense comply with all laws, ordinances, rules and regulations of federal, state, regional and local authorities regarding handling and storing of lead waste material.

NOTE: Regulations by the above and other governing agencies in their most current version are applicable throughout this project. Where there is a conflict between this Specification and the cited federal, state or local regulations or guidelines, the more restrictive or stringent requirements shall prevail. This Section refers to many requirements found in these references, but in no way is it intended to cite or reiterate all provisions therein or elsewhere. It is the Contractor's responsibility to know, understand, and abide by all such regulations, guidelines and common practices.

PART 2.0 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT

A. The Contractor shall be responsible for providing all material and protective equipment required for performance of the work. The Contractor shall comply with all local, state and federal regulations pertaining to the selection and use of materials and equipment on this project. The Contractor shall provide a submittal on all materials and equipment to be used for review by the Architect

PART 3.0 - EXECUTION

3.1 WORKER PROTECTION

A. Initial Determination: The Contractor shall determine, through personal exposure monitoring on the job site or through relevant documentation from other similar jobs, whether workers will be exposed to airborne lead at or above the OSHA Action Level and Permissible Exposure Limit. If exposures at or above the action level are documented, appropriate health and safety procedures identified herein shall be followed. If levels below the action level are documented, the Contractor shall exercise an appropriate level of care to ensure that exposures above the action level do not occur.

Whenever there is a change of equipment, process, control, personnel or a new task has been initiated that may result in additional employees being exposed to lead at or at or above the action level or may result in employees already exposed at or above the action level being exposed above the PEL, the Contractor shall conduct additional monitoring.

Note: The Contractor shall be responsible for performing a negative exposure assessment on each trade subject to the OSHA Regulation. The assessment shall take place during routine work activities, which will simulate employees, actual exposure levels to lead. All assessments shall take place over an 8-hour time period and shall include all appropriate PPE and biological monitoring required as stated herein.

B. Personal Hygiene Practices: Where exposures to airborne lead above the OSHA PEL occurs or may be expected to occur, the Contractor shall enforce and follow good personal hygiene practices. These practices shall be performed until personal exposure sampling indicates that exposures are below the PEL at which time the Contractor has the option to continue or discontinue the use of personal hygiene facilities. These practices shall Include but not be limited to the following:

1. No eating, drinking, smoking, or applying of cosmetics in work area. The Contractor will provide a clean space, separated from the work area, for these activities.
2. Workers must wash upon leaving the work area. The Contractor will provide wash facilities. This wash facility will consist of, at least, running potable water, towels, and a HEPA vacuum. Upon leaving the work area, each worker will remove and dispose of work suit, wash and dry face and hands, and vacuum clothes.

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3. Disposable clothing, such as TYVEK suits, and other personal protective equipment (PPE) must be donned prior to entering work area. A clean room will be provided for workers to put on suits and other personal protective equipment and to store their street clothes. Disposable suits shall be used once, then properly discarded.
4. A lavatory facility must be provided and located adjacent to the work area. The eating and drinking area, clean room, and the lavatory facility must be maintained in a clean and orderly fashion at all times. The Contractor will provide portable lavatories when needed and disinfect them daily.
5. If air-monitoring data gathered by the Contractor shows that employees' exposure to airborne lead exceeds 50 ug/m^3, the following conditions apply:

    a. Showers must be provided. Shower water must pass through at least a 5.0 micron filter before returning to the public waste system.
    b. Workers must shower upon leaving work area.
    c. Three-stage decontamination unit must be established consisting of an Equipment Room, Shower, and Clean Room in series.

3.2 WORK AREA SET UP

A. Site Safety: The Contractor is responsible for all safety at the work site. This includes, but is not limited to, electrical safety, mechanical (tool) safety, fire safety, and personnel protective safety. Safety requirements are, for the most part, common sense and sound business practice; however, the Contractor is advised that federal, state, and local regulations exist which govern safety on the work site. Therefore, in addition to the following, the Contractor is responsible for adhering to the most stringent requirements in effect.

B. Signage: Prior to the preparation for work which will disturb lead containing paint, the Contractor shall place warning signs immediately outside all entrances and exits to the area, warning that lead work is being conducted in the vicinity. The signs shall be at least 20" x 14" and read:

WARNING:
LEAD WORK AREA
POISON
NO SMOKING, EATING OR DRINKING
ALLOWED IN THE WORK AREA

The signs shall be in bold lettering with lettering not smaller than two inches tall. Should personal exposure monitoring results indicate that exposures to lead are below the Action Level, then the signs will not be required.

C. Access to Work Areas: It will be the Contractor's responsibility to allow only authorized personnel into the work area. Barrier tape shall be used to limit access to the exterior work area. Contractor shall maintain a bound logbook, in which any person entering or leaving the lead work area must sign and enter the dates and times of entry and departure. Should personal exposure results indicate the exposures to lead are below the Action Level, then a logbook will not be required. The Contractor or competent person will not allow anyone access to the work area unless they have successfully passed an approved training program, and have been fitted and wearing a properly fitted respirator.

Dumpsters used to store hazardous waste shall be DOT approved, solid enclosed containers and locked and secured at all times.

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3.3 WORK PROCEDURES

A. General: These procedures detail generalities of component work procedures. Resulting bundles of "containers" of removed components and/or debris shall be carefully handled to reduce the potential of ripping, bursting or otherwise diminishing the integrity of the bundle or "container". Care must be taken so that loaded materials are neither burned, nor dusted, nor result in further exposure to workers, residents or observers. Paint chips shall be contained either in the HEPA vacuum or in approved six-mil polyethylene disposal bags.

3.4 AIR SAMPLING – CONTRACTOR

A. Personal Exposure Monitoring: The Contractor shall perform personal exposure sampling to monitor personal exposure levels to airborne lead. Samples shall be taken for the duration of the work shift or for eight hours, whichever is greater. Personal samples need not be taken every day after the first day if working conditions remain unchanged, but must be taken every time there is a change in the removal operation, either in terms of the location or the type of work. Sampling will be used to determine eight-hour Time-Weighted-Averages (TWA). The Contractor is responsible for personal sampling as outlined in OSHA Standard 29 CFR 1926.62.

B. Frequency: Air monitoring frequency will be established in accordance with the requirements set forth in 29 CFR 1926.62.

3.5 CLEAN-UP PROCEDURES

A. When work is in progress, the work site shall be cleaned at end of each day's activities. The building shall be secured to prevent entry by any person after termination of workday. Durable equipment, such as power and hand tools, generators, and vehicles shall be cleaned monthly.

B. Equipment shall be cleaned by HEPA vacuuming. Surfaces shall be maintained as free as practicable of accumulations of lead containing dust and debris. Clean up of lead containing dust and debris shall be accomplished with a HEPA vacuum or wet methods. The debris shall be misted with water with an airless type sprayer and collected with a mop or broom.

3.6 DISPOSAL OF WASTE MATERIAL

A. General:

All costs associated with proper disposal of the waste materials (whether hazardous, non-hazardous or regulated) shall be borne by the Contractor. All materials, whether hazardous, non-hazardous or regulated shall be disposed of in accordance with all laws, and the provisions of this Section and any or all other applicable federal, state county or local regulations and guidelines. It shall be the sole responsibility of the Contractor to assure compliance with all laws and regulations relating to disposal.

B. Non-Hazardous Materials: The Contractor shall contact the regional EPA, State and local authorities to determine disposal requirements for construction and demolition debris that contains lead paint (non-hazardous). The Contractor shall be responsible for providing all dumpsters/containers required for collection and disposal of such material as well as disposal in an approved landfill.

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C. Recyclable Materials (Non-Hazardous): The Contractor shall note that any demolition material deemed to be recyclable by the Contractor may contain lead, which could result in the recycling facility rejecting acceptance regardless of the lead content or TCLP result. The Contractor is hereby notified of this fact and shall bear all responsibilities and costs associated with acceptance and/or rejection of such materials in a C&D landfill, waste disposal facility and/or a recycling facility under their Base Bid.

D. Hazardous Waste/Regulated Materials: All materials which are determined to be hazardous waste or regulated waste for lead shall be disposed of by the Contractor as specified herein. The Contractor shall perform representative TCLP tests of demolition debris to ensure the material is properly profiled for disposal. This shall also include all testing required by the disposal or recycling facility. All costs associated with TCLP testing to profile the waste material shall be borne by the Contractor. If the material is found to be hazardous waste or regulated waste, the Contractor shall provide appropriate drums/containers for use. The Contractor shall properly handle and transport all hazardous waste or regulated waste material into the drums/containers provided. The Contractor shall coordinate all hazardous waste or regulated waste transfer and disposal procedures. The Contractor shall provide the Owner with all required documentation relating to the proper removal and disposal of any hazardous or regulated waste that leaves the site.

E. The following materials are considered Hazardous Waste (Lead) if they are generated in a form by themselves and shall be disposed of as such:

a. Paint chip and paint chip debris

F. Preliminary testing of representative building components by TCLP analysis (Lead) indicated the material to be considered non-hazardous waste. ATC Associates Inc. performed the sample collection and analysis and results for that testing can be found under Attachment C of ATC's "Hazardous Materials Survey Report" dated April 19, 2006.

G. The Contractor shall be responsible for proper disposal of all materials outlined herein. This also shall include all testing required to properly profile each material as well as any testing required by the final disposal site facility. All costs associated with testing and disposal of the material whether non-hazardous, hazardous or regulated waste material shall be borne by the Contractor. In addition, all costs associated with worker protection or environmental protection requirements for such work shall be the responsibility of the Contractor.

END OF SECTION

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ATC
ENVIRONMENTAL · GEOTECHNICAL
BUILDING SCIENCES · MATERIALS TESTING

0318044776

Asbestos Bulk Sample Chain-of-Custody

73 William Franks Drive
West Springfield, MA, 01089
Tel: 413-781-0070
Fax: 413-781-3734

OrderID: 0318044776

Project Name: Longmeadow Storrs Library
Project Address: 693 Longmeadow St. Longmeadow MA 01106

Project Number:
Project Manager: McKinnon

Sampled By: McKinnon
Date: 2/21/18 Results To: McKinnon

Analysis Type: PLM
Turnaround Time: 4 Day Positive Stop: Yes (No)

Special Instructions or Comments:

Field ID	Sample Description	Location	Homogeneous Material
1A	Window Caulk - Outside	SW Window 1st Fl. Old Wing	1
1B	Window Caulk - Outside	NW Window 1st Fl. Old Wing	1
1C	Window Caulk - Outside	SW Window 2nd Fl. Old Wing	1
2A	Window Sealant - Interior	SW Window, 1st Fl. Old Wing	2
2B	Window Sealant - Interior	NW Window 1st Fl. Old Wing	2
2C	Window Sealant - Interior	SW Window 2nd Fl. Old Wing	2
3A	Window Sealant - Storm	SW Window, 1st Fl. Old Wing	3
3B	Window Sealant - Storm	NW Window 1st Fl. Old Wing	3
3C	Window Sealant - Storm	SW Window, 2nd Fl. Old Wing	3
4A	Frame Sealant - Brick	SW Window 1st Fl. Old Wing	4
4B	Frame Sealant - Brick	NW Window 1st Fl. Old Wing	4
1G	Window Caulk - Interior	SW Window, Basement, Old Wing	5
1H	Window Caulk - Interior	Women's Rm Basement Old Wing	5
2H	Window Sealant - Exterior	Women's Rm, Basement, Old wing	6
2I	Window Sealant - Exterior	Custodial Closet Basement Old Wing	6
1D	Window Sealant - Exterior	South Middle, 2nd Fl. New Wing	7
1E	Window Sealant - Exterior	SE Window, 1st Fl. New wing	7

RECEIVED 26 FEB 18 10:06 AM

Relinquished By: [signature] Date: 2/23/18 (Fed Ex) Received By: [signature] Date: 2/26/18 10:06 AM

Relinquished By: Emily Wyatt 3.2.18 8:15A Date: Received By: [signature] 3/2/18 5:37 AM Date:

Page 1 Of 2

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ATC
ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

Asbestos Bulk Sample Chain-of-Custody

73 William Franks Drive
West Springfield, MA, 01089
Tel: 413-781-0070
Fax: 413-781-3734

OrderID: 031804476

Project Name: Longmeadow Storrs Library
Project Address: 693 Longmeadow St. Longmeadow MA 01106
Project Number:
Project Manager: McGlynn
Sampled By: McGlynn
Date: 2/22/18 Results To: McGlynn
Analysis Type: PLM
Turnaround Time: 4 day Positive Stop: Yes (No)
Special Instructions or Comments:

Field ID	Sample Description	Location	Homogeneous Material
1F	Window Sealant - Exterior	Meeting Rm. 1st Fl. Rear Wing	7

EMSL ANALYTICAL LAB
RECEIVED
10 FEB 26 AM 8:06

Relinquished By: [signature] Date: 2/23/18 Received By: [signature] Date: 2/26/18 10:00AM
Relinquished By: Date: Received By: Date:
Emily Wright 3.2.18 8:15A
[signature] 3/2/18 5:37AM

EMSL Analytical, Inc.
307 West 38th Street New York, NY 10018
Tel/Fax: (212) 290-0051 / (212) 290-0058
http://www.EMSL.com / manhattanlab@emsl.com

EMSL Order: 031804476
Customer ID: ATC62
Customer PO: 11-81-0030
Project ID:

Attention: Michael Matilainen
ATC Group Services LLC
73 William Franks Drive
West Springfield, MA 01089

Phone: (413) 781-0070
Fax: (413) 781-3734
Received Date: 02/26/2018 10:06 AM
Analysis Date: 03/02/2018
Collected Date: 02/21/2018

Project: LONGMEADOW STORRS LIBRARY/ 693 LONGMEADOW ST. LONGMEADOW, MA 01106

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
1A *031804476-0001*	SW WINDOW, 1ST FL., OLD WING - WINDOW CAULK-OUTSIDE	Tan/White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
1B *031804476-0002*	NW WINDOW, 1ST FL., OLD WING - WINDOW CAULK-OUTSIDE	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
1C *031804476-0003*	SW WINDOW, 2ND FL., OLD WING - WINDOW CAULK-OUTSIDE	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
2A *031804476-0004*	SW WINDOW, 1ST FL., OLD WING - WINDOW SEALANT-INTERIOR	Gray/White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	**None Detected**
2B *031804476-0005*	NW WINDOW, 1ST FL., OLD WING - WINDOW SEALANT-INTERIOR	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
2C *031804476-0006*	SW WINDOW, 2ND FL., OLD WING - WINDOW SEALANT-INTERIOR	Gray Non-Fibrous Homogeneous		25% Ca Carbonate 75% Non-fibrous (Other)	**None Detected**
3A *031804476-0007*	SW WINDOW, 1ST FL., OLD WING - WINDOW SEALANT-STORM	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	**None Detected**
3B *031804476-0008*	NW WINDOW, 1ST FL., OLD WING - WINDOW SEALANT-STORM	White Non-Fibrous Homogeneous		22% Ca Carbonate 78% Non-fibrous (Other)	**None Detected**
3C *031804476-0009*	SW WINDOW, 2ND FL., OLD WING - WINDOW SEALANT-STORM	White Non-Fibrous Homogeneous		25% Ca Carbonate 75% Non-fibrous (Other)	**None Detected**
4A *031804476-0010*	SW WINDOW, 1ST FL., OLD WING - FRAME SEALANT-BRICK	Tan/White Non-Fibrous Homogeneous		25% Ca Carbonate 73% Non-fibrous (Other)	**2% Chrysotile**

Initial report from: 03/02/2018 09:47:39

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EMSL Order: 031804476
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Customer PO: 11-81-0030
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Attention: Michael Matilainen
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73 William Franks Drive
West Springfield, MA 01089

Phone: (413) 781-0070
Fax: (413) 781-3734
Received Date: 02/26/2018 10:06 AM
Analysis Date: 03/02/2018
Collected Date: 02/21/2018

Project: LONGMEADOW STORRS LIBRARY/ 693 LONGMEADOW ST. LONGMEADOW, MA 01106

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
4B *031804476-0011*	NW WINDOW, 1ST FL., OLD WING - FRAME SEALANT- BRICK	Gray Non-Fibrous Homogeneous		28% Ca Carbonate 70% Non-fibrous (Other)	**2% Chrysotile**
1G *031804476-0012*	SW WINDOW, BASEMENT, OLD WING - WINDOW CAULK- INTERIOR	Tan Non-Fibrous Homogeneous		20% Quartz 15% Ca Carbonate 65% Non-fibrous (Other)	**None Detected**
1H *031804476-0013*	WOMEN'S RM, BASEMENT, OLD WING - WINDOW CAULK- INTERIOR	White Non-Fibrous Homogeneous		20% Quartz 15% Ca Carbonate 65% Non-fibrous (Other)	**None Detected**
2H *031804476-0014*	WOMEN'S RM, BASEMENT, OLD WING - WINDOW SEALANT- EXTERIOR	Gray Non-Fibrous Homogeneous		25% Ca Carbonate 72% Non-fibrous (Other)	**3% Chrysotile**
2I *031804476-0015*	CUSTODIAL CLOSET, BASEMENT, OLD WING - WINDOW SEALANT- EXTERIOR	White Non-Fibrous Homogeneous		25% Ca Carbonate 72% Non-fibrous (Other)	**3% Chrysotile**
1D *031804476-0016*	SOUTH MIDDLE, 2ND FL., NEW WING - WINDOW SEALANT- EXTERIOR	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
1E *031804476-0017*	SE WINDOW, 1ST FL., NEW WING - WINDOW SEALANT- EXTERIOR	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
1F *031804476-0018*	MEETING RM, 1ST FL., NEW WING - WINDOW SEALANT- EXTERIOR	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**

Initial report from: 03/02/2018 09:47:39

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Phone: (413) 781-0070
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Received Date: 02/26/2018 10:06 AM
Analysis Date: 03/02/2018
Collected Date: 02/21/2018

Project: LONGMEADOW STORRS LIBRARY/ 693 LONGMEADOW ST. LONGMEADOW, MA 01106

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date:	02/26/2018	Sample Receipt Time:	10:06 AM
Analysis Completed Date:	03/02/2018	Analysis Completed Time:	8:43 AM

Analyst(s):

Emily Myint PLM (7)

Tiquasha Thompson PLM (11)

Samples Reviewed and approved by:

James Hall, Laboratory Manager
or other approved signatory

Initial report from: 03/02/2018 09:47:39

EMSL Analytical, Inc.
528 Mineola Avenue, Carle Place, NY 11514
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EMSL Order:	061804018
CustomerID:	ATC62
CustomerPO:	
ProjectID:	

Attn: **Michael Matilainen**
ATC Group Services LLC
73 William Franks Drive
West Springfield, MA 01089

Phone:	(413) 781-0070
Fax:	(413) 781-3734
Received:	02/26/18 4:31 PM
Collected:	2/26/2018

Project: **Longmeadow Storrs Library, 693 Longmeadow St, Longmeadow, MA 01106**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	*Lab ID*	*Collected*	*Analyzed*	*Lead Concentration*
A1	*061804018-0001*	2/26/2018	3/5/2018	11 % wt
	Site: SW Window, 1st Fl. Old Wing Desc: Green/White Paint-Interior			
B2	*061804018-0002*	2/26/2018	3/5/2018	11 % wt
	Site: NW Window, 1st Fl. Old Wing Desc: Green/White Paint-Interior			
C3	*061804018-0003*	2/26/2018	3/5/2018	20 % wt
	Site: SW Window, 2nd Fl. Old Wing Desc: White Paint-Interior			
D3	*061804018-0004*	2/26/2018	3/5/2018	0.079 % wt
	Site: S Middle Window, 2nd Fl. New Wing Desc: White Paint-Interior			
E4	*061804018-0005*	2/26/2018	3/5/2018	0.011 % wt
	Site: SE Window, 1st Fl. New Wing Desc: White Paint-Interior			
F5	*061804018-0006*	2/26/2018	3/5/2018	0.051 % wt
	Site: N. Meeting Window, 1st Fl. New Wing Desc: White Paint-Interior			
G6	*061804018-0007*	2/26/2018	3/5/2018	0.12 % wt
	Site: SW Basement Window, Old Wing Desc: White Paint-Interior			
H8	*061804018-0008*	2/26/2018	3/5/2018	0.63 % wt
	Site: Women's Basement Window, Old Wing Desc: Black Paint-Exterior			
I9	*061804018-0009*	2/26/2018	3/5/2018	0.073 % wt
	Site: Custodial Basement Window, Old Wing Desc: Black Paint-Exterior			
H7	*061804018-0010*	2/26/2018	3/5/2018	0.10 % wt
	Site: Women's Basement Window, Old Wing Desc: White Paint-Interior			

Michelle McGowan, Laboratory Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY Lab ID 102344 is accredited by the AIHA-LAP, LLC in the Environmental Lead accreditation program for Lead in Paint, CT PH-0249, NYS ELAP 11469

Initial report from 03/05/2018 16:01:28

SECTION 07 90 00

JOINT SEALANTS

PART 1 GENERAL

1.1 SUMMARY

A. Section includes sealants, joint backing, and accessories.

B. Related Sections:
   1. Section 08 52 13 – Aluminum Clad Wood Ultimate Insert Double Hung and Casement Windows.

1.2 REFERENCES

A. ASTM International:
   1. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.
   2. ASTM C1193 - Standard Guide for Use of Joint Sealants.

1.3 SUBMITTALS

A. Section 01 33 00 – Submittals Procedures: for submittals.

B. Products Data: Submit data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.

C. Manufacturer's Installation Instructions: Submit special procedures, surface preparation, and perimeter conditions requiring special attention.

D. Warranty: Include coverage for installed sealants and accessories failing to achieve watertight seal, exhibit loss of adhesion or cohesion, and sealants which do not cure.

1.4 QUALITY ASSURANCE

A. Maintain one copy of referenced document covering installation requirements on site.

1.5 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years experience.

B. Applicator: Company specializing in performing Work of this section with minimum three years experience.

1.6 ENVIRONMENTAL REQUIREMENTS

A. Section 01 60 00 – Product Requirements.

B. Maintain temperature and humidity recommended by sealant manufacturer during and after installation.

1.7 COORDINATION

A. Section 01 30 00 - Submittals: Coordination and project conditions.

B. Coordinate Work with sections referencing this section.

PART 2 PRODUCTS

2.1 JOINT SEALERS

A. Manufacturers:
1. Dow Corning Corp.
2. GE Silicones.
3. Sika Corp.

B. Products Description:
1. High Performance General Purpose Exterior Nontraffic Sealant: Silicone; ASTM C920, Grade NS, Class 25, Uses M, G, and A; single component.
   a. Color: Standard colors matching finished surfaces.
   b. Applications: Use for:
      1) Control, expansion, and soft joints in masonry.
      2) Joints between concrete and other materials.
      3) Joints between metal frames and other materials.
      4) Other exterior nontraffic joints for which no other sealant is indicated.
2. Exterior Foam Expansion Joint Sealer: Precompressed foam sealer; products recommended by manufacturer.
   a. Color: Black color.
   b. Size: As required to provide watertight seal when installed.
   c. Applications: Use for exterior wall expansion joints.
3. General Purpose Interior Sealant: Acrylic emulsion latex; ASTM C834, single component, paintable.
   a. Color: Standard colors matching finished surfaces.

b. Applications: Use for interior wall and ceiling joints, joints between window frames and wall surfaces, and other interior joints for which no other type of sealant is indicated.

2.2 ACCESSORIES

A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.

B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.

C. Joint Backing: Round foam rod compatible with sealant; ASTM D1667, closed cell PVC; oversized 30 to 50 percent larger than joint width.

D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Submittals: Coordination and project conditions.

B. Verify substrate surfaces and joint openings are ready to receive work.

C. Verify joint backing and release tapes are compatible with sealant.

3.2 PREPARATION

A. Remove loose materials and foreign matter impairing adhesion of sealant.

B. Clean and prime joints.

C. Perform preparation in accordance with ASTM C1193.

D. Protect elements surrounding Work of this section from damage or disfiguration.

3.3 INSTALLATION

A. Perform installation in accordance with ASTM C1193.

B. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.

C. Install bond breaker where joint backing is not used.

D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.

E. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

F. Tool joints concave.

3.4 CLEANING

A. Section 01 70 00 – Execution and Closeout Requirements: Closeout: Final cleaning.

B. Clean adjacent soiled surfaces.

3.5 PROTECTION OF INSTALLED CONSTRUCTION

A. Section 01 70 00 – Execution and Closeout Requirements: Protecting installed construction.

B. Protect sealants until cured.

END OF SECTION

SECTION 08 52 13

ALUMINUM CLAD WOOD ULTIMATE INSERT DOUBLE HUNG AND CASEMENT WINDOWS AND PATIO DOORS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Double Hung Windows:
Aluminum clad wood ultimate insert double hung windows complete with hardware, glazing, weather strip, insect screen, fixed grilles, simulated divided lite, grilles-between-the-glass, and standard or specified anchors, trim, and attachments.

B. Casement Window:
Aluminum Clad Ultimate Casement, operators complete with hardware, glazing, weather strip, insect screen, simulated divided lite, fixed interior and exterior grilles, jamb extension, and standard or specified anchors, trim and attachments.

C. Patio Doors:
Aluminum Clad complete with hardware, glazing, weather strip, insect screen, simulated divided lites, fixed interior and exterior grilles, jamb extension, and standard or specified anchors, trim and attachments.

1.2 RELATED SECTIONS

A. Section 01 30 00 – Administrative Requirements

B. Section 01 33 00 – Submittal Procedures

C. Section 01 60 00 - Product Requirements

D. Section 01 70 00 Execution and Closeout Requirements

1.3 REFERENCES

A. American Architectural Manufactures Association / Window and Door Manufactures Association (AAMA / WDMA): ANSI / AAMA / NWWDA 101 / I.S.2-97 Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors and 101 / I.S.2 / NAFS-02 Voluntary Performance Specification for Windows, Skylights and Glass Doors.

B. Window and Door Manufacturers Association (WMDA): 101 / I.S.2 WDMA Hallmark Certification Program.

C. Sealed Insulating Glass Manufactures Association / Insulating Glass Certification Council (SIGMA / IGCC).

D. American Architectural Manufacturers Association (AAMA): 2605: Voluntary Specification for High Performance Organic Coatings on Architectural Extrusions and Panels.

E. National Fenestration Rating Council (NFRC): 101: Procedure for Determining Fenestration Product Thermal Properties.

1.4 SYSTEM DESCRIPTION

A. Double Hung Window Design and Performance Requirements:
   1. Units to comply with the latest Energy Code requirements.
   2. Window units shall be designed to comply with ANSI / AAMA / NWWDA 101 / I.S.2-97 and 101 / I.S. 2/ NAFS-02
      a. Double Hung: H-LC30 up to 44 X 77.608 Inside Opening.
   3. Air leakage shall not exceed the following when tested at LC-30 - 1.57 psf according to ASTM E 283: LC-30 - 0.30 cfm per square foot of frame.
   4. No water penetration shall occur when units are tested at the following pressure according to ASTM E 547: LC-30 - 4.5 psf.
   5. Window assembly shall withstand the following positive or negative uniform static air pressure difference without damage when tested according to ASTM E 330: LC-30 - 45 psf.

B. Casement Window Design and Performance Requirements:
   1. Units to comply with the latest Energy Code requirements.
   2. Window units shall be designed to comply with ANSI/AAMA/NWWDA 101/I.S.2-97 and 101/I.S.2/NAFS02 and AAMA/WDMA/CSA 101/I.S.2/A440-05 for operable Casement Frame size 40 x 91 1/8= C-C50, for operable Casement Frame size 36 x 96 1/8 = C-C50, for operable Awning Frame size 72 x 63 1/8=AP-C50, for operable Awning frame size 72 x 72 =AP-C40. AAMA/WDMA/CSA 101/I.S.2/A440-08 Picture/Stationary Casement Frame size 96 1/8 x 88=CW-PG50-FW, Picture/Stationary Casement Frame size 88 x 96 1/8=CW-PG50-FW.

C. Patio Doors:
   1. Units to comply with the latest Energy Code requirements.

1.5 SUBMITTALS

A. Shop Drawings: Submit shop drawings under provisions of Section 01 33 00.
   1. Provide photographs of each window and shop drawing documenting window size, muntin pattern and dimensions. Prepare in 8-1/2”x11” format for Longmeadow records.

B. Product Data: Submit catalog data under provisions of Section 01 33 00.

C. Samples:
   1. Submit corner section under provisions of Section 01 33 00.
   2. Include glazing system, quality of construction, and specified finish.

SECTION 12 24 13

ROLLER WINDOW SHADES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. Drawings and general provisions of the Contract, including General and Supplementary Conditions.

1.2 SUMMARY
A. Section Includes:
1. Manually operated roller shades with single rollers.

1.3 ACTION SUBMITTALS
A. Product Data: For each type of product.
1. Include styles, material descriptions, construction details, dimensions of individual components and profiles, features, finishes, and operating instructions for roller shades.
B. Shop Drawings: Show fabrication and installation details for roller shades, including shade materials, orientation to rollers, and seam and batten locations.
C. Samples: For each exposed product and for each color and texture specified, 10 inches (250 mm) long.
D. Samples for Initial Selection: For each type and color of fabric band material.
1. Include Samples of accessories involving color selection.
E. Samples for Verification: For each type of roller shade.
1. Shade Material: Not less than 6 inches square.
2. Installation Accessories: Provide as required for complete installation.

1.4 INFORMATIONAL SUBMITTALS
A. Qualification Data: For Installer.
B. Product Certificates: For each type of fabric band material, signed by product manufacturer.
C. Product Test Reports: For each type of fabric band material, for tests performed by a qualified testing agency.

1.5 CLOSEOUT SUBMITTALS
A. Maintenance Data: For roller shades to include in maintenance manuals.

1.6 QUALITY ASSURANCE
A. Installer Qualifications: Fabricator of products.
1. Installer shall be qualified to install specified products by a minimum of five (5) years of experience.
2. Installer shall be responsible for acceptable installation in accordance with instructions published by the manufacturer.
B. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
1. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
2. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver roller shades in factory packages, marked with manufacturer, product name, and location of installation using same designations indicated on Drawings.

1.8 FIELD CONDITIONS

A. Environmental Limitations: Do not install roller shades until construction and finish work in spaces, including painting, is complete and dry and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

B. Field Measurements: Where roller shades are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operating hardware of operable glazed units through entire operating range. Notify Architect of installation conditions that vary from Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Product: Springs Window Fashions
SOLAR SHADING SYSTEMS - Manual Solar Shade
Call 800-327-9798 or email architectsolutions@swfcontract.com ■ swfcontract.com
OR Architect approved equal.

B. Source Limitations: Obtain roller shades from single source from single manufacturer.

2.2 MANUALLY OPERATED SHADES WITH SINGLE ROLLERS

A. Chain-and-Clutch Operating Mechanisms: With continuous-loop bead chain and clutch that stops shade movement when bead chain is released; permanently adjusted and lubricated.

1. Bead Chains: #10 Stainless steel.

a. Loop Length: As required to operate full height of window shade.

b. Chain-Retainer Type: Locking-style chain retainer restricts the operation of the chain unless the chain retainer is properly mounted to a fixed surface such as a window frame, sill, or wall. Compliant with American National Standard for Safety of Corded Window Covering Products ANSI A100.1. Non-locking P-Clip is not acceptable.

Provide 6 lb (2.7 kg) lift assist for shades as recommended by manufacturer.

B. Rollers: Extruded-aluminum tubes engineered with channel to accept fabric spline. The diameter and wall thickness to be determined by manufacturer based on fabric selection and shade size to provide minimal deflection and optimal performance.

1. Clutch System: Consists of fiberglass filled nylon for wear resistance, smooth operation and corrosion resistance. The clutch is comprised VelvetrolTM internal spring arrangement for a smooth pulling force that locks the shade in any position when operating the control loop. The clutch mechanism is bi-directional and does not require adjustment or lubrication.
Clutch to be inserted in roller tube at manufacturing. Clutch size to be selected by manufacturer based on fabric selection and shade size. Clutch size and spring assist upgrade if required.

2. Direction of Shade Roll: Regular, from back of roller.

3. Fabric-to-Roller Attachment: Removable spline system shall consist of a co-extruded PVC spline heat-welded to the shade fabric and inserted into an engineered channel on the roller tube. The spline system allows for adjustability on-site and ease in changing fabric bands in the field.

4. Idler End: Constructed of high strength, fiberglass filled nylon with spring-loaded pin-end technology for wear resistance, smooth operation, and corrosion resistance.

C. Mounting Hardware: Brackets, corrosion resistant and compatible with roller assembly, operating mechanism, installation accessories, and mounting location and conditions indicated.

1. Thickness; 16 gauge.
2. Material: Stamped steel.

D. Fabric Bands:
1. Fabric Band Material: Light-filtering fabric, 10% openness.
b. Color and Finish: As selected by Architect from manufacturer's full range, white.

E. Installation Accessories:
1. All components as necessary for a completed installation.

2.3 ROLLER-SHADE FABRICATION

A. Product Safety Standard: Fabricate roller shades to comply with ANSI - WCMA A 100.1, including requirements for flexible, chainloop devices; lead content of components; and warning labels.

B. Unit Sizes: Fabricate units in sizes to fill window and other openings as follows, measured at 74 deg F :

1. Between (Inside) Jamb Installation: Width equal to jamb-to-jamb dimension of opening in which shade is installed, plus or minus 1/8 inch (3.1 mm). Length equal to head-to-sill or -floor dimension of opening in which shade is installed less 1/4 inch (6 mm), plus or minus 1/8 inch (3.1 mm).

2. Outside of Jamb Installation: Width and length as indicated, with terminations between shades of end-to-end installations at centerlines of mullion or other defined vertical separations between openings.

C. Fabric Band Fabrication: Fabricate fabric bands without battens or seams to extent possible except as follows:

1. Railroaded Materials: Railroad material where material roll width is less than the required width of fabric band and where indicated. Provide battens and seams as required by railroaded material to produce fabric bands with full roll-width panel(s) plus, if required, one partial roll-width panel located at top of fabric band.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, operational clearances, and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 ROLLER-SHADE INSTALLATION

A. Install roller shades level, plumb, and aligned with adjacent units per manufacturer's written instructions.

1. Opaque Fabric Bands: Located so fabric band is not closer than 2 inches to interior face of glass. Allow clearances for window operation hardware.

B. Electrical Connections: Connect motor-operated roller shades to building electrical system. 3.3

3.3 ADJUSTING

A. Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

3.4 CLEANING AND PROTECTION

A. Clean roller-shade surfaces after installation, per manufacturer's written instructions.

B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, ensuring that roller shades are without damage or deterioration at time of Substantial

Completion.
C. Replace damaged roller shades that cannot be repaired, in a manner approved by Architect, before time of Substantial Completion.

3.5 DEMONSTRATION
A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain the roller shades.

END OF SECTION

D. Quality Control Submittals: Submit manufacturer's certifications indicating compliance with specified performance and design requirements under provisions of Section 01 33 00.

1.6 DELIVERY

A. Comply with provisions of Section 01 65 00.

B. Deliver in original packaging and protect from weather.

1.7 STORAGE AND HANDLING

A. Prime or seal wood surfaces, including surface to be concealed by wall construction, if more than thirty (30) days will expire between delivery and installation.

B. Store window units in an upright position in a clean and dry storage area above ground and protect from weather under provisions of Section 01 66 00.

1.8 WARRANTY

A. Windows shall be warranted to be free from defects in manufacturing, materials, and workmanship for a period of ten (10) years from the date of substantial completion.

B. Insulating glass shall be warranted against visible obstruction through the glass caused by a failure of the insulating glass air seal for a period of twenty (20) years from the date of substantial completion.

C. The window manufacturer shall be responsible for full replacement (labor and material) of the above during the period of the dates stated.

PART 2 PRODUCTS

2.1 MANUFACTURED UNITS

A. Description:
Pella Architect Series® Traditional - Precision Fit, LX Double-Hung, Inswing Casement, Inswing French Door
Aluminum EnduraClad® Exterior
Detailed Product Descriptions

<u>Frame</u>

- Select softwood, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains

from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are clear pine
- Exterior surfaces are clad with aluminum.
- Components are assembled with screws, staples and concealed corner locks.
- Pocket depth for Replacement DH is 3-1/4", Casement is 5”, Inswing French door is 5-7/8”
- Vinyl jamb liner LX includes wood / clad inserts
- Solid extruded aluminum sill with brown EnduraClad finish.

Sash
- Select softwood, immersion treated with Pella’s EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are LX: clear pine
- Exterior surfaces are clad with aluminum and sealed.
- Double Hung Sash thickness is 1-7/8", Casement Sash Thickness is 1 13/16”, Door Panel Thickness is 2-1/16”
- Upper sash has surface-mounted wash locks.
- Lower sash has concealed wash locks in lower check rail.
- Sashes tilt for easy cleaning.

Weatherstripping
- Water-stop Santoprene-wrapped foam at head and sill.
- Thermoplastic elastomer bulb with slip-coating set into lower sash for tight contact at check rail.
- Vinyl-wrapped foam inserted into jamb liner or jamb liner components to seal against sides of sash.

Glazing System
- Quality float glass complying with ASTM C 1036.
- Custom and high altitude glazing available.
- Silicone-glazed 11/16" dual-seal insulating glass annealed Advanced Comfort Low-E with argon
- Tempered where required.

Exterior
- Aluminum clad exteriors shall be finished with EnduraClad® protective finish, in a multi-step, baked-on finish.
- Color is standard: White.

Interior
- Pine: factory prefinished paint, color selected from Pella Standard offerings

Hardware. Color: Bright White.

- Galvanized block-and-tackle balances are connected to self-locking balance shoes which are connected to the sashes using zinc die cast terminals and concealed within the frame.
- Sash lock is historic spoon-style. Two sash locks on units with frame width 37" and greater.
- Sash lift furnished for field installation. Two lifts on units with frame width 37" and greater.
- Bottom sash opening limiter.
- Hardware finish is baked enamel White

Casement Hardware Notes

- Roto operator assembly
  - Steel worm gear sash operator with hardened gears.
  - Operator base is zinc die cast with painted finish.
  - Operator linkage, hinge slide, and hinge arms are stainless steel.
  - Exposed fasteners are stainless steel.
  - Hardware shall exceed 1,000 hours salt spray exposure per ASTM B 117.
- All vent units are available with left- or right-hand hinging.
- SureLock® System—A single handle locking system operates positive-acting arms that reach out and pull the sash into a locked position: one operating lock installed on units with frame height 29" and less, two unison operating locks installed on units with frame height over 29".
- Style of hardware is Standard integrated fold-away crank and standard lock handle with baked enamel White hardware finish.

Door Hardware notes

- Hinges are adjustable to help with installation.
- Doors under 7' 0" frame height will have three (3) hinges per panel
- Mortised and keyed multi-point locking system, center deadbolt and shoot-bolts at head and sill will engage simultaneously
- Hardware finish is (Handle, Hinges and Strike) baked enamel White

Optional Products

Grilles

- Integral Light Technology® grilles
  - Interior grilles are 7/8" ogee profile that are solid pine. Interior surfaces are factory prefinished paint.
  - Exterior grilles are 7/8" ogee profile that are extruded aluminum.
  - Patterns are per drawings.
  - Insulating glass contains non-glare spacer between the panes of glass.
  - Grilles are adhered to both sides of the insulating glass with VHB acrylic adhesive tape and aligned with the non-glare spacer.

Window Screens

- InView™ Screens
  Full-Size black vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in aluminum frame fitted to outside of window for double hung and inside for casement windows, supplied complete with all necessary hardware.
  Spreader bar placed on units > 37" width or 64-1/4" make height.
  Screen frame finish is baked enamel, color to match window cladding.

Door Screens

Finish matches exterior cladding.
Hinged Insect Screens:
Compliance: ASTM D 3656 and the performance requirements of SMA 1201.
Screen Cloth: InView™ Vinyl-coated fiberglass, 18/18 mesh fiberglass screen cloth.
Extruded-aluminum frame, hinged to door frame.
Complete with necessary hardware.
Hardware Color: White

Additional Double Hung Window Hardware

Provide field applied window opening control device. Device allows window to open less than 4” with normal operation. Color: White.

2.3 FINISH

A. Exterior: Fluoropolymer modified acrylic topcoat applied over primer. Meets or exceeds AAMA 2605 requirements.
   1. Standard Color: Stone White

B. Interior: Factory prime and painted white.
   The windows interiors shall be finished off site (by manufacturer or contractor) PRIOR to installation.

2.4 EXTERIOR JAMB EXTENSION/CLOSURE AND PANNING

A. Aluminum Extrusions:
   1. Sill: Match existing window sill profile, slope.
   2. Jamb: Profile: Frame expander, Flat.
   3. Finish: Fluoropolymer modified acrylic topcoat applied over primer. Meets or exceeds AAMA 2605 requirements.
      a. Standard Color: to match window frame color selection, White.
   4. Provide curving aluminum jamb/head extensions to match roundtop assemblies.

2.5 ATTIC STOCK

A. Provide the following attic stock items and store where directed by Owner.
   (6) Sash locks
   (6) Sash lifts
   (6) Sash limiters
   (6) Replacement interior muntin assemblies for the bottom sashes of the windows in the 1933 Building, most common consistent window size.
   (6) Replacement interior muntin assemblies for the bottom sashes of the windows in the 1993 Building, most common consistent window size.
   (6) Replacement insect screens for the windows in the 1933 Building, most common consistent window size.
   (6) Replacement insect screens for the windows in the 1993 Building, most common consistent window size.
   (6) Pair of replacement balancers for the bottom sashes of the windows in the the 1933 Building, most common consistent window size.
   (6) Pair of replacement balancers for the bottom sashes of the windows in the the 1993 Building, most common consistent window size.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verification of Conditions: Before installation, verify openings are plumb, square, and of proper dimension as required in Section 01 70 00. Report frame defects or unsuitable conditions to the General Contractor before proceeding.

B. Acceptance of Conditions: Beginning of installation confirms acceptance of existing conditions.

3.2 INSTALLATION

A. Comply with Section 01 70 00.

B. Assemble and install window unit according to manufacturer's instructions and reviewed shop drawings.

C. Install sealant and related backing materials at perimeter of unit or assembly in accordance with Section 07 90 00 Joint Sealants. Do not use expansive foam sealant.

D. Install accessory items as required.

3.3 CLEANING

A. Remove visible labels and adhesive residue from glass according to manufacturer's instructions.

B. Leave windows and glass in a clean condition. Final cleaning as required in Section 01 70 00.

3.4 PROTECTING INSTALLED CONSTRUCTION

A. Comply with Section 01 70 00.

B. Protect windows from damage by chemicals, solvents, paint, or other construction operations that may cause damage.

END OF SECTION