Fairhaven High School

Historic Wood Window Restoration Project - Phase IV 12 Huttleston Avenue

Project Manual – 100% Bidding Documents Issue

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Invitation for Bids

Fairhaven High School 12 Huttleston Avenue Fairhaven, Massachusetts 02719

I. INTRODUCTION

The Fairhaven School Department seeks to engage an experienced and qualified contractor to accomplish restoration of designated historic wood window sashes and sills at the Fairhaven High School. The contractor must provide evidence of similar projects available for inspection. These projects should have similar conditions to that required for this project.

II. GENERAL INFORMATION

- 1. All interested parties must submit a proposal in the form, and in accordance with the criteria, prescribed in this Invitation. The bid must be submitted as one (1) set of unbound original materials containing an original signature of the firm's principal and two (2) copies of the same which shall be bound.
- 2. Proposals must be submitted no later than **TBD**.
- 3. Proposals should be submitted to and addressed as follows:

Fairhaven Public Schools
Office of the Superintendent
128 Washington Street
Fairhaven, MA 02719

ATTN: Nicole Verronneau Potter

- 4. Bids should be clearly marked: "FHS Wood Window Restoration Phase IV"
- 5. Questions or clarifications concerning this IFB must be made in writing, addressed to John Hecker, Spencer, Sullivan & Vogt, Inc., at the address of the Architect, e-mail at jhecker@ssvarchitects.com at least five (5) days prior to the due date. Any response will be in writing and both the inquiry and the response will be distributed by e-mail to all persons who have requested a copy of this IFB.

III. PRE-PROPOSAL SESSION

A non-mandatory pre-submittal session on this project is scheduled for **TBD**, at the Fairhaven High School, 12 Huttleston Avenue, Fairhaven, Massachusetts.

IV. TIMELINE FOR RENOVATION

The work is being partially funded with a grant from the Massachusetts Community Preservation Commission. The work shall commence late June 2021 (end of school year) and shall be completed no later than mid-August 2021 (beginning of new school year).

V. MINIMUM QUALIFICATIONS

Bidders shall have a minimum eight-years of experience in similar window sash restoration projects.

VI. PROPOSAL SUBMISSION REQUIREMENTS

Bid Form Bid Deposit

OTHER SUBMISSIONS

District Forms:

Agency Contact Information Certificate of Non-Collusion Tax Compliance Insurance Certificate Bidders Qualifications Form

Relevant experience and references should include names, address and phone numbers of contact persons. References should list the communities for which the firm has implemented similar projects, a brief description of the work performed and the total cost of each project. Include sketches/drawings or photocopies of photographs of relevant projects, if available

Any other information that the applicant considers relevant for the purpose of evaluating its qualification for the project.

VII. GENERAL AND SPECIAL PROVISIONS

- The Fairhaven School Committee reserves the right to reject any and all proposals, waive informalities, and to award contracts as may be in the best interests of the School District.
- 2. Ownership of Documents: All proposals, materials, drawings, plans, model, etc. shall become the property of the Fairhaven Public Schools and may be disposed of without notification and shall be considered public information. These documents may be provided in electronic and paper formats.
- 3. The successful proposal shall be expected to comply with all applicable federal and state laws in the performance of services.

- 4. The consideration of all proposals and subsequent selection of the successful proposal shall be made without regard to race, color, sex, age, handicap, religion, political affiliation or national origin.
- 5. The successful proposal shall adhere to the provisions of the Fair Employment Practices Law of the Commonwealth (Chapter 151B of the M.G.L.).
- 6. The provisions relating to non-discrimination and affirmative action in employment shall flow through all contracts and subcontracts that the successful proposal may receive or award as a result of this contract.
- 7. Services provided by the contractor shall be rendered through a contract; the contractor will not be considered an employee of the Fairhaven School Department and will not receive any benefits of any employee.
- 8. A Bidder shall be required to furnish a 5% percent bid bond with their respective bid packet.
- 9. The Owner requires the Contractor to carry and maintain General Liability Insurance coverage of a minimum of Five hundred thousand dollars (\$500,000) naming the Owner as an additionally insured party. The Contractor will also maintain worker's compensation, disability, and unemployment insurance in accordance with State Law. Certificates of Insurance shall be filed with the Owner prior to the commencement of work.
- 10. The successful General Bidder will be required to furnish a 50% Performance Bond. The Contractor will be required to pay the premium for such bond and shall include such premium in the Bid Price. Such bond shall be of a surety company qualified to do business under the laws of the Commonwealth of Massachusetts and in a form acceptable to the Owner.
- 11. It is the policy of the Fairhaven Public Schools to obtain all available Criminal Offender Record Information (C.O.R.I) from the criminal history systems board of prospective employee(s), volunteer(s) or contractors of the school department.
- 12. No Bidder may withdraw his bid for at least sixty (60) days after the day and date set for the receipt of General Bids. All bids shall remain effective until June 30, 2021.

FAIRHAVEN PUBLIC SCHOOLS FORM of BID

SUBMITTED BY:	
	(Full Name)
	(Complete Address)
The Owner rese	erves the right to reject any or all bids if it deems this action to be in its best interest or if it is in est to do so.
1. OFFER	
Documents for	the Place of the Work and all matters referred to in the Instructions to Bidders and the Contract the above-mentioned project, we, the undersigned, hereby offer to enter into a Contract to ork, including the work of all Subcontractors, for the
BASE BID PRICE	of:
	dollars andcents (\$)
ALTERNATES as	follows:
	No. 1: Remove, restore and reinstall all designated window sashes on indicated elevations. Shop-painting of sashes to be completed under Section 08 01 52, "Historic Wood Window Restoration."
	ADD:dollars andcents (\$)
	No. 2: Remove, restore and reinstall all designated window sashes on indicated elevations. Shop-painting of sashes to be completed under Section 08 01 52, "Historic Wood Window Restoration."
	ADD:dollars andcents (\$)
UNIT PRICES as	follows:
No. 1	Wood Window Sill Repair: Per (12) lineal inches of window sill width (full depth of sill):
	ADD:dollars andcents (\$)

No. 2	Supplemental Sash Weights: Per additional pound of steel or lead sash weights required:		
	ADD:	dollars andcents	(\$)
No. 3	Bronze Weather-Stripping: F	Per twelve (12) lineal inches at window jambs	and window sill:
	ADD:	dollars andcents	(\$)

2. ACCEPTANCE

This offer shall be open to acceptance and is irrevocable for *sixty* days, Saturdays, Sundays and legal Holidays excluded, from the bid closing date. If the Owner accepts this bid within the time period stated above, we will:

- -Execute the Agreement within ten days of receipt of Notice of Award.
- -Furnish the required 50 percent (50%) Performance Bond and within ten days of receipt of Notice of Award in the form described in Supplementary Conditions.

The work shall commence on TBD and shall be completed no later than TBD.

If this bid is accepted within the time stated, and we fail to provide the required bonds, the security deposit shall be forfeited as damages to the Owner by reason of our failure, limited in amount to the lesser of the face value of the security deposit or the difference between this bid and the bid upon which a Contract is signed. In the event our bid is not accepted within the time stated above, the required security deposit will be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

3. CONTRACT TIME

If this Bid is accepted, the successful bidder will be required to complete the entire project no later than mid-August 2021.

4. BIDDING LAWS

Bids for this contract are subject to MASSACHUSETTS GENERAL LAWS, CHAPTER 149, AS AMENDED TO DATE, APPLIES.

5. ADDENDA The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Price.

Addendum #	Date
Addendum #	Date
Addendam #	Date
Addendum #	Date

6. APPLICABLE GENERAL LAWS AND REGULATIONS

This Contract is governed by applicable provisions of Massachusetts General Laws and Regulations and/or the United States Code and Code of Federal Regulations. Any provision violation of the foregoing shall be deemed null, void and of no effect. Where conflict between Code of Federal Regulations and State Laws and Regulations exist, the more stringent requirement shall apply.

7. CERTIFICATION STATEMENTS

The Undersigned certifies under penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this paragraph, the word "person" shall mean any natural person, joint venture/partnership, corporation or other business or legal entity.

The Undersigned further certifies, under penalties of perjury, and pursuant to M.G.L. c.62c., s.49A, that to the best of his knowledge and belief has filed all State tax returns and paid all State taxes required by law, and has complied with reporting of employees and contractors, and withholding and remitting of child support.

The Undersigned certifies under penalties of perjury that there have been no substantial changes in his financial position or business organization other than those changes noted within the application since the applicant's most recent pre-qualification statement and that the bid is in all respects bona fide, fair and made without collusion or fraud with any other person. "Person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity which sells material, equipment or supplies used in or for, or engages in the performance of, the same or similar construction, reconstruction, installation, demolition, maintenance or repair work or any part thereof.

The Undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that he will comply fully with all laws and regulations applicable to awards made subject to s.44A.

The Undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of s.29 F of c.29, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

The Undersigned hereby certifies that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least ten (10) hours in duration at the time the employee begins work. The Undersigned shall furnish documentation of successful completion of said course with the first certified payroll report for each employee.

8. BID FORM SIGNATURES	The Corporate Seal of	
	(Bidder - print the full name of your firm)	
	(Bidder's business address, city, state, zip)	
(Bidder's State of Incorporati	ion) was hereunto affixed in the presence of:	
	(Print name of authorized signing officer and Title)	
(Signature)	(Sea	al)
	(Print name of authorized signing officer and Title)	
	(Signature)	
Business Telephone No	Business Fax No	
Tax Identification No		
If the Rid is a joint venture or n	artnershin, add additional forms of execution for each memb	er of the io

If the Bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture/partnership in the appropriate form or forms as above.

9. PROJECT COMPLETION HISTORY

Have you ever failed to complete any work awarded to you? If so, state where, when and why.

AFFIDAVIT

	(Bid Opening Date)	
The undersigned being duly sworn, depose other duly authorized agent or official of	es and says that he is the sole owner,	partner, president, treasurer, or
(Name of bidder as appearing in submitted	d proposal) for work in	
(City/Town)		_
and certifies that of his own knowledge, sa agreement, participated in any collusion, c connection with this contract.		
(Signature and title of person making affi	davit)	_
Sworn to before me this day o	f 2021.	

BID DEPOSIT (PLEASE ATTACH HERE)

Include in Bid Response a Bid Deposit in the amount of 5% of the contract price.

AGENCY CONTACT INFORMATION

This Form And All Accompanying Bid Documents Must Be Typed Or Legibly Printed.

Please Print:		
Agent Submitting Bid (Full name)	Title	
Company	()Phone	_
Street	State Zip	
a.m. top.m Office Hours		-
() Fax		-
e-mail address		
Agent's Signature	Date	

CERTIFICATE OF NON-COLLUSION FORM

The undersigned certifies, under penalties of perjury, that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

PLEASE PRINT			
Name of Person Signin	g Bid or Proposal		
Name of Company or I	Business		
Signature	Date		

TAX COMPLIANCE CERTIFICATION FORM

All providers of goods or services to any agency of the **Commonwealth of Massachusetts** or of any subdivisions shall be required to attest that he/she is in compliance with all the laws of the **Commonwealth of Massachusetts**. The form of attestation shall also provide space for the provider to furnish his/her:

- 1. Social Security Number or;
- 2. Federal Identification Number

It should be noted that submission of a **Social Security Number** or **Federal Identification Number** is purely voluntary. The attestation shall be in the following form:

"Pursuant to Section 49A of Chapter 62C of the Massachusetts General Laws, I:		
(Name and Title)		
Authorized signatory for:		
(Contracting Party)		
Whose principal place of business is at:		
(Address)		
do hereby certify under the penalties of perjury, that :		
(Contracting Party)		
Has complied with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support."		
Social Security Number or Federal Identification Number		

CERTIFICATE OF LIABILITY COVERAGE FROM YOUR INSURANCE CARRIER

(PLEASE ATTACH COPY HERE)

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BIDDERS QUALIFICATIONS FORM

1.1	BID INFORMATION			
A.	Bidder:			
В.	Project Name: FAIRHAVEN HIGH SCHOOL HISTORIC WOOD WINDOW			
	RESTORATION PROJECT – PHASE IV			
	Project Location: 12 Huttleston Ave, Fairhaven, MA.			
D.	Owner: Fairhaven Public Schools.			
1.2	BID FO	DRM SUPPLEMENT		
A.	This fo	orm is required to be attached to the Bid Form.		
В.	A list of craftspeople to be employed on this project and proof of level of experience will be submitted at the beginning of the project and updated whenever there is a change in personnel during the project.			
C.	Included below are three examples of work similar to that described in the contract documents completed within the last three years by the crafts people to be employed on this project. Failure to include qualifications will result in rejection of bid.			
1.3	PREVIOUS PROJECTS			
A.	Project One:			
	1. Project Address:			
	2.	Scope of Work:		
	3.	Owner Contact: (Name, phone number, e-mail)		
	4.	Owner/Engineer/Construction Manager Contact: (Name, phone number, e-mail)		
В.	Projec	et Two:		
	1.	Project Address:		

	2.	Scope of Work	:
3. Owner Contact: (Name, phone number, e-mail)			
		Owner Contac	t: (Name, phone number, e-mail)
	4.	Owner/Engine	er/Construction Manager Contact: (Name, phone number, e-mail)
C.	Projed	ct Three:	
	1.	Project Addres	SS:
	2.	Scope of Work	c:
	3. Owner Contact: (Name, phone number, e-mail)		t: (Name, phone number, e-mail)
	4. Owner/Engineer/Construction Manager Contact: (Name, phone number, e-mail)		er/Construction Manager Contact: (Name, phone number, e-mail)
1.4	SURM	IISSION OF BID	SLIPPLEMENT
1.,			thisday of, 2021.
	Submitte		
		-	(Insert name of bidding firm or corporation)
Authorized			
	Signature		(Handwritten signature)
	Signed B	-	
			(Type or print name)
	Title:		(Owner/Partner/President/Vice President

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This form, to be used for New Contracts and Contract Amendments/Renewals, is jointly issued and published by the <u>Executive Office for Administration and Finance (ANF)</u>, the <u>Office of the Comptroller (CTR)</u> and the <u>Operational Services Division (OSD)</u> for use by all Commonwealth Departments. Any changes to the official printed language of this form shall be void. Additional non-conflicting terms may be added by Attachment. Contractors should only complete sections marked with a "→". For Instructions and hyperlinks (italics), please view this form at: www.mass.gov/osc under Guidance For Vendors - Forms or at www.mass.gov/osc under GUIDANCE OF Vendors - Forms or at www.mass.gov/osc under GUIDANCE OF Vendors - Forms or at www.mass.gov/osc under GUIDANCE OF Vendors - Forms or at www.mass.gov/osc under GUIDANCE OF Vendors - Forms or at www.mass.gov/osc under GUIDANCE OF Vendors - Forms or at www.mass.gov/osc under GUIDANCE OF Vendors - Forms or at www.mass.gov/osc under GUIDANCE OF Vendors - Forms or at www.mass.gov/osc under Www

,, ,	-,,,						
→ <u>Contractor Legal Name</u> (and d/b/a): .		<u>Department Name</u> : FAIRHAVEN PUBLIC SCHOOLS					
→ <u>Legal Address</u> (from W-9):		Business Mailing Address: 128 WASHINGTON STREET					
→ <u>Payment Remittance Address</u> (from W-9):		Billing Address (if different):					
→ Contract Manager.		Contract Manager: NICOLE VERRONNEAU POTTER					
→ <u>E-Mail Address</u> :	→ Phone:	E-MailAddress:	npotter@fairhavenps.net	Phone: (508) 979-4000			
→ Fax:	→ TTY:	Fax: (508) 979	-4016	TTY:			
→ <u>State of Incorporation</u> (if a corporation) or "N	I/A":	MMARS Doc ID	<u>)(s)</u> :				
→ <u>Vendor Code</u> :		RFR/Procurement or Other ID Number (if applicable):					
MMARS Object Code:		Account(s) Fund	Account(s) Funding Contract:				
X NEW CO	<u> NTRACT</u>	CONTRACT AMENDMENT/RENEWAL					
COMPENSATION (Check only one):							
Total <u>Maximum Obligation</u> of this Contract \$		ENTER CURRENT CONTRACT START and END DATES (prior to amendment)					
Rate Contract (Attach details of rate(s) u	ınits and any calculations):	Current Start Date: Current End Date:					
The following COMMONWEALTH TERMS A		<u>COMPENSATION</u> : (Check Either, "No Compensation Change"; "Maximum Obligation" or "Rate change". ATTACH Amended Scope and Budget to support Amendment.)					
has been executed and filed with CTR (Che Commonwealth Terms And Conditions	эск only one).	NO Co	ompensation Change (Skip to "OTH	IER" section below and select change)			
Commonwealth Terms And Conditions For	or Human And Social Services	Redist	ribute Budget Line Items (No Maxir	num Obligation Change)			
PROCUREMENT OR EXCEPTION TYPE (C)			um Obligation Change. Current Total Contract Maximum	Obligation: \$			
Single Department Procurement/Single D		, (T	Fotal Contract Maximum Obligation, inclu	ding all prior amendments).			
Single Department Procurement/Multiple	Department User Contract	b) A	Amendment Amount ("+" or "-"):	\$			
 Multiple Department Procurement/Limited Statewide Contract (OSD or an OSD-desi 		•	c) NEW TOTAL CONTRACT MAXIMUM OBLIGATION: \$ Rate Changes to Rate Contract				
Grant (as defined by <u>815 CMR 2.00)</u>	igriated Department)	Nate C	manges to Nate Contract				
Emergency Contract (attach justification)		OTHER: (Check option, explain under "Brief Description" below, and attach documentation.)					
 Contract Employee (Complete <u>Employme</u> Collective Purchase (attach OSD approva 		Amend Duration Only (No Compensation or Performance Change) Amend Scope of Services/Performance Only (no budget impact.)					
Legislative/Legal Exemption (attach author		Interim Contract (Temporary Extension to complete new Procurement)					
Other (Specify and attach documentation)			escribe Details and Attach documer				
ANTICIPATED START DATE: (Enter the Date Contract		ANTICIPATED START DATE: . (Enter the Date Amendment					
Obligations may begin. Review Certification for Effective Date Below prior to entry.)		Obligations may begin. Review Certification for Effective Date Below prior to entry.)					
CONTRACT END DATE:	'	NEW CONTRA	CT END DATE:	·			
→ PROMPT PAYMENT DISCOUNTS. Contr				See <u>Prompt Payment Discount Policy:</u>			
% Within 10 Days % Within 15 Days				n-commodity or non-service compensation)			
				r-commodity of non-service compensation)			
	BRIEF DESCRIPTION OF CONTRACT PERFORMANCE OR REASON FOR AMENDMENT (Reference to attachments is insufficient):						
CERTIFICATIONS: Notwithstanding verbal of							
be the latest date this Contract or Amendment has been executed by an authorized signatory of the Contractor, the Department, a later Contract or Amendment Start Date specified above, or the date of any required approvals. By executing this Contract/Amendment, the Contractor makes, under the pains and penalties of perjury, all certifications							
required under the attached Contractor Certific	cations, and has provided all required doc	cumentation noted	d with a "→", or shall provide any re	equired documentation upon request, and			
the Contractor agrees that all terms governing							
of the applicable Commonwealth Terms and C							
of the attached <u>Instructions</u> , the Request for Response (RFR), solicitation (if applicable) or other authorization, the Contractor's response to the RFR or solicitation (if applicable), and any additional negotiated performance or budget provisions. The terms of this Contract shall survive its termination for the purpose of resolving any claim, dispute or other Contract							
action, or for effectuating any negotiated representations and warranties. THE PARTIES HEREBY ALSO CERTIFY THAT (Check one option only):							
 the Contractor has NOT incurred any obligations triggering a payment obligation for dates <u>prior</u> to the <u>Effective Date</u> of this Contract or Amendment; OR any obligations incurred by the Contractor <i>prior</i> to the <u>Effective Date</u> of this Contract or Amendment (for which a payment obligation has been triggered) are intended to 				· · · · · · · · · · · · · · · · · · ·			
part of this Contract/Amendment and shall be considered a final Settlement and Release of these obligations which are incorporated herein, and upon payment of these							
obligations, the Contractor forever releases the Commonwealth from any further claims rela			these obligations.				
AUTHORIZING SIGNATURE FOR THE CONTRACTOR:		AUTHORIZIN	G SIGNATURE FOR THE DEPAR	TMENT:			
→ X:(Signature and Date Must Be Hand	Date:	X:	Signature and Date Must Be Hand	Date:			
		-	=				
→ Print Name:			Nicole Verronneau Potter	<u> </u>			
→ Print Title:		Print Title:	Business Manager	·			



INSTRUCTIONS

The following instructions to the **Standard Contract Form** are provided to assist both Contractors and Commonwealth Departments with the interpretation and completion of the **Standard Contract Form**. These Instructions, including policies, procedures and legal references, are incorporated by reference into the **Standard Contract Form**. The **Standard Contract Form** is the boilerplate contract used by the Commonwealth for commodity and service Contracts, Grants and any other agreements for which another standard boilerplate is not already prescribed by statute, regulation or policy.

The **Standard Contract Form** is not a stand alone contract document but is used as the key document that incorporates the various documents that make up a Commonwealth Contract, which include in the hierarchy of precedence: (1) the applicable <u>Commonwealth Terms and Conditions</u> or the procurement solicitation document, or procurement exception supporting documentation, (4) the Contractor's response to the RFR or other solicitation, or scope of performance and budget for procurement exceptions, and (5) any other non-conflicting negotiated terms and conditions and attachments. Departments may not sign Vendor Contracts but may attach copies of the Contracts, with appropriate redaction of conflicting terms. A Contractor may not condition execution of the Standard Contract Form or the applicable T&C on the Department's signing the Contractor's contract or other contractual form, invoice, or other documents with additional or conflicting contractual terms. Any of these attached terms or documents shall be superseded by the documents in the order of precedence listed above.

Note: Any changes to the official printed language of this form shall be void. This form is designed to have data electronically added, rather than manually completed and table boxes will expand to accommodate text that is required to be added. Departments and Contractors may not alter the format or add fields to the form. The Department and a Contractor may negotiate by attachment, any additional language which clarifies their understanding of, but does not change, the language of the applicable Commonwealth Terms and Conditions and this Standard Contract Form.

Clarifications may fill in the gaps and "spell-out" the understanding of the Department and the Contractor regarding their respective contract responsibilities. Clarifications may not be used to have the effect of negating, modifying, or replacing language in the applicable Commonwealth Terms and Conditions or this Standard Contract Form. For example, the following are acceptable additional terms: prior written notice periods, types of reports and timing of submission, details of delivery or acceptance of performance, records storage requirements, identifying what items are considered "deliverables" and what items are "contractor materials" that are already copyrighted or owned prior to the Contract, and are being used to complete performance. Ownership can not be conveyed after performance if the Commonwealth has paid for development of a deliverable with just compensation.

Contract Should be Sent and Reviewed Electronically. The Standard Contract Form is designed to be used electronically and should be reviewed by Contractors online to ensure access to hyperlinked references. Departments completing the Standard Contract Form for execution should enter the information electronically and send the form electronically to the Contractor to ensure timely completion and execution.

Links to policies, procedures and legal references. Text that appears italicized and underlined in the Standard Contract Form indicates a "hyperlink" that will link you to an Internet or bookmarked site for the particular reference being cited. Pressing the "Alt" and "F9" keys while in the Microsoft® Word version of this document will display the full text of hyperlinks which can be copied and pasted or typed into your Internet browser address field if you can not connect directly to the Internet by clicking on a hyperlink. Hyperlinks to legal requirements such as statutes and regulations are links to unofficial versions of these documents. While reasonable efforts have been made to assure the accuracy of the data provided, Departments and Contractors should consult with their legal counsel to ensure compliance with all legal requirements. Using the Web Toolbar will make navigation between the form and the hyperlinks easier. Please note that not all applicable laws have been cited in this document. Instructions and hyperlinks may be added or changed without notice, so please periodically check this document at: www.mass.gov/osc under Guidance For Vendors - Forms or at www.mass.gov/osd under OSD Forms for updates.

A Department is **NOT** responsible for providing a paper copy of the **Standard Contract Form** Instructions to Bidders or Contractors. The **Standard Contract Form** Instructions are incorporated by reference into the **Standard Contract Form** and do not have to be filed with the completed Contract documents. **Departments and Contractors are responsible for reviewing the Standard Contract Form electronically online including the Instructions and hyperlinks.**

Contractor Name (and d/b/a): Enter the full legal name of the Contractor's business as it appears on the Contractor's W-9 Form and the applicable Commonwealth Terms and Conditions. If Contractor also has a "doing business as" (d/b/a) name, both the legal name and the "d/b/a" name must appear in this section. Changes to the Contractor's Legal Name without a major structural change (such as a merger or consolidation) will require an updated W-9 and Commonwealth Terms and Conditions signed by an Authorized Signatory of the Contractor and filed with CTR. The Department should update the Contract and attachments either at the time of the name change, or when the Contract is next amended. The Department is required to make the necessary changes using a VCM for the VCUST table to update the Contractor's Vendor Code.

Contractor Legal Address: Enter the Legal Address of the Contractor which matches the W-9 filed for this Contractor where all tax reporting forms will be sent. This address must match the legal address the Contractor has on file with the Internal Revenue Service (IRS) and the Department of Revenue (DOR) and must match the 1099 information for the Vendor Code listed for this Contract. Updates to the Legal Address without a major structural change to the Contractor (such as a buyout, merger, or other change) requires an updated W-9 from an Authorized Signatory of the Contractor, but does not require other contract document changes. The Department is required to make the necessary changes using a VCM for the VCUST table to update the Master and Legal Addresses for the Contractor's Vendor Code.

Contractor Payment Remittance Address: Also enter the "Remittance Address" if payments are to be mailed to a separate mailing address, which much match the remittance address on the W-9 submitted by the Contractor. Unless otherwise specified in the Contract, legal notice sent or received by the Contractor's Contract Manager (with confirmation of actual receipt) through the listed address, fax number(s) or electronic mail address will meet any requirements for written notice under the Contract. Updates to the Remittance Addresses require an updated W-9 from an Authorized Signatory of the



Contractor, but do not require other contract document changes. The Department is required to make the necessary changes using a VCM for the VCUST table to update the Master and Legal Addresses for the Contractor's Vendor Code.

Contractor Major Structural Change. The Contractor is required to provide the Department with a minimum of 45 days written advance notice of any planned or potential structural change (merger, buyout, acquisition, consolidation). Contract performance may not be automatically assigned to the new entity (since the underlying procurement may be affected) and the Contractor may be required to negotiate continued performance and execute a Contractor Change in Identity Form in lieu of a Standard Contract Form. See the Amendments, Suspensions, and Termination Policy for additional information.

Contractor Contract Manager: Identify the authorized Contract Manager who will be responsible for managing the Contract. The Contract Manager should be an Authorized Signatory or, at a minimum, a person designated by the Contractor to represent the Contractor, receive legal notices and negotiate ongoing contract issues. The Contract Manager is considered "Key Personnel" and may not be changed without the prior approval of the Department. Notice of a change of Contract Manager may be sent in writing by letter, e-mail, or fax to the Department Contract Manager and does not require a formal Amendment. If the Contract is listed on Comm-PASS, the Contract Manager should be listed in the Vendor Section.

Contractor Phone/Fax/TTY/E-Mail Address: Identify the phone, fax and TTY/TTD number(s) and electronic mail (e-mail) address of the Contract Manager. The Contractor is required to ensure that this information is kept current to ensure that the Department can contact the Contractor and provide any notice under the Contract. Unless otherwise specified in the Contract, legal notice sent or received by the Contract Manager (with confirmation of actual receipt) through the listed address, fax number(s) or electronic mail address will meet any requirements for written notice under the Contract. Notice of a Change of this information may be sent in writing, by e-mail or fax to the Department Contract Manager and does not require a formal Amendment. If the Contract is listed on Comm-PASS, the Contract Manager Information should be listed in the Vendor Section.

<u>State of Incorporation</u>: If Contractor is a <u>corporation</u>, enter the state in which the Contractor is incorporated. If the Contractor is not a corporation enter "N/A":

Contractor Vendor Code: Enter the state accounting system Vendor Code (also known as the Vendor Customer Number) assigned by the Commonwealth. If a Vendor Code has not been assigned, leave this space blank and the Department will complete this section when a Vendor Code has been assigned. The Department must ensure that the Contractor's Vendor Code matches the Vendor Code created on the state accounting system MMARS VCUST table. If the Contractor has a Vendor Code with multiple payment remittance addresses (see the MMARS VEND file), the Department must verify the correct Vendor Code with the Contractor to ensure timely and properly directed payments. See Vendor/Customer Policy. The Contractor's failure to verify the correct Vendor Code will waive the Department's liability for late payment interest for payments sent to the incorrect remittance address. A change in Vendor Code is usually considered a significant Contract Amendment (unless the change involves no major structural change and the underlying procurement is not affected). Changes in Vendor Codes which result in change of Contractors are restricted (see major structural change).

MMARS Object Code: MMARS is the Massachusetts Management and Accounting Reporting System. This field is entered by the Department and should identify the MMARS Object Code(s) from the Expenditure Classification Handbook that represent the type of expenditures for this Contract, and is used to match with the MMARS encumbrance transaction. The object code may be changed by the Department without a formal amendment.

<u>Department MMARS Alpha Code and Name</u>: Enter the MMARS Department Alpha code assigned to this Department and the full legal Department name, which must be a Department recognized in the MMARS state accounting system with a <u>three (3) letter MMARS Code</u>. A Division within a recognized MMARS Department may not sign contracts or make other obligations, but must have contracts and other obligations signed under the Department recognized in MMARS.

Department Contract Manager: Identify the authorized Contract Manager who will be responsible for managing the Contract. The Contract Manager should be an authorized signatory or, at a minimum, an employee designated by the Department to represent the Department to receive legal notices and negotiate ongoing contract issues. Notice of a proposed change of a Contract Manager may be sent in writing by letter, e-mail or fax to the Contractor's Contract Manager (with confirmation of actual receipt) and does not require a formal Amendment.

<u>Department Business Mailing Address</u>: Enter the address where all formal correspondence to the Department must be sent. Unless otherwise specified in the Contract, legal notice sent or received by the Department's Contract Manager (with confirmation of actual receipt) through the listed address, fax number(s) or electronic mail address for the Contract Manager will meet any requirements for written notice under the Contract.

<u>Department Billing Address</u>: Enter the Billing Address if invoices must be sent to a different location. Billing or confirmation of delivery of performance issues should be resolved through the listed Contract Managers.

<u>Department Phone/Fax/TTY/E-Mail Address</u>: Identify the phone, fax and TTY/TTD number(s) and electronic mail (e-mail) address for the Contract Manager. Unless otherwise specified in the Contract, legal notice sent or received by the Contract Manager (with confirmation of actual receipt) through the listed address, fax number(s) or electronic mail address will meet any requirements for written notice under the Contract.

MMARS Document ID: Enter the state accounting system (MMARS) encumbrance transaction number associated with this Contract. The same MMARS Document ID should be used as a reference number on all transactions, documentation or other correspondence related to the Contract for audit, Quality Assurance and Records Management purposes. This information can be entered after the Contract is executed. If more than one ID has been used for this Contract or Amendment, identify all that apply. This information must be completed for all contracts and amendments. For Statewide Contracts, OSD may enter the Comm-PASS ID in addition to the MMARS doc id.

Request for Response (RFR)/Procurement Reference number or other Contract Identifier. Enter the reference number of the RFR or other Procurement Number for this Contract or Amendment (even if you are using an RFR that was issued by another Department). If the RFR was posted on Comm-PASS, use RFR Reference Number as posted. If an RFR was not used, enter Contract No. or other reference number. If none, indicate "N/A". This information is necessary for Audit, Quality Assurance and Records Management purposes.

Account(s) Funding Contract: Enter the account(s) funding the Contract. This information can be entered after the Contract is executed. If more than one ID has been used for this Contract or Amendment, identify all that apply. This information must be completed for all contracts and amendments.

information. Please note that the "Interim Contract" competitive procurement exception is only available for Contract Amendments/Renewals (right



procurement process or exception is supported under the new funding account. Earmark or procurement exception authorization in one account is not transferable to another funding source.

<u>CONTRACT TYPE</u>: The Department must select one of two options to indicate whether this is a "**NEW CONTRACT**" or a "**CONTRACT** AMENDMENT/RENEWAL" and complete the "Left" side only for New Contracts, and the "Right" side only for Contract Amendments/Renewals.

FOR NEW CONTRACTS (left side):

COMPENSATION: Identify if the Contract has a **Maximum Obligation** or is a **Rate Contract**:

- Maximum Obligation. A maximum obligation is used for either unit-based or project-based compensation when performance (commodity, service, grant, etc.) is predictable and measurable and a maximum amount of funds will be set aside for the Contract.
 - o The amount entered in this space must be fully encumbered by the Department for the duration of the Contract (including "out years" for multi-year contracts) according to the **Effective Date**, and any settled obligations that are included.
 - Any fiscal year in which Contract Terms will still be effective, but no compensation will be paid, must also be reflected in MMARS to ensure that
 the total duration of the Contract is included.
 - The attached budget or cost information must match the Contract Maximum Obligation (or as amended) and the MMARS transaction.
- Rate Contract. A Rate Contract is used when the rate per unit of performance (e.g., commodity or service) is known but the number of units that will be needed during the Contract period is unknown or may vary based upon need or usage. Rate Contracts are also used when there are multiple Contractors available to provide performance and it is unknown which Contractors will be selected at any given time to provide performance. If the Rate Contract is signed solely with one Contractor, the Department must encumber sufficient funds on behalf the Contractor to support the anticipated use of the Contract. If the Rate Contract is signed with multiple Contractors that may or may not provide performance during the Contract period, the Department must encumber sufficient funds to support the anticipated use of the Contract. The encumbrances may be "vendor specific" with one encumbrance per Contractor, or may be done through a Departmental Master Agreement (MA) or a CT with Event Type 51 ("open order") if not tied to a Departmental MA (where funds are not encumbered on behalf of any single Contractor). Attach rates and types of unit (per hour, day, week, item, etc.) including any supporting documentation for rates. If rates are to be negotiated, attach a description of the process, index or schedule that will be used to negotiate the rates. Rate Contracts with negotiated rates should identify a range of rates or a cap in rates and may not be used for open-ended arrangements but are appropriate for lists of pre-qualified contractors and certain Statewide Contracts for which rates are negotiated on a per project, program, task or work order basis depending upon the performance required.

Commonwealth Terms and Conditions That Apply To This Contract: Check either "Commonwealth Terms and Conditions" or "Commonwealth Terms and Conditions for Human and Social Services", whichever is applicable to the Contract performance. (See Expenditure Classification Handbook for assistance in determining applicable Commonwealth Terms and Conditions). The applicable "T&C" is signed only once by the Contractor and filed by the initial contracting Department with the Office of the Comptroller (CTR) and is recorded on the VCUST table on the "Business Type" screen. The signed and filed Commonwealth Terms and Conditions will be incorporated by reference and apply to any contract, Grant or other agreement entered into by the Contractor and any Commonwealth Department. Therefore, Contractors do not have to re-sign the applicable T&C for subsequent procurements or contracts, unless the Contractor has a legal name change, or a <a href="mailto:mai

Departments are required to verify that the T&C is executed by an <u>Authorized Signatory</u> of the Contractor. The applicable T&C must be on file at CTR PRIOR to submitting this Contract for encumbrance processing at either CTR or OSD, or if the Department has transaction delegation, prior to processing the encumbrance in MMARS. A Department must check the MMARS VCUST under the "Business Type" tab to determine if the Contractor has already signed the applicable Commonwealth Terms and Conditions and should not request additional copies if already filed. Contractors may submit photocopies of a previously signed T&C if so requested. Additional original T&Cs should not be retained by a Department, but must be sent to the Office of the Comptroller Payee Unit to be maintained on file to ensure that CTR and the VCUST table reflect the most recent documents.

If the Contractor does not have the applicable Commonwealth Terms and Conditions on file and recorded on the MMARS VCUST table, the Department must complete a VCM on MMARS and then mail the completed Commonwealth Terms and Conditions to CTR's Payee Unit. Changes to the Contractor's identity during the period of the Contract require an updated W-9 and execution of another Commonwealth Terms and Conditions reflecting the new information. See Guidelines for Material Changes in Contractor Identity under <u>Amendments, Suspensions, and Termination Policy.</u> For more information on Vendor Code requirements see <u>Vendor File</u> Policy.

Procurement or Exception Type: Check the appropriate type of procurement or exception for this Contract. Only one option can be selected.

- Commodity or Service Contracts. If the Contract is for the procurement of commodities or services, the Department must indicate if the Contract was procured as a "Single Department Procurement/Single Department User Contract"; "Single Department Procurement/Multiple Department User Contract", "Multiple Department Procurement/Limited Department User Contract", or a "Statewide Contract (Only for use by OSD or an OSD-designated Department)". See Commodities and Services Policy and Use of a Procurement by a Single or Multiple Departments for more information and documentation requirements for these options.
- **Grants**. If the Contract is being used for the award of a Grant, the Department must check "Grant". Grants are governed by <u>815 CMR 2.00</u> and <u>State Grants and Federal Subgrants Policy</u>. See "<u>Required Standard Contract Form Contents</u>" below for additional information.
- Competitive Procurement Exception. If the Contract did not result from a competitive procurement, the Department must check off the appropriate exception: "Emergency Contract"; "Contract Employee"; "Collective Purchase approved by OSD"; a "Legislative/Legal Exemption" or "Other" (and specify procurement exception). Documentation proving the exception and a justification memorandum identifying how the Contractor was selected and why the selection represents best value, must also be attached. See "Required Standard Contract Form Contents" below for additional

information. Please note that the "Interim Contract" competitive procurement exception is only available for Contract Amendments/Renewals (right side of form; see below).



Anticipated Start and End Dates: See Effective Date, Anticipated Start Date and End Date below.

FOR CONTRACT AMENDMENT/RENEWAL (right side):

There are no automatic Contract Renewals and both parties must execute an Amendment for a Contract Renewal. Any "material" change in the Contract terms must also be memorialized in an Amendment even if the Maximum Obligation or a corresponding MMARS transaction is not needed to support the change. "Material" changes are any significant change to the performance obligations of a Contractor or the performance expectations of the Department (such as any change in duration or maximum obligation). Minor adjustments to the scope and budget that do not materially impact the maximum obligation or performance responsibilities of the Contractor, or do not materially change the performance expectations of the Department do not require a formal Amendment, but it is presumed that the terms of performance (scope) and costs (budget) will be updated as part of the Contract file, unless already identified under the Contract. See <u>Amendments</u>, <u>Suspensions</u>, <u>and Termination Policy</u> for further guidelines on Amendments and Options to Renew.

The parties may negotiate a change in any element of contract performance or cost identified in the RFR or the Contractor's response which results in lower costs, or a more cost-effective or better value performance than was presented in the original selected response. Provided the negotiation results in a better value within the scope of the RFR than what was proposed by the Contractor in the original selected response, it is negotiable.

<u>CURRENT CONTRACT START AND END DATES</u>: Enter the "Current Start Date" and the Current End Date" for the Contract prior to the Amendment. This information is necessary to validate the MMARS transaction that is being changed and to ensure that the dates of performance are accurate for the entire duration of the Contract. This information can be obtained from the original contract form, or if previously amended from the Amendment Form.

COMPENSATION: Check either. "No Compensation Change"; "Redistribute Budget Line Items"; "Maximum Obligation" or "Rate change".

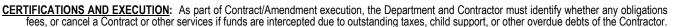
- **No Compensation Change**, should only be selected if there is no change to the compensation under the Contract, including Maximum Obligation, Line-item redistribution or Rates. Then Skip to "Other" and identify the type of Amendment being made and attach documentation for change.
- Budget Line Items Redistribution (No Maximum Obligation Change). Identify any changes in budget line items that move funding around within current Maximum Obligation and procurement parameters. Attach amended performance and budget terms to support redistribution.
- Maximum Obligation Change. (Check off this section and complete if Maximum Obligation is increasing or decreasing.)
 - a) Enter Current Total Contract Maximum Obligation (prior to Amendment/Renewal reflecting all prior amendments).
 - b) Enter the Amendment/Renewal Amount (indicate whether increase or decrease by including "+" or "-" respectively before the amount). (MMARS transaction must match this amount.)
 - c) Enter <u>New</u> Total Contract Maximum Obligation, which must equal the Current Total Contract Maximum Obligation plus ("+") or minus ("-") the Amendment/Renewal amount. (MMARS transaction must match this amount.)
 - Mote: Carry over funds. Multi-year contracts in which encumbered amounts in any fiscal year that remain unexpended at the close of the fiscal year are NOT automatically available for compensation for Contractor performance in subsequent fiscal years unless so authorized by the Department. For operating accounts, unexpended balances revert at the close of the fiscal year and are not available for subsequent fiscal year obligations. Unexpended, encumbered amounts in continuing accounts (federal, trust, capital) will balance forward obligation ceilings for these amounts in MMARS. The Department is responsible for reconciling performance and expenditures in each fiscal year and authorizing use of carry over amounts for performance in the subsequent fiscal year(s) either as part of amendments to the scope and budget of the Contract, and underlying MMARS transactions, or as part of the original Contract performance terms and budget.
- Rate Changes to Rate Contract. (Check off this section if Rates are being changed. Attach rate changes.)

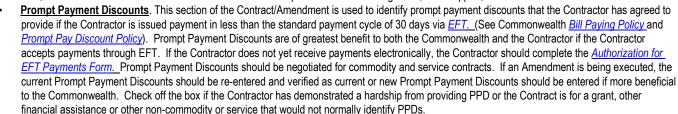
OTHER (Check off Change and attach all supporting documentation):

- Amend Duration Only (No Compensation Change): Check off this section only if duration is being changed with no changes to compensation or performance. This option is commonly used to extend the date for completion of performance with no additional compensation.
- Amend Scope of Services/Performance Only (no budget impact): Attach detailed description of changes to Scope or performance.
- Interim Contract: Check off this section for a temporary extension (Interim Contract) of a current Contract in order to accommodate the completion of a new procurement.
- Other: (Describe Details of the other type of amendment and attach documentation)

<u>Payments and Prompt Pay Discounts.</u> Payments under this Contract or Amendment are made in accordance with the applicable Commonwealth Terms and Conditions and the Commonwealth <u>Bill Paying Policy.</u>

- Electronic Funds Transfer (EFT). If the Contractor does not yet receive payments electronically, the Contractor should complete the <u>Authorization for EFT Payments Form</u>. In addition to sending the remittance information to the Contractor's financial institution with the payment, CTR's <u>MassFinance/Vendor Web site</u> allows Contractors access to their remittance information, payment history and pending payments under their Vendor Code (listed above).
- Legal Payment Date. An invoice/obligation is considered legally paid based upon the Payment Issue date recorded in the state accounting system (MMARS) which will be when the payment is issued by the Commonwealth via EFT (Electronic Funds Transfer) when issuance file is transmitted to the bank or, for checks, when the check is sent to the U.S. Post Office by the State Treasurer's Office. The issuance date is the relevant date for Prompt Payment Discounts. (See <u>Prompt Pay Discount Policy</u>.) Under the applicable Commonwealth Terms and Conditions, pursuant to <u>G.L. c. 29, s. 26, s. 27 and s. 29, obligations</u> may not be incurred unless there are sufficient appropriated or non-appropriated funds available and allotted to support the obligations.
- Intercept. All payments due to the Contractor shall be subject to intercept pursuant to <u>G.L. c. 7A, s. 3</u> and <u>815 CMR 9.00</u>. Overpayments shall be reimbursed by the Contractor or may be offset by the Department from future payments in accordance with state finance law. Offset shall include





- Invoices. Invoices must be submitted in accordance with the terms of the Contract and the Bill Paying Policy. Final invoices in any fiscal year must be submitted no later than August 15th for performance made and received (goods delivered, services completed) prior to June 30th, in order to make payment for that performance prior to the close of the fiscal year and reversion of appropriated funds. By signing this Contract or Amendment the Contractor agrees that it the Contractor fails to provide timely final invoices for final payments by August 15th, the Department may make payment based upon the terms and prices of the Contract for the goods or services that are accepted by the Department, and the Contractors acceptance of payment shall release the Commonwealth from further claims for payment. If the Contractor disputes the final payment and refuses payment, available funds may revert and may be delayed significantly until funds are available to make payment once the dispute is resolved, and the Department will not be subject to late payment interest for this delay.
- Pandemic, Disaster or Emergency Performance. In the event of a serious emergency, pandemic or disaster outside the control of the Department, the Contractor agrees the Department may request performance changes related to the Contract, or may negotiate additional performance from the Contractor to address the emergency needs of the Commonwealth (subject to appropriation), even if not contemplated under the original Contract. Departments will receive guidance on allowable or mandated emergency actions in the event of an emergency.

Brief Description of Contract Performance: Enter a brief description of the Contract performance, project name and/or other identifying information for the Contract or the reason for the Contract or Amendment. The description is used to specifically identify the Contract performance, match the Contract with attachments, and determine if the appropriate expenditure code (as listed in the Expenditure Classification Handbook) has been selected. Merely stating "see attached" or referencing attachments without a narrative description of performance is insufficient. The Department may include any additional information in this section to identify unique or important information related to this Contract or the Contractor.

Effective Date, Anticipated Start Date And End Date

- The "Effective Date" of the Contract or Amendment is determined by the execution dates of the Contract and any required approvals as outlined in Section 1 of the applicable Commonwealth Terms and Conditions. For contracts exceeding the MMARS transaction delegation threshold that are routed through workflow to CTR and OSD may have the dates corrected in the state accounting system (MMARS) to reflect the legal Contract Effective Date, as appropriate.
 - For Contracts using the <u>Commonwealth Terms and Conditions</u>, "the effective start date of performance under a Contract shall be the date a Contract has been executed by an authorized signatory of the Contractor, the Department, a later date specified in the Contract or the date of any approvals required by law or regulation, whichever is later."
 - For Human and Social Service Contracts using the <u>Commonwealth Terms and Conditions for Human and Social Services</u>, "the effective start date of a Contract shall be the later of: the date the Contract was executed by an authorized signatory of the Contract of the Contract was executed by an authorized signatory of the Department; the date specified in the Contract; or the date of Secretariat authorization pursuant to G.L. c. 29, s. 29B."

The Contractor and the Department are required to certify that the "Effective Date" of the Contract or Amendment being executed is the latest date the Contract or Amendment has been executed by an authorized signatory of the Contractor, the Department, a later Start Date specified, or the date of any required approvals. If the Effective Date of the Contract or Amendment is later than the Start Date listed, the Contractor and Department agree that by signing the Contract or Amendment they have identified if any obligations have been incurred prior to the Effective Date for which a payment obligation has been triggered prior to that date, which shall be included as final settlement of these obligations as part of the Contract/Amendment and payment of these obligations shall release the Commonwealth from any claims related to these obligations.

- Anticipated Contract/Amendment Start Date: The Department must enter the "anticipated" start date of "obligations" under the Contract that will trigger a payment obligation. Departments must consider when a payment obligation is "incurred" (creates an obligation to make payment). For most goods, payments obligations are incurred when goods are delivered and accepted. For services, the Contract should specify if obligations are incurred based upon performance (such as performance charged at an hourly rate as services are provided; services for clients in residence, services upon request) or the date the services are made available (such as the start date of maintenance or customer service hours are available for use), or whether the performance obligation occurs at a later date, such as when a periodic, final report, program or system component is delivered and accepted, or other Contract milestone has been achieved (delivered and accepted). Most grants provide financial assistance for a public purpose, rather than a fee for service or good (or other performance) for the Department, and will have installment payments with obligations being incurred based upon the schedule of payments, grant milestones or reporting requirements in the Contract, not the actual date grant performance is started.
- End Date of this Contract/Amendment: The Department must enter the date the Contract will terminate. A Contract must be signed for at least the
 initial duration listed in the RFR, or other solicitation document (if applicable). Amendments to extend the termination date, such as exercising an
 option to renew, must be made using this Form and must be signed prior to any new obligations being incurred by the Contractor. Please see
 Amendments, Suspensions, and Termination Policy for additional guidelines.

CERTIFICATIONS AND EXECUTION: As part of Contract/Amendment execution, the Department and Contractor must identify whether any obligations were performed prior to the "Effective Date" of the Contract or Amendment (as outlined above). Contractors are not authorized to deliver performance for which compensation is sought under a contract or amendment (even if requested by the Department or any other Commonwealth representative) prior to the Contract effective start date of that contract or after the termination date of that contract. Any oral or written representations, commitments, or assurances made by the Department or any other Commonwealth representative are not binding and a Department may not back-date a contract or amendment in order to cover the delivery of performance prior to the Contract effective date. The Commonwealth has no legal obligation to compensate a Contractor for performance that is not requested and is intentionally delivered by the Contractor outside the scope of a Contract. In the event obligations have been incurred by the Contractor that were intended to be included as part of the Contract/Amendment prior to the Effective Date, the parties have two options to resolve the settlement of these obligations:

- 1. Execute a separate Settlement and Release document for the performance and attach to the original contract; OR
- 2. Include the performance as part of the Contract/Amendment, as follows: The Department would enter the actual date the performance obligations began under "Anticipated Start Date" for either the new Contract or Contract Amendment on the Standard Contract Form and check off box "2." indicating that the performance prior to the Effective Date is included under a Settlement. By completing the Contract/Amendment to include the performance prior to the Effective Date, the Department is able to enter the MMARS encumbrance to include the performance under the properly executed Contact/Amendment.

Please note that if **no performance occurred or was anticipated to occur until** <u>on or after</u> the Effective Date of the Contract/Amendment, the parties would check off box "1", thereby indicating that no obligations were incurred prior to the Effective Date.

Authorizing Signature for Contractor/Date: The Authorized Contractor Signatory must, in their own handwriting and in ink, sign AND enter the date the Contract is signed. See section above under "Anticipated Contract Start Date". Acceptance of payment by the Contractor shall waive any right of the Contractor to claim the Contract/Amendment is not valid and the Contractor may not void the Contract. Rubber stamps, typed or other images are not acceptable. Proof of Contractor signature authorization may be required by the Department if not already on file. See "Required Standard Contract Form Contents" section below. See also CTR Department Head Signature Authorization Policy for the policy requiring live signatures and signature dates and Contractor signature authorization verification. See Contractor Authorized Signatory Listing.

Contractor Name /Title: The Contractor Authorized Signatory's name and title must appear legibly.

<u>Authorizing Signature For Department/Date</u>: The Authorized Department Signatory must, in their own handwriting and in ink, sign AND enter the date the Contract is signed. See section above under "<u>Anticipated Contract Effective Start Date</u>". **Rubber stamps, typed or other images are not accepted.** See also CTR <u>Department Head Signature Authorization Policy</u>.

<u>Department Name /Title:</u> The Department Authorized Signatory's name and title must appear legibly. For Contracts requiring secretariat signoff, if the Department Signatory is not an authorized signatory of the Secretary, evidence of Secretariat signoff must be included in the Contract file.

EXPEDITED EXECUTION. The Contract/Amendment may be sent electronically to the Contractor, completed, executed by the Contractor and faxed back to the Department for start date purposes. The Department does not have to wait to receive a hard copy of the executed Contract/Amendment and may sign the fax copy for start date purposes. When the hardcopy of the Contractor's executed Contract/Amendment is submitted, the Department has the option of re-signing the hardcopy with the date from the earlier signed fax or may just attach the fax copy to the hardcopy of the Contract. In the alternative, the Department and the Contractor may each sign a separate Contract/Amendment and the two separately signed documents may be attached representing one executed Contract/Amendment, provided there are no conflicts in the information contained on each signed document.

PLEASE NOTE: Any corrections to information on the Standard Contract Form after execution must be initialed and dated by the parties. Faxed copies of initialed changes are sufficient for records management purposes, although hardcopies are preferred.

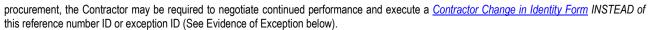
REQUIRED STANDARD CONTRACT FORM CONTENTS CHECKLIST

Originals or true attest copies of contracts. Massachusetts <u>G.L. c. 7A, s. 5</u> requires that either the original or a certified copy of all Contracts be filed as directed by the Comptroller. The "record copy" contents of a Contract (as listed below) must be filed either at CTR, OSD (commodity contracts) or at the Department if so delegated. Pursuant to the <u>Delegation of MMARS Transaction Policy</u> and 815 MCR 10.00, Departments retain the record copy of all contract documents. If a Contract exceeds the published delegation threshold, the Department must submit a copy of Contract package to CTR or OSD (Commodity contracts) for secondary review using the appropriate Transmittal Form (if applicable). CTR or OSD secondary review is not legal approval of a Contract, but an expedited quality assurance review to ensure Contract documents support minimum procurement and contracting requirements. All contracts are subject to additional post audit and quality assurance reviews. The **Standard Contract Form** Instructions are incorporated by reference and are not required to be filed as part of the original or true attest copy of the **Standard Contract Form**. A Department official who has seen the original of a document can attest that a copy submitted is a "true attest" or "true copy" of the original. This certification can be done on the top page of the copy or by attachment. See also <u>Department Head Signature Authorization Policy</u>. For additional guidance for contents and submission requirements see <u>Contracts Quick Reference</u> and <u>State Finance Law and General Requirements Policy</u>. In addition to this Standard Contract Form, the following Contract content checklists apply to each respective contract type:

CONTENT CHECKLIST FOR NEW CONTRACTS

Applicable Commonwealth Terms and Conditions: Department must verify if Contractor is already on VCUST table on MMARS. New Contractors must have T&C filed with CTR along with appropriate VCC/VCM to update table. T&C must be on file with VCUST before encumbrance can be entered for this Contract. For an existing Contractor's **Standard Contract Form**, <u>Contractor information must match VCUST table</u> for the Vendor Code, Division and Remittance address. (AD001, AD002...)

Evidence of Procurement (if procurement done): A copy of the RFR, or a Comm-PASS close-out Contract Summary screen print (provided the RFR has been properly closed out and the close-out Summary posted on Comm-PASS verifies the location of the RFR and RFR Reference Number on





Evidence of Exception (If competitive procurement was not done): Attach documentation for the exception: Justification Memorandum for Emergency; copies of legislative language or other legal exemption for Contracts with legislative earmark or legal exemption from procurement; copy of approval from OSD for Collective Purchase Contract with federal or other public entity; or copy of posting/hiring documentation and resume for Contract Employees. Attach copy of public posting or notice of intent to contract with Contractor, if done. Also include documentation of how the Contractor was selected and why this selection supports best value; See also 801 CMR 21.05 and "Competitive Procurement Exceptions" of the OSD Procurement Information Center (PIC). For grants, see by 815 CMR 2.00 and State Grants and Federal Subgrants Policy.

Please note that if Emergency performance or other contract performance has been <u>fully completed</u> prior to signing this **Standard Contract Form**, and no additional performance is intended to be made after signing this Standard Contract Form, Departments may use the <u>Settlement and Release</u> <u>Form</u> in lieu of the Standard Contract Form to document completed performance to enable final payment.

Contractor's Response: an original or true attest copy of the Contractor's Response (bid) to the RFR or Response to another procurement or grant application, or a copy of the Responses if the RFR/procurement was conducted by another procuring Department. Attach any additional negotiated terms that either modify or are in addition to the RFR or Response. If an RFR or other procurement was not done, attach a detailed description of the scope of performance, work or task order, and a detailed budget or schedule of fees or compensation for this Contract. Performance terms may not modify terms of applicable Commonwealth Terms and Conditions or Standard Contract Form.

Human and Social Services Contracts: attach required Human and Social Services Attachments 1-6. See Instructions for Attachments.

Individual Contractors: Departments hiring "individual contractors" as either "contract employees" or "independent contractors" are required to comply with the policy *Individual Contractors - Independent Contractors vs. Contract Employees* and attach the *Employment Status Form*.

Consultant Contracts (HH, N01-N14, U05 object codes per the Expenditure Classification Handbook):

- Contractor Disclosures. Contractors must disclose <u>Individuals with Financial Interest</u> (if applicable); <u>Other income</u> (if applicable); and <u>Key Personnel</u>. Please note that key personnel may be deemed to be state or special state employees pursuant to <u>G.L. c. 268A.</u> Contractors may make required disclosures as part of the RFR Response, by attachment or may use the <u>Consultant Contractor Mandatory Submission Form.</u>
- Secretariat Signoff. Departments must obtain secretariat signoff for all contracts under <u>G.L. s. 29, s. 29A and s. 29B</u> PRIOR to performance beginning. Secretariat signoff does not have to be on the Standard Contract Form, but must be included as part of the Contract File.
- o <u>TELP (Tax Exempt Lease Purchase)</u>. TELP attachments: ANF TELP Authorization Form, TELP Lease Purchase Quote, Acceptance Certificate, Essential Use Letter) must be included. Certificate of Appropriation and Payment Schedule. Payment schedules must use current MMARS standard recurring payment schedule: See RPSCHD (TELP-quarterly; TEMO-monthly; TESA-semi-annual, TEAN-annual). TELPs paid with state funds must use the Commonwealth TELP (ITD) or the Statewide TELP (OSD). Please note that TELP payments take the highest priority for payment, even above payroll. Contact CTR immediately if Department faces any uncertainty of making TELPs payments on time. Please coordinate with ANF to ensure sufficient allotments to make timely payments.
- Legal Services Contracts (H09, N03).
 All Commonwealth Departments are required to obtain:
 - GOV Approval. Attorneys hired by Executive Departments are required to competitively procure all legal services (See <u>801 CMR 21.01(2)(b)</u>) and obtain prior approval of the Governor's Chief Legal Counsel PRIOR to posting or hire (See <u>G.L. c. 30, s. 65.</u>)
 - o **AGO Review**. PRIOR to the start of performance, prior review of planned services by the Office of the Attorney General (AGO) for legal representation of the Department under a contract, and appointment as a Special Assistant Attorney General "SAAG" for litigation services. The <u>Attorney General Review Form for Attorneys Providing Legal Services</u> form must be completed and mailed (with required attachments) to the AGO for any new legal services contract, and for any significant amendment to the scope of services under an existing contract, PRIOR to the start of performance or a material change in performance. See: <u>Attorney General Policy for Prior Review of Attorneys</u>.
 - MMARS Encumbrance Rates and Purpose in Comments Field. For Executive Departments, the MMARS encumbrance "Comments field" must contain the Units and "Rates" or "Range of Rates" for the services and a brief description of the type of services under the engagement to enable completion of annual reporting requirements under <u>G.L. c. 30</u>, <u>s. 65</u>. Departments that fail to include this information as part of the original encumbrance will be required to modify the encumbrance to add this information in order to complete reporting requirements.

CONTENT CHECKLIST FOR AMENDMENTS

Attach a detailed description of the changes that are being made to the scope of performance (if any), and any corresponding changes to the detailed budget or schedule of fees. For renewals funded by continuing accounts, verify if any carry over funds from prior fiscal years need to be re-authorized for the current or a future fiscal year.

For Interim Contracts (or for grants), attach justification memorandum for reasons for Interim Contract (or for grant).

If Contractor is undergoing a major <u>structural change</u> which impacts the underlying procurement, the Contractor may be required to negotiate continued performance and execute a <u>Contractor Change in Identity Form INSTEAD of this Standard Contract Form.</u> See the <u>Amendments, Suspensions, and Termination Policy</u> for additional information. <u>Performance terms</u> may not modify terms of applicable Commonwealth Terms and Condition or Standard Contract Form.

CONTENT CHECKLIST FOR ALL CONTRACTS AND AMENDMENTS

Form W-9 if Contractor is not already on VCUST table (new Contracts). If new W-9, file with CTR with T&C and VCC. For Existing Vendors, verify that VCUST matches any new W-9 and the Standard Contract Form, and if there is new information on W-9 or Standard Contract Form, update VCUST with updated W-9 and VCM. For Amendments, no updates are necessary unless the Contractor's information on the Standard Contract Form is changing which may require an updated W-9 and T&C. If Contractor is undergoing a major structural change which impacts the underlying

procurement, the Contractor may be required to negotiate continued performance and execute a <u>Contractor Change in Identity Form</u> INSTEAD of this Standard Contract Form. See the <u>Amendments, Suspensions, and Termination Policy</u> for additional information. Vendors must be careful when submitting W-9s that information is accurate, since the VCUST table will be updated for all business with the Commonwealth. Departments should verify with the Contractor when information is updated to ensure that the update is accurate since changes will impact all business with the Commonwealth.

<u>Contractor Signature Verification For All Contracts, Grants or Other Agreements</u>. The <u>Contractor Authorized Signature Listing</u> or any other alternate format, may be used for this purpose. Pursuant to the <u>Contractor Authorized Signatory Policy</u> Departments are responsible for verifying that the **Standard Contract Form**, T&C, W-9 and other documents related to the Contract (regardless of amount) is signed by an authorized signatory for the Contractor. Verification includes authentication of identify and authority to sign of the person signing the documents.

MMARS must match total Contract, including settlements.

- Current state finance law policy requires the information input in MMARS to match the underlying contract or supporting documents, including extensions, renewals and amendments. What appears in the MMARS system will be considered the "official record" or "record copy" of fiscal activities and will supersede paper or other formats of the same information. Therefore, the MMARS encumbrance must match the terms of the Contract including Vendor Code, start and end dates and compensation. If a settlement is part of the Contract or Amendment, include all settlement amounts on the same MMARS encumbrance as the Contract/Amendment, unless otherwise directed by CTR.
- MMARS encumbrances must be entered as soon as possible after Contract/Amendment execution to ensure funds are timely encumbered.
- At least one commodity line with appropriate corresponding accounting line is required for each budget fiscal year of the Contract.
- All supporting documentation must be included in the Contract File. Departments must remember that MMARS is an accounting system, which is used to accurately record and report on fiscal activities. Compliance responsibility remains at all times with the Department employees who process documents to "Final" status. Since MMARS will track the UAID of the Department employee who approves documents, quality assurance reviews will identify not only the documents that will be reviewed, but also the security identification (UAID) of the employee who approved the MMARS transactions. Departments must be especially careful when modifying MMARS transactions (such as encumbrances) to support contract extensions and amendments, specifically effective dates. It is improper for Departments to enter a modification to a MMARs transaction to reflect start and end dates that are not supported by the underlying Contract documentation.
- MMARS changes/adjustments with no underlying Contract changes do not require a Contract amendment. For fiscal changes with no underlying Contract change that exceed the Department's <u>MMARS transaction processing limit</u>, submit a CTR Transmittal Form referencing the Doc Id of the MMARS document and indicating the change required (Non-Commodity contracts). For example, enter the Doc Id and "Rate Contract Increase/Decrease" for Rate Contract increases and decreases in total obligations. For appropriation account changes (switching, adding or deleting accounts) with no underlying contract change, enter Doc Id and "Appropriation Account Change".

Records Management – Procurement and Contract Files. In accordance with 815 CMR 10.00, the Department is the record keeper of the official record copy of the Contract documents and the Contract/Procurement file. MMARS is the official record of the encumbrance and payment documents and will supersede any paper copies of the same information. The Contract/Procurement file must contain, or refer to the location of, all documentation related to the Procurement and resulting Contract(s). A Department is responsible for retaining and archiving Contract records in accordance with the Statewide Records Retention Schedule issued by the Secretary of State Records Conservation Board.

Public Information and Privacy Concerns. It is important to provide Contractors with remittance information that will facilitate proper payment application to their receivables. When negotiating a Contract, Departments should establish a mutually agreeable data structure to communicate goods delivered or services rendered. Since these fields are a matter of public record, MMARS Doc IDs (encumbrances, payments, etc.), vendor invoice numbers, contract numbers, check descriptions, and any comment fields MUST NOT contain personal information (such as individual's names, SSN numbers, bank account numbers, date of birth, addresses etc.) or other information that could jeopardize privacy or facilitate identity theft. MMARS Doc IDs and key comment fields may be printed on checks, sent electronically as part of remittance advice, and will appear on VendorWeb (and may be viewed related to public records requests), therefore care must be taken that individual personal information is not used.

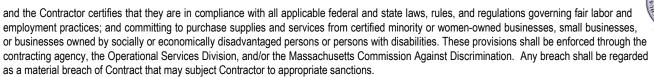
CONTRACTOR CERTIFICATIONS AND LEGAL REFERENCES

By executing this Contract, the Contractor under the pains and penalties of perjury, makes all certifications required under the certifications listed below, and has provided all required documentation and disclosures (identified below with an ">"), or shall provide any required documentation upon request, and the Contractor agrees that all terms governing performance of this Contract and doing business in Massachusetts are attached to this Contract or incorporated by reference herein, including in the following order of precedence: the terms of the applicable Commonwealth Terms and Conditions available at www.mass.gov/osc_under Guidance For Vendors - Forms or at www.mass.gov/osc_under Guidance For Vendors - Forms or at <a href="https://www.mass.gov/osd_under_osd_und

- The Contractor is qualified and shall at all times remain qualified to perform this Contract; that performance shall be timely and meet or exceed industry standards, including obtaining requisite licenses, registrations, permits and resources for performance; and that the Contractor shall provide access to records to state officials under <u>Executive Order 195</u> and G.L. c. 11, s.12; and the Contractor certifies that the Contractor and any of its subcontractors are not currently debarred or suspended by the federal or state government under any law or regulation including, Executive Order 147; G.L. c. 29, s. 29F and G.L. c. 152, s. 25C;
- The Contractor shall comply with the terms of the Request for Response (RFR) or solicitation for this Contract, if applicable; and any additional negotiated provisions for this Contract. Including the <u>RFR Required Specifications</u> if an RFR was done for this Contract, which are incorporated by reference herein if not already included as part of the Request for Response under 801 CMR 21.00; or for any other procurement;

and the Contractor certifies that they are in compliance with all applicable federal and state laws, rules, and regulations governing fair labor and Regulations; Partial CMR Listing; 801 CMR 21.00 (Procurement of Commodity and Service Procurements, Including Human and Social Services); 815 CMR 2.00 (Grants and Subsidies); 808 CMR 1.00 (Compliance, Reporting and Auditing for Human And Social Services); AICPA Standards; confidentiality of Department records under G.L. c. 66A; and the Massachusetts Constitution Article XVIII if applicable.

- The Contractor agrees to the terms for "Effective Date" and "Payments" and any terms under the Instructions of this Contract or Amendment. The Contractor certifies that there is no authorization to deliver performance for which compensation is sought under this Contract or Amendment (even if requested by the Department or any other Commonwealth representative) prior to the effective date and that any oral or written representations, commitments or assurances made by the Department or any other Commonwealth representative are not binding and a Department may not back-date this Contract or Amendment in order to cover the delivery of performance prior to the Effective date. The Commonwealth has no legal obligation to compensate a Contractor for performance that is not requested and is intentionally delivered by the Contractor outside the scope of a Contract or Amendment.
- The Contractor certifies Tax Compliance with Federal tax laws; State tax laws including G.L. c. 62C, G.L. c. 62C, s. 49A (the Contractor has complied with all laws of the commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting of child support and is in good standing with respect to all returns due and taxes payable to the commissioner of revenue); reporting of employees and contractors under G.L. c. 62E, withholding and remitting child support including G.L. c. 119A, s. 12;
- → The Contractor certifies it has not been in bankruptcy and/or receivership within the last three calendar years, and the Contractor certifies that it will immediately notify the Department in writing if there is any risk to the solvency of the Contractor that may impact the Contractor's ability to timely fulfill the terms of this Contract or Amendment.
- → The Contractor shall affirmatively disclose the details of any pertinent judgment, criminal conviction, investigation or litigation pending against the Contractor or any of its officers, directors, employees, agents, or subcontractors of which the Contractor has knowledge, or learns of during the Contract term. Law firms or Attorneys providing legal services are required to identify any potential conflict with representation of any Department client in accordance with Massachusetts Board of Bar Overseers (BBO) rules. Contractors must affirmatively disclose any potential structural change in its organization at least 45 days prior to the change.
- <u>Corporations</u>. If incorporated, the Contractor certifies that it has identified the Contractor's state of incorporation, and the Contractor certifies compliance with all filling requirements of both the incorporating state and the Massachusetts Secretary of State. If the Contractor is a foreign corporation, the Contractor certifies compliance with all requirements for certification, reporting, filing of documents and service of process.
- <u>Filing of required certificates and reports.</u> The Contractor certifies compliance with filing requirements for the <u>Secretary of the Commonwealth</u> and <u>Office of the Attorney General</u> or other Departments as related to its conduct of business in the Commonwealth;
- <u>Employer requirements.</u> If an employer, the Contractor certifies compliance with applicable state and federal employment laws or regulations, including but not limited to <u>minimum wages and prevailing wage programs and payments; unemployment insurance</u> and contributions; <u>workers' compensation and insurance, child labor laws, AGO fair labor practices; G.L. c. 149 (Labor and Industries); G.L. c. 150A (Labor Relations); <u>G.L. c. 151A</u> and <u>455 CMR 2.00 (Minimum Fair Wages)</u>; <u>G.L. c. 5, s. 1</u> (Prevailing Wages for Printing and Distribution of Public Documents); <u>G.L. c. 151A</u> (Employment and Training); <u>G. L. c. 151B</u> (Unlawful Discrimination); <u>G.L. c. 151E</u> (Business Discrimination); <u>G.L. c. 152</u> (Workers' Compensation); <u>G.L. c. 153</u> (Liability for Injuries); <u>29 USC c. 8</u> (Federal Fair Labor Standards); <u>29 USC c. 28</u> (Federal Family and Medical Leave Act; <u>AGO Consumers and Civil Rights;</u>
 </u>
- Federal And State Laws And Regulations Prohibiting Discrimination including but not limited to the Americans with Disabilities Act,; 42 U.S.C. Sec. 12.101, et seq., Disability Law Resources; the Rehabilitation Act, 29 USC c. 16 s. 794; 29 USC c. 16. s. 701; 29 USC c. 14, 623; the 42 USC c. 45; (Federal Fair Housing Act); G. L. c. 151B (Unlawful Discrimination); G.L. c. 151E (Business Discrimination); the Public Accommodations Law G.L. c. 272, s. 92A; G.L. c. 272, s. 98 and G.L. c. 272 s. 98A; the Massachusetts Constitution Article CXIV and G.L. c. 93, s. 103; 47 USC c. 5, sc. II, Part II, s. 255 (Telecommunication Act; Chapter 149, Section 105D, G.L. c. 151C, G.L. c. 272, Section 92A, Section 98 and Section 98A, and G.L. c. 111, Section 199A, and Massachusetts Disability-Based Non-Discrimination Standards For Executive Branch Entities, and related Standards and Guidance, authorized under Massachusetts Executive Order 478 or any disability-based protection arising from state or federal law or precedent. See also MCAD and MCAD links and Resources;
- Northern Ireland Certification. Pursuant to G.L. c. 7 s. 22C for state agencies, state authorities, the House of Representatives or the state Senate, the Contractor certifies that it does not employ ten or more employees in an office or other facility in Northern Ireland and if the Contractor employees ten or more employees in an office or other facility located in Northern Ireland the Contractor certifies that it does not discriminate in employment, compensation, or the terms, conditions and privileges of employment on account of religious or political belief; and it promotes religious tolerance within the work place, and the eradication of any manifestations of religious and other illegal discrimination; and the Contractor is not engaged in the manufacture, distribution or sale of firearms, munitions, including rubber or plastic bullets, tear gas, armored vehicles or military aircraft for use or deployment in any activity in Northern Ireland.
- <u>Executive Orders</u>. For covered Executive state Departments, the Contractor certifies compliance with applicable <u>Massachusetts Executive Orders</u> (for most recent, see <u>Governor's Executive Orders</u>) including but not limited to:
 - Executive Order 481. Prohibiting the Use of Undocumented Workers on State Contracts. For all state agencies in the Executive Branch, including all executive offices, boards, commissions, agencies, Departments, divisions, councils, bureaus, and offices, now existing and hereafter established the Contractor certifies under the pains and penalties of perjury they shall not knowingly use undocumented workers in connection with the performance of Contracts; that, pursuant to federal requirements, they shall verify the immigration status of all workers assigned to Contract without engaging in unlawful discrimination; and that they shall not knowingly or recklessly alter, falsify, or accept altered or falsified documents from any such worker. The Contractor understands and agrees that breach of any of these terms during the period of a Contract may be regarded as a material breach, subjecting Contractor to sanctions, including but not limited to monetary penalties, withholding of payments, contract suspension or termination.
 - <u>Executive Order 478.</u> Non-discrimination. Diversity. Equal Opportunity, and Affirmative Action. And <u>Executive Order 390</u>. <u>Establishing an</u> Affirmative Market Program in Public Contracting. The Contractor and any subcontractors may not engage in discriminatory employment practices;



- Executive Order 130. Anti-Boycott. The Contractor warrants, represents and agrees that during the time this Contract is in effect, neither it nor any affiliated company, as hereafter defined, participates in or cooperates with an international boycott, as defined in Section 999(b) (3) and (4) of the Internal Revenue Code of 1954, as amended, or engages in conduct declared to be unlawful by Section 2 of Chapter 151 E, Massachusetts General Laws. If there shall be a breach in the warranty, representation, and agreement contained in this paragraph, then without limiting such other rights as it may have the Commonwealth shall be entitled to rescind this contract. As used herein, an affiliated company shall be any business entity of which at least 51% of the ownership interests are directly or indirectly owned by the Contractor or by a person or persons or business entity or entities directly or indirectly owning at least 51% of the ownership interests of the Contractor, or which directly or indirectly owns at least 51% of the ownership interests of the Contractor.
- <u>Executive Order 346.</u> Hiring of State Employees By State Contractors Contractor certifies compliance with both the conflict of interest law <u>G.L. c. 268A specifically s. 5 (f)</u> and this order; and includes limitations regarding the hiring of state employees by private companies contracting with the Commonwealth. A privatization contract shall be deemed to include a specific prohibition against the hiring at any time during the term of Contract, and for any position in the Contractor's company, any state management employee who is, was, or will be involved in the preparation of the RFP, the negotiations leading to the awarding of the Contract, the decision to award the Contract, and/or the supervision or oversight of performance under the Contract.
- Executive Order 444. Disclosure of Family Relationships With Other State Employees. Each person applying for employment within the Executive Branch under the Governor must disclose in writing, upon such application, the names of all immediate family as well as persons related to immediate family by marriage who serve as employees or elected officials of the Commonwealth. All disclosures made by applicants hired by the Executive Branch under the Governor shall be made available for public inspection to the extent permissible by law by the official with whom such disclosure has been filed. (This section applies to Contract Employees.)
- . <u>Consultant Contractor Certifications.</u> (For Consultant Contracts "HH" and "N01-N14" and "U05" object codes). Contractors may make required disclosures as part of the RFR Response, by attachment or may use the Consultant Contractor Mandatory Submission Form:
 - → Disclosure of Additional Income. Pursuant to the provisions of M.G.L. c. 29, s. 29A, the Contractor shall affirmatively disclose any contracts, grants or other income due from entities other than Commonwealth state Departments (including any political subdivision or public authority) during the period of a Contract. For state departments, the Department can identify all obligations and payments made through MMARS through a query or through <u>Vendor Web</u> using the Contractor's listed Vendor Code.
 - → Disclosure of Persons with Financial Interest (other than the Contractor). Pursuant to the provisions of M.G.L. c. 29, s. 29A and c. 7A, s. 6, the Contractor shall affirmatively disclose all individuals (other than the Contractor) who have a financial interest of more than one percent (1%) interest in the capital stock of the Contractor. If no disclosure is made, Contractor is certifying that this section is not applicable.
 - **Key Personnel.** The Contractor shall identify all key personnel assigned to the performance of this Contract, in addition to the Contract Manager. Key personnel may not be changed without prior written approval of the Department.
- Anti-Lobbying Requirements. The Contractor certifies compliance with federal anti-lobbying requirements including 31 USC 1352; other federal requirements when receiving federal funds; Executive Order 11246; Air Pollution Act; Federal Water Pollution Control Act.

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NOTICE TO PROCEED

То:		
Date:		
Work: Fairhaven High School, Fairhaven, MA		
You are hereby notified to commence Work ir are to complete the Work on or before TBD.	n accordance with the Agreement dated	, 2021, and you
	FOR THE FAIRHAVEN PUBLIC SCHOOLS	
ACCEPTANCE OF NOTICE		
Receipt of the above NOTICE TO PROCEED		
Is hereby acknowledged by:		
This the	day of ,	_ 2021
Rv: Title:		

SECTION 01 10 00 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

- 1. Project information.
- 2. Work covered by Contract Documents.
- 3. Phased construction.
- 4. Work under separate contracts.
- 5. Access to site.
- 6. Coordination with occupants.
- 7. Work restrictions.
- 8. Specification and drawing conventions

B. Related Section:

1. Division 01 Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.2 PROJECT INFORMATION

- A. Project Identification: FHS Historic Wood Window Restoration Project (phase IV).
 - 1. Project Location: 12 Huttleston Avenue, Fairhaven, MA
- 02719. B. Owner: Fairhaven Public Schools.
 - 1. Owner's Representative: Nicole Verronneau Potter.
 - 2. Architect: John Hecker of Spencer, Sullivan & Vogt, Inc.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of the Project is defined by the Contract Documents and consists of the following:
 - 1. Restoration of wood window sashes and sills.

1.4 ACCESS TO SITE

A. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

SUMMARY 01 10 00 -1

- Active School: Construction is scheduled during school activities while the school is occupied. Disruption to the daily workings of the school is to be kept to a minimum.
- 2. Limits: Confine construction operations to areas shown on the construction drawings and immediate surroundings of the Fairhaven High School.
- 3. Driveways, Walkways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials except those areas already designated in discussion with Owner.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- B. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weather-tight condition throughout construction period. Repair damage caused by construction operations.

1.5 COORDINATION WITH OCCUPANTS

- A. Occupancy: Work will occur when school is in session and building access must be available to Fairhaven Public School employees and students throughout the construction period. Maintain existing exits unless otherwise indicated.
 - Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
 - 2. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.

1.6 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 7:00 a.m. to 2:30 p.m., Monday through Saturday, except when occupied.
- C. Existing Utility Interruptions: Do not interrupt utilities.
- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner's occupancy, with Owner.
 - 1. Notify Owner not less than two days in advance of proposed disruptive operations.

SUMMARY 01 10 00 -2

E. Controlled Substances: Use of tobacco products and other controlled substances on the Project site is not permitted.

1.7 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail in the Specifications. One or more of the following are used on the Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.

END OF SECTION 01 10 0

SUMMARY 01 10 00 -3

SECTION 01 22 00 - UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.
- B. Related Requirements:
 - 1. Division 01 Section 01 26 00 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.

1.2 DEFINITIONS

A. Unit price is an amount incorporated into the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

UNIT PRICES 01 22 00 - 1

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

A. Unit Price No. 1 – Wood Window Sill Consolidation and Patching Repairs:

- Description: Where advanced weathering/deterioration of window sills exists, strip paint from sill, prepare wood for epoxy consolidation, followed by application of epoxy patching materials, as per Specification Section 08 01 52, "Historic Wood Window Restoration." Sand surfaces smooth to receive primer and two (2) finish coats of paint as per Specification Section 09 90 00 "Exterior Painting."
 - a. Unit of Measurement: Per twelve (12) lineal inches of full width of wood window sill.

B. <u>Unit Price No. 2</u> – Sash Weight replacement:

- 1. Description: Where existing sash weights are missing from sash weight pockets, provide new sash weights to balance weight of each restored window sash.
 - a. Unit of Measurement: Per pound of new steel or lead sash weight.

C. <u>Unit Price No. 3</u> – New Bronze Weatherstripping:

- Description: Where existing weatherstripping is missing from jambs of window sash channels or along sill below sash, provide new bronze weatherstripping. Weatherstripping at sill is to be ribbed, and is to fit within existing kerf in bottom of lower window rail. See Specification Section 08 01 52, "Historic Wood Window Restoration" for more information on acceptable weatherstripping products.
 - a. Unit of Measurement: Per twelve (12) lineal inches of bronze weatherstripping.

END OF SECTION 01 22 00

UNIT PRICES 01 22 00 - 2

SECTION 01 25 00 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for substitutions.

1.2 DEFINITIONS

A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

1.3 SUBMITTALS

- A. Substitution Requests: Submit two copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable specification section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project names and addresses and names and addresses of Owners and owners.
 - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.

- i. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
- j. Cost information, including a proposal of change, if any, in the Contract Sum.
- k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
- I. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- Owner's Action: If necessary, the Owner may request additional information or documentation for evaluation within seven days of receipt of a request for substitution. The Owner will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
 - a. Forms of Acceptance: Change Order, Construction Change Directive, or Owner's Supplemental Instructions for minor changes in the Work.
 - b. Use product specified if Owner does not issue a decision on use of a proposed substitution within time allocated.

1.4 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage qualified testing agency to perform compatibility tests recommended by manufacturers.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
 - 1. Conditions: Owner will consider Contractor's request for substitution when the following conditions are satisfied:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.

- b. Requested substitution will not adversely affect Contractor's construction schedule.
- c. Requested substitution has received necessary approvals of authorities having jurisdiction.
- d. Requested substitution is compatible with other portions of the Work.
- e. Requested substitution has been coordinated with other portions of the work.
- f. Requested substitution provides specified warranty.
- g. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Owner will consider requests for substitution if received within 60 days after commencement of the Work.
 - 1. Conditions: Owner will consider Contractor's request for substitution when the following conditions are satisfied:
 - a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume.
 - b. Requested substitution does not require extensive revisions to the Contract Documents.
 - c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - d. Requested substitution will not adversely affect Contractor's construction schedule.
 - e. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - f. Requested substitution is compatible with other portions of the Work.
 - g. Requested substitution has been coordinated with other portions of the work.
 - h. Requested substitution provides specified warranty.
 - If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

END OF SECTION 01 25 00

SECTION 01 29 00 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.
 - 1. This section does not describe wage reporting as required by the public procurement process.
 - a. Contractor will report wages as required by the public procurement process in Massachusetts.
- B. Related Sections include the following:
 - 1. Division 1 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.

1.2 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of Contractor's construction schedule. Cost-loaded Critical Path Method Schedule may serve to satisfy requirements for the schedule of values.
 - 1. Correlate line items in the schedule of values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with continuation sheets. b. Submittal schedule.
 - c. Items required to be indicated as separate activities in Contractor's construction schedule.
- B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
 - 1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.

PAYMENT PROCEDURES 01 29 00 – 1

- b. Name of Owner.
- c. Owner's project number.
- d. Contractor's name and address.
- e. Date of submittal.
- Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of Contract Sum.
 - Include separate line items under Contractor and principal subcontracts for project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.
- 3. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
- 4. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
- 5. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
 - a. Differentiate between items stored on-site and items stored off-site. If specified, include evidence of insurance or bonded warehousing.
- Each item in the schedule of values and Applications for Payment shall be complete.
 Include total cost and proportionate share of general overhead and profit for each item.
 - Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
- 7. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.3 APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments

PAYMENT PROCEDURES

01 29 00 – 2

as certified by Owner and paid for by Owner.

- 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: Progress payment rough drafts ("pencil draft") shall be submitted to Owner by the 25th of the month. The period covered by each Application for Payment is one month, ending on the last day of the current month.
 - Owner, Owner and General Contractor shall review, discuss and agree to any
 modifications to "pencil draft" Payment Application. General Contractor shall
 submit Final Monthly Application for Payment to the Owner reflecting the agreedto
 Schedule of Values for the monthly payment, by the 1ST of the following month.
 Payment
 period application for the Final Monthly Application for Payment shall be for
 the previous month.
- C. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Owner will return incomplete applications without action.
 - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 - 2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- E. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Owner. One copy shall include waivers of lien and similar attachments if required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- F. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
 - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit conditional final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must

PAYMENT PROCEDURES 01 29 00 – 3

- submit waivers.
- 4. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.
- G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. Schedule of values.
 - 3. Contractor's construction schedule (preliminary if not final).
 - 4. Submittal schedule (preliminary if not final).
 - 5. List of Contractor's staff assignments.
 - 6. Copies of building permits.
 - 7. Initial progress report.
 - 8. Report of preconstruction conference.
 - 9. Certificates of insurance and insurance policies.
 - 10. Initial in-place conditions survey and damage report if required.
- H. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - 2. This application shall reflect Certificates of Partial Substantial Completion, issued Previously, for Owner occupancy of designated portions of the Work.
- I. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
 - 1. Evidence of completion of Project closeout requirements.
 - 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 - 3. Updated final statement, accounting for final changes to the Contract Sum.
 - 4. Evidence that claims have been settled.

END OF SECTION 01 29 00

PAYMENT PROCEDURES 01 29 00 – 4

SECTION 01 20 00 – ALTERNATES

PART 1 - GENERAL

1.01 GENERAL

- A. For each of the listed alternates, the Bidder(s) shall state in their proposals the amount to be added to or deducted from the Contract Sum for the work of each of the Alternates.
- B. The work described under any or all of the listed Alternates may be accepted or rejected by the Owner. The Contract Agreement, at the time of execution, shall list those that are accepted, if any, and the work of the Contract shall thereby be modified to the extent described under the accepted Alternate(s). Also, the Contract Sum for the project shall be altered on the basis of alternate prices given on the successful Bidder's proposal. Rejected Alternate(s), as evidenced by not being listed in the Contract Agreement at the time of execution, shall thereupon be null and void.
- C. The Alternates are listed in a numerical sequence in order of priority. When the Owner decides to consider alternates in determining the lowest eligible and responsible bidder, the Owner shall consider the alternates in descending numerical sequence, such that no single alternate shall be considered unless every alternate preceding it on the list has been added to or subtracted from the base bid price.
- D. The detailed descriptions of Alternates herein and in the Specification trade Section(s) are detailed to assist the Contractor and various trades in understanding the work required thereby, and are intended to set the intent and to list the major work only. Such descriptions are not to be taken as limiting the work required under any of the Alternates, and all work required to carry out the intent of each of the accepted Alternates shall be done without additional cost to that agreed upon as the Alternate price.

1.02 <u>DESCRIPTION OF ALTERNATES</u>

Alternate No. 1: Remove, restore and reinstall all designated window sashes on indicated elevation

<u>Alternate No. 2:</u> Remove, restore and reinstall all designated window sashes on indcated.

END OF SECTION 01 20 00

ALTERNATES 01 20 00-1

SECTION 01 31 00 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. Coordination drawings.
 - 2. Requests for Information (RFIs).
 - 3. Project meetings. B.

Related Sections:

1. Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.

1.2 DEFINITIONS

A. RFI: Request from Owner, Construction Manager, or Contractor seeking information from each other during construction.

1.3 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's construction schedule.
 - 2. Preparation of the schedule of values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.

- 6. Pre-installation conferences.
- 7. Project closeout activities.

1.4 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 - 1. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
 - 1. Project name.
 - 2. Project number.
 - 3. Date.
 - 4. Name of Contractor.
 - 5. Name of Owner.
 - 6. RFI number, numbered sequentially.
 - 7. RFI subject.
 - 8. Specification Section number and title and related paragraphs, as appropriate.
 - 9. Drawing number and detail references, as appropriate.
 - 10. Field dimensions and conditions, as appropriate.
 - 11. Contractor's suggested resolution. If Contractor's solution(s) impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - 12. Contractor's signature.
 - 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.

1.5 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
 - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Owner, within three days of the meeting.
- B. Preconstruction Conference: Schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner.
 - 1. Attendees: Authorized representatives of Owner, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties

shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

- 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Phasing.
 - c. Critical work sequencing and long-lead items.
 - d. Designation of key personnel and their duties.
 - e. Procedures for processing field decisions and Change Orders. f. Procedures for RFIs.
 - g. Procedures for testing and inspecting.
 - h. Procedures for processing Applications for Payment.
 - i. Distribution of the Contract Documents.
 - j. Submittal procedures.
 - k. Sustainable design requirements
 - I. Preparation of record documents.
 - m. Use of the premises and existing building
 - n. Work restrictions.
 - o. Working hours.
 - p. Owner's occupancy requirements.
 - q. Responsibility for temporary facilities and controls.
 - s. Procedures for disruptions and shutdowns.
 - t. Construction waste management and recycling.
 - u. Parking availability.
 - v. Office, work, and storage areas.
 - w. Equipment deliveries and priorities.
 - x. First aid.
 - y. Security.
 - z. Progress cleaning.
- 3. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Progress Meetings: Conduct progress meetings at regular intervals.
 - Attendees: In addition to representatives of Owner, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting.

 Determine whether each activity is on time, ahead of schedule, or behind

schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

- 1) Review schedule for next period.
- b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Progress cleaning.
 - 10) Quality and work standards.
 - 11) Status of correction of deficient items.
 - 12) Field observations.
 - 13) Status of RFIs.
 - 14) Status of proposal requests.
 - 15) Pending changes.
 - 16) Status of Change Orders.
 - 17) Pending claims and disputes.
 - 18) Documentation of information for payment requests.
- 3. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
 - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

END OF SECTION 01 31 00

SECTION 01 32 33 - PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1. Preconstruction photographs.
 - 2. Periodic construction photographs.
 - 3. Final completion construction photographs.

1.2 INFORMATIONAL SUBMITTALS

- A. Digital Photographs: Submit image files within three days of taking photographs.
 - 1. Submit photos on CD-ROM or thumb-drive or by uploading to web-based project software site. Include copy of key plan indicating each photograph's location and direction.
 - 2. Identification: Provide the following information with each image description in file metadata tag or in web-based project software site:
 - a. Name of Project.
 - b. Name and contact information for photographer.
 - c. Name of Architect.
 - d. Name of Contractor.
 - e. Date photograph was taken.
 - f. Description of location, vantage point, and direction.
 - g. Unique sequential identifier keyed to accompanying key plan.

1.3 FORMATS AND MEDIA

- A. Digital Photographs: Provide color images in JPG format, produced by a digital camera with minimum sensor size of 12 megapixels, and at an image resolution of not less than 3200 by 2400 pixels, and with vibration-reduction technology. Use flash in low light levels or backlit conditions.
- B. Digital Images: Submit digital media as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
- C. Metadata: Record accurate date and time from camera.
- D. File Names: Name media files with date and sequential numbering suffix.

1.4 CONSTRUCTION PHOTOGRAPHS

- A. Photographer: Engage a qualified photographer to take construction photographs.
- B. General: Take photographs with maximum depth of field and in focus.
 - 1. Maintain key plan with each set of construction photographs that identifies each photographic location.
- C. Preconstruction Photographs: Before starting construction, take photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, as directed by Architect.
 - 1. Flag construction limits before taking construction photographs.
 - 2. Take 20 photographs to show existing conditions adjacent to property before starting the Work.
 - 3. Take 20 photographs of existing buildings either on or adjoining property to accurately record physical conditions at start of construction.
 - 4. Take additional photographs as required to record settlement or cracking of adjacent structures, pavements, and improvements.
- D. Periodic Construction Photographs: Take 50 photographs weekly. Select vantage points to show status of construction and progress since last photographs were taken.
- E. Final Completion Construction Photographs: Take 50 photographs after date of Substantial Completion for submission as Project Record Documents. Architect will inform photographer of desired vantage points.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 32 33

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements:
 - 1. Submit electronic submittals via email as PDF electronic files.
 - a. Owner will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
 - 2. Action Submittals: Submit three paper copies of each submittal, unless otherwise indicated. Owner will return two copies.
 - 3. Informational Submittals: Submit two paper copies of each submittal, unless otherwise indicated. Owner will not return copies.
 - 4. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 01 Section "Closeout Procedures."
 - 5. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - a. Provide a digital signature with digital certificate on electronically-submitted certificates and certifications where indicated.
 - 6. Test and Inspection Reports Submittals: Comply with requirements specified in Division 01 Section "Quality Requirements."
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.

- 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
- 5. Submit Product Data before or concurrent with Samples.
- 6. Submit Product Data in the following format:
 - a. PDF electronic file.
 - b. Three paper copies of Product Data, unless otherwise indicated. Owner will return two copies.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 - 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 42 inches.
 - 3. Submit Shop Drawings in the following format:
 - a. Two opaque (bond) copies of each submittal. Owner will return one copy.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable Specification Section.

- 3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- 4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Owner will return submittal with options selected.
- 5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three sets of Samples. Owner will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a Project record sample.
 - 1) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
 - 1. Submit product schedule in one of the following formats:
 - a. PDF electronic file.
 - b. Three paper copies of product schedule or list, unless otherwise indicated. Owner, through Construction Manager, will return two copies.
- F. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."

- G. Application for Payment: Comply with requirements specified in Division 01 Section "Payment Procedures."
- H. Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."
- I. Coordination Drawings: Comply with requirements specified in Division 01 Section "Project Management and Coordination."
- J. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of Owners and owners, and other information specified.
- K. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- L. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- M. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- N. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- O. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- P. Product Test Reports: Submit written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- Q. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.
- R. Schedule of Tests and Inspections: Comply with requirements specified in Division 01 Section "Quality Requirements."
- S. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- T. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed

- before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- U. Field Test Reports: Submit reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- V. Maintenance Data: Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."
- W. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Owner.
- B. Project Closeout and Maintenance/Material Submittals: Refer to requirements in Division 01 Section "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.

END OF SECTION 01 33 00

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

B. Related Section:

- 1. Division 01 Section "Summary" for work restrictions and limitations on utility interruptions.
- 2. Division 08 Section "Historic Treatment of Windows" for temporary protection at openings where removed.

1.2 USE CHARGES

- A. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for responsible use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- B. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use by the contractor without payment of use charges. Provide connections and extensions of services as required for construction operations.

PART 2 - PRODUCTS

2.1 TEMPORARY FACILITIES

A. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations. Do not store materials within Fairhaven High School.

2.2 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.

- 1. Locate facilities to limit site disturbance as specified in Division 01 Section "Summary."
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- C. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
- D. Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.

3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - 1. Provide construction for temporary offices, shops, and sheds located within construction area or within 30 feet of building lines that is noncombustible according to ASTM E 136. Comply with NFPA 241.
 - 2. Maintain support facilities until Owner schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Traffic Controls: Comply with requirements of authorities having jurisdiction.
 - 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
 - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- C. Parking: Use designated parking areas for construction personnel identified in the Pre-Construction meeting.
- D. Project Sign:
 - 1. Allow no signs or advertising of any kind on the job site except as specifically approved in advance by the Owner and the Owner.

- E. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 01 Section "Execution" for progress cleaning requirements.
- F. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
 - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each work day.
- C. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- D. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weather tight enclosure for building exterior.
 - 1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.

END OF SECTION 01 50 00

SECTION 01 52 00 - STAGING, LIFTS & ACCESS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The general provisions of the Contract, including General and Supplementary Conditions, and all Division 1 sections of the Specifications apply to the work specified in this section.

1.02 SCOPE

- A. All staging, stairs, hoisting, rigging, lifts and access required to complete the work shall be the responsibility of the General Contractor.
- B. The Contractor is responsible for obtaining and paying for permits, erecting and maintaining, in safe condition, all scaffolding, stairs and hoisting, and associated equipment required on the job. All work shall comply with OSHA requirements and the requirements of all applicable state and local laws, codes, regulations and ordinances. Specifically, the Contractor must designate a safety supervisor who is familiar with OSHA Publications 2202, 3077, and 3072, and those that deal with construction industry safety standards, personal protective equipment, and sling safety and labor. No swing staging shall be permitted without specific written approval of the Owner.
- C. The Contractor shall control access to the work area and prevent unauthorized access to the work area and any area where there is danger from falling objects.

Adjoining windows, roof and building surfaces shall be protected by the Contractor. The adjoining parking lot and walkways must be protected from falling dust, overspray and general debris.

Provide protection of existing slate roof in area of staging prior to erection. Maintain protection throughout construction and remove following dismantling of staging. No staging shall be supported by the roof framing of the main building or adjacent buildings. All staging shall bear on ground.

The Contractor shall allow access by the trades and coordinate scheduling and use.

D. Police details required for the work require prior authorization from the City of Fairhaven. Approved Police details will be provided and paid for by the City of Fairhaven.

1.03 SUBMITTALS

A. The Contractor shall submit certification by a Massachusetts registered professional engineer certifying that the staging meets OSHA and applicable regulations and requirements.

- B. The Contractor shall be responsible for grounding the staging in compliance with UL requirements.
- C. The Contractor shall submit a written safety plan to the Owner with detail for full protection along with a list of on-site competent persons.
- D. The Contractor shall submit a written schedule and work proposal identifying the proposed sequencing and coordination of the sub-trades' use of staging.

END OF SECTION 01 52 00

SECTION 01 60 00 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.

1.2 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved by Architect through submittal process to have the indicated qualities related to type, function, dimension, inservice performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a single manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation. In addition to the basis-of-design product description, product attributes and characteristics may be listed to establish the significant qualities related to type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other special features and requirements for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.3 ACTION SUBMITTALS

- A. Comparable Product Request Submittal: Submit request for consideration of each comparable product. Identify basis-of-design product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.

- Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
 - a. Form of Architect's Approval of Submittal: As specified in Section 01 33 00 "Submittal Procedures."
 - b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.
- B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 01 33 00 "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.

B. Delivery and Handling:

- 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
- 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
- 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
- 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.

C. Storage:

- 1. Store products to allow for inspection and measurement of quantity or counting of units.
- 2. Store materials in a manner that will not endanger Project structure.
- 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.

- 4. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 5. Protect stored products from damage and liquids from freezing.

1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
 - 3. See other Sections for specific content requirements and particular requirements for submitting special warranties.

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties meeting requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," Architect will make selection.
 - 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
- B. Product Selection Procedures:

- Non-Limited List of Products: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, which complies with requirements.
 - a. Non-limited list of products is indicated by the phrase: "Subject to compliance with requirements, available products that may be incorporated in the Work include, but are not limited to, the following: ..."
- 2. Non-Limited List of Manufacturers: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, which complies with requirements.
 - a. Non-limited list of manufacturers is indicated by the phrase: "Subject to compliance with requirements, available manufacturers whose products may be incorporated in the Work include, but are not limited to, the following: ..."
- 3. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
 - a. For approval of products by unnamed manufacturers, comply with requirements in Section 01 25 00 "Substitution Procedures" for substitutions for convenience.
- C. Visual Matching Specification: Where Specifications require "match Architect's sample," provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
 - 1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 01 25 00 "Substitution Procedures" for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

A. Conditions for Consideration of Comparable Products: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:

- Evidence that proposed product does not require revisions to the Contract Documents, is
 consistent with the Contract Documents, will produce the indicated results, and is
 compatible with other portions of the Work. Detailed comparison of significant qualities of
 proposed product with those named in the Specifications. Significant product qualities
 include attributes such as type, function, in-service performance and physical properties,
 weight, dimension, durability, visual characteristics, and other specific features and
 requirements.
- 2. Evidence that proposed product provides specified warranty.
- 3. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
- 4. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 60 00

SECTION 01 73 00 - EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Installation of the Work.
 - 2. Cutting and patching.
 - 3. Progress cleaning.
 - 4. Protection of installed construction.
 - 5. Correction of the Work.

1.2 INFORMATIONAL SUBMITTALS

A. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.

1.3 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
 - 1. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
 - Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Owner's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

1.4 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to the Owner for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 MATERIALS

Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.

- 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
- 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
- 3. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weather-tight condition.
- H. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.2 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.

- 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.3 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly.

END OF SECTION 01 73 00

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1. Salvaging nonhazardous demolition and construction waste.
 - 2. Recycling nonhazardous demolition and construction waste.
 - 3. Disposing of nonhazardous demolition and construction waste.

1.2 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.3 PERFORMANCE REQUIREMENTS

A. General: Achieve end-of-Project rates for salvage/recycling of 50 percent by weight of total non-hazardous solid waste generated by the Work. Facilitate recycling and salvage of materials.

1.4 ACTION SUBMITTALS

A. Waste Management Plan: Submit plan within 7 days of date established for commencement of the Work.

1.5 INFORMATIONAL SUBMITTALS

- A. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit report. Include the following information:
 - Material category.
 - 2. Generation point of waste.
 - 3. Total quantity of waste in tons.
 - 4. Quantity of waste salvaged, both estimated and actual in tons.
 - 5. Quantity of waste recycled, both estimated and actual in tons.
 - 6. Total quantity of waste recovered (salvaged plus recycled) in tons.
 - 7. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- B. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated endof-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
- C. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- D. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- E. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- F. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- G. Qualification Data: For waste management coordinator.

1.6 QUALITY ASSURANCE

- A. Waste Management Coordinator Qualifications: Experienced firm, with a record of successful waste management coordination of projects with similar requirements.
- B. Waste Management Conference: Conduct conference at Project site to comply with requirements in Section 01 31 00 "Project Management and Coordination."

1.7 WASTE MANAGEMENT PLAN

A. General: Develop a waste management plan according to ASTM E 1609 and requirements in this Section. Plan shall consist of waste identification, waste reduction work plan, and cost/revenue analysis. Distinguish between demolition and construction waste. Indicate quantities by weight or volume but use same units of measure throughout waste management plan.

- B. Waste Identification: Indicate anticipated types and quantities of demolition and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
 - 1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
 - 2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
 - 3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
 - 4. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
 - 5. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
 - 6. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location where materials separation will be performed.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PLAN IMPLEMENTATION

- A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
- B. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan.
- C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
 - 1. Distribute waste management plan to everyone concerned within three days of submittal return
 - 2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.
- D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

- 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
- 2. Comply with Section 01 50 00 "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection, and noise control.

3.2 SALVAGING DEMOLITION WASTE

- A. Salvaged Items for Reuse in the Work:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning. Identify contents of containers.
 - 3. Store items in a secure area until installation.
 - 4. Protect items from damage during transport and storage.
 - 5. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.
- B. Salvaged Items for Donation: Permitted on Project site.
- C. Salvaged Items for Owner's Use:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning. Identify contents of containers.
 - 3. Store items in a secure area until delivery to Owner.
 - 4. Transport items to Owner's storage area on-site.
 - 5. Protect items from damage during transport and storage.

3.3 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to Contractor.
- C. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
 - 1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials if found.
 - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

- 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
- 4. Store components off the ground and protect from the weather.
- 5. Remove recyclable waste from Owner's property and transport to recycling receiver or processor.

3.4 RECYCLING DEMOLITION WASTE

- A. Wood Materials: Sort and stack members according to size, type, and length. Separate lumber, engineered wood products, panel products, and treated wood materials.
- B. Metals: Separate metals by type.
 - 1. Structural Steel: Stack members according to size, type of member, and length.
 - 2. Remove and dispose of bolts, nuts, washers, and other rough hardware.

3.5 RECYCLING CONSTRUCTION WASTE

A. Packaging:

- 1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
- 2. Polystyrene Packaging: Separate and bag materials.
- 3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
- 4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.

B. Wood Materials:

- 1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
- 2. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.

3.6 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.

C. Disposal: Remove waste materials from Owner's property and legally dispose of them.

END OF SECTION 01 74 19

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.

1.2 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete with request.
 - Substantial Completion procedures shall be carried out based on completions of incremental sections of building envelope repairs as defined by the Owner's Construction Manager.
 - 2. For each designated section of project proposed Substantial Completion, prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - 6. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 7. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
 - 8. Complete final cleaning requirements, including touchup painting.
 - 9. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Owner, that must be completed or corrected before certificate will be issued.

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1.3 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:
 - 1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
 - Submit certified copy of Owner's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Owner. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1.5 WARRANTIES

A. Submittal Time: Submit written warranties on request of Owner for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply

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- with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - f. Leave Project clean.

END OF SECTION 01 77 00

CLOSEOUT PROCEDURES 01 77 00 -3

FAIRHAVEN HIGH SCHOOL WINDOW RESTORATION (2021)

SS&V FAIRHAVEN, MA

SECTION 02 90 00 - LEAD-CONTAINING PAINT CONSIDERATIONS

PART 1 - GENERAL

1.1 DESCRIPTION

A. This Section specifies furnishing all labor, worker training, materials, equipment and tools for the minimum requirements needed for removal of paint from existing window substrates found to contain lead-based paint.

1.2 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specifications Sections, apply to this Section.

1.3 RELATED WORK

A. Work in this Section is related to and shall be coordinated and performed with work specified in:

SECTION 02 91 00 – PAINT REMOVAL SECTION 08 01 52 – HISTORIC WOOD WINDOW RESTORATION

1. 4 WORK INCLUDED

- A. Provide all labor, materials, services, insurance and equipment necessary to perform the work in accordance with these Specifications and with all applicable local, state and federal regulations.
- B. The work of this Section specifies minimum requirements for the disturbance, removal, containment and disposal of lead-containing paint and associated waste generated as a result of renovation/demolition activities as outlined in the Specification.
- B. Lead based paint has been determined to be present in the following areas:

Window sashes

NOTE: Any amount of lead present on painted surfaces requires compliance with 29 CFR 1926.62 OSHA "Lead in Construction; Interim Final Rule".

- D. Determining airborne lead concentrations for each work method performed which will impact the lead painted surfaces in accordance with the methods specified in Section 2.4 (E) of this document.
- E. Preparation of each work area location in accordance with the methods described in Section 3.1 of this document.

- F. Conduct the work in each work area using appropriate respiratory protection, protective clothing, and engineering controls to minimize the exposure of employees and the public in areas of the building adjacent to work areas to airborne lead particulate.
- G. Proper clean-up procedures, handling and disposal of the waste generated in accordance with the methods described in Section 3.03 of this document.
- H. Periodic visual inspection of surfaces outside of the work area shall be performed by the Contractor to identify any visible suspect lead dust, debris, or particulate. Ambient air monitoring should be performed by the contractor to document airborne lead levels during construction activities. If any visible suspect lead dust or debris is observed, an immediate clean-up of the area shall be performed using HEPA-filtered vacuums and Tri-Sodium Phosphate solution in accordance with the methods described in Section 3.03 of this document.
- I. All debris generated from activities which disturb lead based paint shall be collected using HEPA-filtered vacuums or other appropriate methods. Disposal of all lead contaminated waste shall be in accordance with applicable Federal, State and local regulations. Disposal shall be based on results of TCLP analysis.

1.5 STANDARDS AND GUIDELINES

A. The Contractor(s) shall comply with all federal, state and local regulations pertaining to the Contract. These regulations include but are not limited to:

Code of Federal Regulations (CFR)

CFR 29 Part 1910	Occupational Safety and Health Standards
CFR 29 Part 1926	Safety and Health Regulations for Construction
CFR 40 Part 148	Hazardous Waste Injection Restrictions
CFR 40 Part 260	Hazardous Waste Management System: General
CFR 40 Part 261	Identification and Listing of Hazardous Waste
CFR 40 Part 262	Standards Applicable to Generators of Hazardous Waste
CFR 40 Part 263	Standards Applicable to Transporters of Hazardous Waste
CFR 40 Part 264	Standards for Owners and Operations of Hazardous Waste
	Treatment, Storage, and Disposal Facilities
CFR 40 Part 265	Interim Status Standards for Owners and Operators of
	Hazardous Waste Treatment, Storage, and Disposal Facilities
CFR 40 Part 268	Land Disposal Restrictions
CFR 49 Part 172	Hazardous Material Table, Special Provisions, Hazardous
	Material Communications, Emergency Response Information,
	and Training Requirements
CFR 49 Part 178	Specifications for Packaging

Commonwealth of Massachusetts

454 CMR 22.00 Deleading Regulations and all policy statements.

310 CMR 30.00 Hazardous Waste Regulations

National Fire Protection Association (NFPA)

NFPA 701-1989 Methods of Fire Test for Flame-Resistant Textiles and Films

National Institute for Occupational Safety and Health (NIOSH)

NIOSH OSHA Booklet 3142 Lead in Construction

Underwriters Laboratories (UL)

UL 586-1990 High-Efficiency, Particulate, Air Filter Units

American National Standards Institute

9.2-1979(R1991) Fundamentals Governing the Design and Operation of Local

Exhaust Systems

Z88.2-1992 Respiratory Protection

1.6 CONTRACTOR RESPONSIBILITY

A. Prior to performance of work activities which will disturb lead-based paint, provide workers with a comprehensive medical examination as required by 29 CFR 1926.62 (I) (1) (i) & (ii). The examination shall not be required if adequate records show that employees have been examined as required by 29 CFR 1926.62(I) within the last year.

- B. Medical Records. Maintain complete and accurate medical records of employees in accordance with 29 CFR 1910.20.
- C. The Contractor shall employ a competent person who will be responsible for the following.
 - 1. Employee Training in accordance with 29 CFR 1926.62.
 - 2. Directing air monitoring.
 - 3. Ensuring work is performed in strict accordance with specifications at all times.
 - 4. Ensuring hazardous exposure to personnel and to the environment are adequately controlled at all times.
- D. Respiratory Protection Program:
 - 1. Furnish each employee required to wear a negative pressure respirator or other appropriate type with a respirator fit test at the time of initial fitting and at least every 6 months thereafter as required by 29 CFR 1926.62.
- 2. Establish and implement a respiratory protection program as required by 29 CFR 1910.134, 29 CFR 1910.1025, and 29 CFR 1926.62.
 - E. Hazard Communication Program: Establish and implement a Hazard Communication Program as required by 29 CFR 1910.1200.

- F. Hazardous Waste Management: The Hazardous Waste Management plan shall comply with applicable requirements of Federal, State, and local hazardous waste regulations and address.
 - 1. Identification of hazardous wastes associated with the work.
 - 2. Estimated quantities of wastes to be generated and disposed of.
 - 3. Names and qualifications of each contractor that will be transporting, storing, treating, and disposing of the wastes. Include the facility location and a 24-hour point of contact. Furnish a copy of the EPA hazardous waste permits and EPA Identification number.
 - 4. Names and qualifications (experience and training) of personnel who will be working onsite with hazardous wastes.
 - 5. List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment.
 - 6. Spill prevention, containment, and cleanup contingency measures to be implemented.
 - 7. Work plan and schedule for waste containment, removal and disposal. Wastes shall be cleaned up and containerized daily.
 - 8. Cost for hazardous waste disposal according to this plan.
- G. Site specific Health and Safety Plan.

1.7 SUBMITTALS

- A. Submittals shall be in accordance with General Conditions Division I, SUBMITTALS.
- B. The Contractor shall provide three (3) copies of the following submittals prior to commencement of work.
 - 1. Notifications, permits, licenses, and application as required by all Federal, State and local regulations.
 - 2. A written project schedule including proposed workshift size and work hours.
 - Medical records as required by 29 CFR 1926.62 including results of venous blood lead and ZPP levels. Blood lead level test must have been conducted within thirty (30) days of project commencement.
 - 4. Name, address, and EPA Identification Numbers of the hazardous waste transporter and disposal facility (if applicable).
 - 5. Hazard Communication Program.
 - 6. Hazardous Waste Management Program.

PART 2 - PRODUCTS

2.1 QUALITY ASSURANCE

A. All materials and work shall be subject to acceptance by the Owner or the Owner's Representative. Contractor shall submit a listing of all pertinent material and equipment prior to start of abatement.

2.2 MATERIALS

- A. The following materials and equipment will be provided by the Contractor during work on this project:
 - 1. Washing agent: 5% tri-sodium phosphate at one ounce per gallon of water.
 - 2. Polyethylene sheeting: 6-mil conforming to ASTM EI54, C-156, D-124B, D-2103 and D-4379.
 - 3. Disposal Drums or other Containers: Per EPA, DEP, and DOT regulations.
 - 4. Spray encapsulant: Spray material that encases lead dust particles in an adhesive matrix.
 - 5. Spray adhesive: To assist adhesion in areas (i.e., concrete, etc.) that are otherwise difficult for duct tape alone.
 - 6. Duct tape: Aluminum backed high adhesion tape.
 - 7. Vacuum equipment: All vacuum equipment employed in the work area shall utilize HEPA filtration systems 99.97% efficient to 0.3 microns particulate size.
 - 8. Lead warning and health signs: Submit samples
 - 9. Barrier tape: 2 inch wide, yellow, non-adhesive tape with the words "CAUTION LEAD PAINT ABATEMENT"
- B. Replacement and covering materials shall be approved per requirements of the contract document.
- C. Polyethylene sheeting for segregating lead contaminated work areas (where applicable) shall be a minimum of 6-mil thickness and shall be fire resistant in accordance with applicable local fire codes.
- D. Polyethylene sheeting for shower enclosures (where applicable) shall be opaque white or black in color.
- E. Disposal drums (where applicable) shall meet all applicable EPA, MA DEP and US DOT regulations.
- F. Appropriate labels as per applicable EPA, DOT, OSHA and MA DPH regulations shall be permanently affixed to all waste disposal containers (if applicable).
- G. Lead contamination warning signs (where applicable) shall be in conformance with OSHA 29 CFR 1926.62 (R) (2)(i).
- H. ABC type fire extinguishers, properly pressurized and in good working condition shall be conspicuously located in all work areas.
- I. An adequately stocked first aid kit shall be conspicuously located in all work areas.
- J. Only non-caustic strippers shall be allowed for use in this project.

2.3 NOTIFICATIONS

A. The Contractor shall give a minimum of five (5) days advance notice to the Owner and Owner Representative of the date abatement will commence, the estimated completion date, and the method of abatement.

2.4 EQUIPMENT

- A. Provide approved respirators and protective clothing to all workers and all representatives of the Authority who may inspect the work site.
- B. Protective clothing requirements:
 - Full body coveralls, including head covering, ("TYVEK" or a material equally resistant to dust penetration): these coveralls will be worn one time only and properly disposed of; hard hats, eye protection, and gloves.
 - 2. All disposable protective clothing shall be disposed of as hazardous waste unless TCLP analysis is performed and the clothing is found to be below the threshold for hazardous disposal.
- C. Require that ALL persons wear all appropriate protective equipment during all facets of work where lead exposure may exceed the OSHA PEL.
- D. Respiratory protective equipment shall be according to OSHA Regulations: 29 CFR 1926.62, 29 CFR 1910.134 and ANSI Z88.2-1980. Respirators must also be NIOSH approved for protection against lead exposure.

E. Respirators:

1. Respirator selection shall be according to the following table:

Airborne Concentration of Lead	Respirator Type
Not in excess of 500 μg/m³	 1/2 mask air purifying respirator with high efficiency filters. 1/2 mask supplied air respirator operated in demand (negative pressure) mode.
Not in excess of 1,250 μg/m³	 Loose fitting hood or helmet powered air purifying respirator with high efficiency filters. Hood or helmet supplied air respirator operated in a continuous-flow mode - e.g., type CE abrasive blasting respirators operated in a continuous-flow mode.
Not in excess of 2,500 μg/m³	 Full facepiece air purifying respirator with high efficiency filters. Tight fitting powered air purifying respirator with high efficiency filters. Full facepiece supplied air respirator operated in demand mode. 1/2 mask or full facepiece supplied air respirator

operated in a continuous-flow mode.

 Full facepiece self-contained breathing apparatus (SCBA) operated in demand mode.

Not in excess of $50,000 \mu g/m^3$ Not in excess of $100,000 \mu g/m^3$ • 1/2 mask supplied air respirator operated in pressure demand or other positive-pressure mode.

- Full facepiece supplied air respirator operated in pressure demand or other positive-pressure mode e.g., type CE abrasive blasting respirators operated in a positive-pressure mode.
- Greater than 100,000 μg/m³ or unknown concentration
- Full facepiece SCBA operated in pressure demand or other positive-pressure mode.
- 2. The Contractor is responsible for determining airborne lead concentrations in each work area for each phase of work, i.e. demolition, clean-up, transport from building, cutting, etc. Personal air sampling shall be conducted at the start of each phase of work. Each personal air sample shall run a minimum of seven hours at a minimum of 2 liters per minute. It is the responsibility of the Contractor to insure that workers wear suitable respiratory protection at all times if exposure to airborne lead is a possibility. Daily air monitoring (personal) shall be conducted. Written results shall be submitted to the Owner or the Owner's representative within 48 hours of the sampling period. If these sample results are not submitted within 48 hours of their collection the work will stop until the air sample results are submitted.
- 3. Workers shall perform positive and negative air pressure fit tests each time a respirator is put on, whenever the respirator's design so permits. Powered air-purifying respirators shall be tested for adequate flow each time upon entry to the work area as specified by the manufacturer.
- 4. Workers shall be given a qualitative fit test in accordance with procedures detailed in appendix D, OSHA 29 CFR 1926.62 for all 1/2 face, negative pressure respirators to be used on this project. An appropriately administered quantitative fit test may be substituted for the qualitative fit test.
- 5. Documentation of adequate respirator fit shall be submitted to the Authority prior to beginning work.
- 6. No one wearing a beard shall be permitted to wear a negative pressure respirator and enter the work area.
- F. Ventilation devices where applicable, shall include filters capable of filtering particles of 0.3μ diameter at 99.97% efficiency (HEPA filters). Air filtering devices must be approved by the environmental consultant on-site. The ventilation units must be exhausted outside of the building away from walkways and building air intakes unless on-site, in position DOP tests (conforming to ANSI N-S10) certify that filters are functioning as specified.

The environmental consultant may, at any time, require DOP testing of any or all HEPA filtered equipment. Reasons for requiring on-site, in position DOP tests may include, but are not limited to:

- 1. Obvious holes or gouges in HEPA filter
- 2. Cracked, brittle or otherwise inferior exhaust flex ducts
- G. All vacuums used to clean protective clothing or surfaces within lead contaminated work areas must be equipped with HEPA filters (99.97% efficient at 0.3µ diameter).
- H. All equipment shall be used according to OSHA Safety and Health Standards for the Construction Industry (29 CFR, Part 1926).
- I. Any equipment which cannot be adequately cleaned before removal from the work area (brushes, vacuum wands, gloves, etc.) shall be placed into (2) 6-mil thickness polyethylene bags that shall be sealed airtight before removal from the work area.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Post caution signs meeting the specifications of OSHA 29 CFR 1926.62 (k) at any location or approach to a location where airborne lead concentrations may exceed 30 μ g/m³. Caution signs shall be posted at a sufficient distance from the work area to permit an employee to read the sign and take the necessary protective measures to avoid exposure. Additional caution signs may need to be posted following construction of workplace enclosure barriers (if applicable).
- B. Contractor shall evaluate each task required to complete the work described herein and in other sections of the contract documents to determine if employee exposure to lead may occur.
- C. Until the Contractor documents that employee exposures are below the PEL for each type of activity where lead is present including manual demolition of structures (dry wall, plasters, wood, etc.), preparation of surfaces for painting, clean-up activities, or at any other time when exposure to lead is a possibility, the Contractor shall provide the following:
 - 1. Appropriate respiratory equipment as specific herein and as required by OSHA 29 CFR 1926.62 (f).
 - 2. Appropriate personal protective equipment as specific herein and as required by 29 CFR 1926.62 (g).
 - 3. Change areas as required by 29 CFR 1926.62 (i)(2).
 - 4. Hand washing facilities as required by 29 CFR 1926.62 (i)(5).
 - 5. Biological monitoring as required by 29 CFR 1926.62 (j)(1)(i).
 - 6. Training as required by 29 CFR 1926.62 (I)(1)(i), 29 CFR 1926.62 (I)(2)(ii)(c) and 29 CFR 1926.21.

3.2 CONDUCTING THE WORK

- A. Contractor shall provide appropriate respiratory and other personal protective equipment to all employees who may be exposed to airborne lead in excess of 50 μ g/m³.
- B. Lead based paint removal operations where airborne lead concentrations exceed 30 μ g/m³ shall be fully contained and separated from other areas by polyethylene sheeting forming a work enclosure and requires decontamination facilities.
- C. Lead based paint removal operations where airborne lead concentrations exceed 50 $\mu g/m^3$ -shall be fully contained and separated from other areas by polyethylene sheeting forming a work enclosure, be under negative pressure and require decontamination facilities.
- D. Demolition activity shall be engineered and conducted such that the least amount of airborne dust is generated. The following work practices shall be employed when demolition of building components which contain lead paint is performed.
 - 1. No person under the age of 18 years shall be permitted to work on renovation and/or rehabilitation projects.
 - 2. Whenever there is an exposure to lead dust, a respirator and personal protective clothing such as those listed in 454 CMR 22.00 shall be worn.
 - 3. The employer shall not permit employees to eat, drink, smoke, chew (gum or tobacco), or apply cosmetics in any work area.
 - 4. When tools and/or equipment are removed from the work area, they shall be cleaned with a solution of tri-sodium phosphate or vacuumed with a HEPA vacuum. All work areas shall be cleaned at the end of the job with a HEPA vacuum.
 - 5. Adequate precautions shall be implemented to ensure that the outside environment is protected, according to applicable EPA and DEP regulations.
 - 6. To prevent contamination of adjacent areas, the employer shall seal off the work areas, in accordance with 454 CMR 22.11.
 - 7. The preparation, transportation and disposal of waste material containing lead shall follow the work practice requirements set forth in 454 CMR 22.00.

3.3 CLEAN-UP AND DISPOSAL OR SALVAGE

- A. Clean-up activities shall include the use of HEPA filtered vacuums and a 5% solution of Trisodium Phosphate to clean all surfaces within the work area which may be contaminated with lead dust or particulate.
- B. Prior to disposal, any debris which may contain lead shall be analyzed to determine the quantity of lead which may leach from the debris if it were buried in a conventional landfill. This analytical procedure is called toxicity characteristic leachate procedure (TCLP) and is required by US EPA regulation. The US EPA requires that materials which, when analyzed using TCLP, leach greater than 5 milligrams lead per liter of water (mg/L), be disposed of as hazardous waste.
- C. All wastes shall be sampled using TCLP to determine if the material is hazardous waste. These wastes may include, but may not be limited to, disposable protective clothing, waste-water,

- paint chips, polyethylene sheeting used as work area barriers, etc. Contractor shall provide analytical results to the Authority's Representative prior to disposal of said wastes.
- D. Materials which have salvage value shall be appropriately salvaged. Salvage site shall be informed, in writing, of lead content of materials from this site to be salvaged.
- E. Clean-up of the work area shall be conducted until a level of no visible suspect paint chips or dust is achieved on the interior horizontal and vertical surfaces, including the floor, desks, and cabinets.
- F. If visible suspect debris is observed outside of the work area, re-cleaning will be required until a level of no visible suspect lead dust or debris is achieved.

END OF SECTION 02 90 00

SECTION 02091 - PAINT REMOVAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The drawings and general provisions of the contract, including General and Supplementary Conditions, Division 1 Specification Sections and relevant sections of these Specifications, apply to the work specified in this section.

1.2 DESCRIPTION OF WORK

- A. The work of this Section shall be performed as stated herein. And includes:
 - a. Complete removal of paint from all window sashes (**excluding frames**) prior to window restoration. Contractor shall remove the windows and transport them to an off-site facility for paint removal.
 - b. Prep the work area as required including providing and installing polyethylene barriers at access / egress points, ventilation, changing areas and other preparations required by Federal, State, or local regulations.
 - c. Cleanup and decontaminate according to procedures described herein. Install a secured centralized shower facility on the site equipped with hot and cold running water, for workers to decontaminate at the end of the work shift. Water shall be filtered through a five-micron filtration unit prior to containing the water for waste disposal testing.
 - d. Dispose of all removal materials in accordance with all federal RCRA requirements and State and local regulations.
 - f. All removal procedures must comply with 105 CMR 460.000 and 454 CMR 22.00.
 - g. Approvals and Inspections: All work procedures, temporary facilities, equipment, material and services must meet all the requirements of this Section, as well as all applicable local, State and Federal regulations and guidelines. Where an overlap exists, the most stringent shall apply.

1.3 PRE-CONSTRUCTION MEETING:

A. Pre-Construction Meeting

Meet with the Owner and Architect and any major trades, for a Pre-Construction Meeting prior to commencing work of the project. The meeting shall be at the facility of

the Owner at a mutually convenient time and date to be determined by Owner and Architect. At the Meeting, the Paint Removal Contractor shall be represented by authorized representatives and the supervisors(s) who shall supervise the project on a daily basis and shall present evidence that all the requirements for initiation of the work have been met.

1.4 SUBMITTALS

Provide six (6) copies of the following Submittals at the Pre-Construction Conference for the acceptance of the Owner and Architect:

- 1. Copies of all notifications, permits, applications, and licenses and like documents required by Federal, State, or local regulations and this Specification obtained or submitted in proper fashion.
- 2. Copies of recent blood testing, pulmonary function test (PFT) for respirator use, and medical records as required by 454 CMR 22.00, 105 CMR 460.00 and OSHA 29 CFR 1926.62.
- 3. Copies of Supervisor's and workers' training certificates.
- 4. Record of successful respirator fit testing performed by a qualified individual within the previous 6 months, for each employee to be used on this project with the employee's name and social security number with each record.
- 5. Employers Hazard Communication Program as requires by OSHA 29 CFR 1926.62, including proposed respiratory protection program and medical monitoring for all employees throughout all phases of the job, including make, model, and NIOSH approval numbers of respirators to be used.
- 6. Proposed number and type (i.e., hazardous waste or non-hazardous waste, open top, front loading, etc.) of dumpsters for waste, proposed location(s). (NOTE: A maximum of two dumpsters will be allowed on site.)
- 7. Proposed worker orientation plan which at a minimum includes a description of lead hazards and removal methodologies, a review of worker protection requirements, proposed decontamination procedures, location of wash station and change areas.
- 8. A list of all equipment to be used on-site, by make and model, including ventilation equipment, HEPA vacuums, etc.
- 9. Chain-of-Command of responsibility at work site including supervisors and competent person, their names, resumes and certificates of training and phone numbers.

- 10. List of total number of supervisors and workers intended to be assigned to the project, including name and lead removal qualifications.
- 11. The name and address of Contractor's blood lead testing lab, OSHA-CDC listing, and Certification in the State where work site is located.
- 12. Material Safety Data Sheets on potentially hazardous materials to be used on the project.
- 13. Name, address, and ID number of the proposed hazardous waste hauler, and proposed disposal reclamation or treatment facility.
- 14. Name and address of the proposed construction debris site.
- 15. Proof of Insurance.
- 16. Construction schedule including sequence of critical work.

1.5 MOCK UPS

A Submit mock-ups of paint removal of one complete window for approval prior to starting the complete work of this SECTION. As noted on 3.3B-4, hand scrapping shall be performed wherever possible with other acceptable methods used when needed. The mockup should reflect both methods.

1.6 <u>ADDITIONAL INSURANCE REQUIREMENTS</u>

- A. Insurance requirements: Refer to General Conditions of the Contract Article 16 Insurance and the Supplementary Conditions Article 16 Insurance.
 - 1. Transportation: The Paint Removal Contractor shall provide evidence that the transporter of all hazardous waste has a Form MCS-90 Endorsement for Master Carriers Policy of Insurance for Public Liability as required under Section 29 and 30 of the Motor Carriers Act of 1980.
 - 2. Contractor shall provide, with his insurance certificates, a complete explanation of their coverage and any / all exclusions in their coverage. Policies may not be canceled prior to giving thirty (30) days written notice of the Owner.
 - 3. Contractor shall indemnify, hold harmless, and defend the Owner, Consultant and Architect and any of its affiliates, partially or wholly owned entities, and any of their agents, employees, or officers (hereinafter referred to as Releases) from and against any and all losses, claims, judgements, including legal fees and expenses, of any and every nature and description brought or recoverable against Paint Removal Contractor or releases by reason of any act, intentional or otherwise, or covered by

this Contract, including but not limited to, the removal, handling and disposal of any hazardous material.

- B. The working hours for this project are set forth in Division 1, and the General Requirements.
 - 1. Removal of paint stripper can take place during normal working hours.

1.7 RELATED DOCUMENTS

- A. The following documents are made applicable and a part of this Section:
 - 1. Code of Federal Regulations (CFR) Publications:

29 CFR 1910 - General Industry

29 CFR 1926-55 - Gases, Vapors, Fumes, Dusts and Mists

29 CFR 1926. 57 - Ventilation

29 CFR 1926.62 - Lead in Construction

29 CFR 1926. 200 - Signs, Signals and Barricades

29 CFR Subpart T - Demolition

40 CFR 61 Subpart A - General Provisions

40 CFR 61.152 - Standard for Waste Manufacturing Demolition, Renovation, Spraying, and Fabricating Operations

40 CFR 241 - Guidelines for the Land Disposal of Solid Wastes

40 CFR 257 - Criteria for Classification of Solid Waste

40 CFR 261 and 262 - Waste Disposal Facilities and Practices

2. Massachusetts Regulations:

105 CMR 460.00 - Massachusetts Childhood Lead Poisoning Prevention

454 CMR 11.00 - Structural Painting Safety Code

454 CMR 22.00 - Deleading Regulations

454 CMR 23.00 - Occupational Lead Exposure

3. American National Standards Institute (ANSI) Publications:

29.2-79 - Fundamentals Governing the Design and Operation of Local Exhaust System

288.2-80 - Practices for Respiratory Protection

4. National Institute of Occupational Safety and Health (NIOSH) Publications:

Manual of Analytical Methods, 2nd Ed., Vol. 1, Physical and Chemical Analysis Method (P&CAM)

5. Underwriters Laboratories, Inc. (UL) Publications;

Fire Resistance Directory

586-77 (R- 1982) - Test Performance of High Efficiency Particulate Air Filter Units

1.8 SCOPE OF WORK

A. The work of this Section, without limiting the generality thereof, includes the furnishing of labor, materials, tools; equipment, services and incidentals necessary to complete all Lead Based Paint Removal from windows in accordance with the Drawings, Tables and Specifications, which are intended to describe, and provide for, completed lead removal and refinishing as required by regulations and this Specification; what is called for by any portion of these documents shall be complete in every detail, notwithstanding whether or not every item necessarily involved is particularly mentioned.

1.9 DISPOSAL OF WASTE MATERIAL

A. General

- For the purposes of bidding, all waste from removal activities shall be considered hazardous waste. All disposal costs shall be borne by the Paint Removal Contractor. The Contractor shall carry the cost to dispose of all hazardous waste material in a lined landfill in the base bid price.
- 2. The Paint Removal Contractor shall contact the regional EPA, State, DEP and local authorities to determine lead-based paint debris disposal requirements. The requirements of Resource Conservation and Recovery Act (RCRA) shall be complied with as well as applicable DEP solid waste plan requirements. During the actual removal, the Paint Removal Contractor shall not leave debris on the property, incinerate debris, dump waste by the road or in an authorized dumpster, or introduce lead-contaminated water into storm (will not be flushed down yard inlet or

street drain) or sanitary sewers (will not be flushed down toilet or other household drain)

- B. Testing of Materials by Paint Removal Contractor:
 - The following materials, individually and at a minimum, shall be representatively
 tested according to the TCLP procedures of the Resource Conservation and Recovery
 Act (RCRA) by the Paint Removal Contractor, and results made available to the
 Owner, Architect and Consultant to determine whether or not they are to be
 considered hazardous waste.
 - a. Waste-water for permitting requirements for disposal.
 - b. Dust from HEPA filters and from damp sweeping.
 - c. Plastic sheets, duct tape, or tape used to cover floors and disposal work clothes and respirator filters.
 - d. Rags, sponges, mops, HEPA filters, respirator cartridges, scrapers, and other materials used to be testing, removal, and clean-up.
 - e. Any other components to be removed and disposed not listed elsewhere.
 - 2. For waste disposal and classification purposes, the following documents are made applicable and part of this Section: 40 CFR 241, 257, 261, 262, and 49 CFR 172, 173, 178, and 179.
- C. Disposal of Non-Hazardous Contaminated Solid Waste
 - Contractor shall place lead-based paint chips debris, and lead dust in double six-mil
 polyethylene bags that are air-tight and puncture resistant. Pieces of wood or other
 types of substrates that do not fit into polyethylene bags shall be wrapped and
 labeled DANGER, LEAD DUST".
 - 2. Contractor shall place all disposable cleaning materials, such as sponges, mop heads, filters, disposable clothing in double six-mil polyethylene bags and seal.
 - 3. Contractor shall clean surfaces and equipment and bag large debris. Contractor shall then remove polyethylene sheeting and tape from covered surfaces. Prior to removing polyethylene sheeting, Contractor shall lightly mist the sheeting in order to keep dust down and fold inward to form tight bundles to bag for disposal, Contractor shall place all polyethylene sheeting in double six-mil thick polyethylene bags and seal. Bags shall be labeled "DANGER, LEAD DUST".
 - 4. Contractor shall bag and seal vacuum bags and filters in double six-mil thick polyethylene bags.

- Contractor shall place contaminated clothing or work area clothing used during removal in polyethylene bags for disposal prior to leaving the work area.
- 6. Contractor shall contain and properly dispose of all liquid waste, including lead dust-contaminated waste-water,
- 7. Contractor shall HEPA vacuum the exterior of all liquid waste containers prior to removing waste containers from the work area, and wet-wipe containers to ensure that no residual contamination remains. Containers shall then be moved out of the work area into the designated storage area.
- 8. Contractor shall carefully place the containers into a truck or dumpster used for disposal.
- 9. Contractor shall ensure that all waste is transported in covered vehicles to a landfill, or lined landfill, if available, in accordance with applicable DOT and EPA regulations.
- 10. Contractor shall submit to Owner the waste transfer procedure and route and shall comply with all DEP and DOT regulations concerning hazardous and non-hazardous waste removal and transportation. If a Paint Removal Contractor is utilized for the disposal procedure, Paint Removal Contractor shall submit for Owner's approval the Contractor Qualifications to perform the work as specified in this Specification. Contractor shall be responsible for all actions of the waste hauler pertaining to waste removal and disposal under this Section.

D. Disposal of Hazardous Waste

- 1. Paint Removal Contractor and Transporting Contractor will be required to comply with the Resource Conservation and Recovery Act (RCRA) and with all applicable State and local regulations.
- 2. Contractor shall comply with all EPA regulations for waste treatment, transfer and disposal.
- 3. Contractor shall place caustic paste residues in drums fabricated of materials that cannot be dissolved or corroded by chemicals. Caustic and acid waste must be segregated from each other and cannot be stored in the same containers, Other materials testing as hazardous shall be prepared for disposal as follows:
 - a. Packaged and sealed in containers approved under 49 CFR 173, 178, and 199.
 - b. Containers shall be numbered to correspond to the seal number, labeled with the type of materials, date it was filled and sealed, seat

- number, and weight of sealed container in addition to the information required under 49 CFR 172.
- c. A log shall be prepared at time of filling, identifying each numbered container and the information from "b" above. A copy of this log shall be furnished to the Consultant within three working days after the containers are filled.
- d. Name, location and telephone number of the disposal site used; copy of the state license in which the disposal site is located, locally-issued license, and a signed agreement that the disposal site will accept the hazardous lead waste shall be provided to the Consultant.
- e. Name, address and telephone number of any waste Contractors used; provide copies of licenses and signed agreements to Consultant.
- f. Submit copies of the Hazardous Waste manifest as required by these Specifications.
- 4. Waste Containers: Contractor shall comply with EPA and DOT regulations for containers Contractor shall contact State and local authorities to determine their criteria for containers and present this information to Owner. The more stringent regulation shall apply. No more than two hazardous waste trailers shall be allowed on the site at any time All trailers shall be placed at the direction of the Owner
- 5. Waste Transportation: If Contractor is not a certified hazardous waste transporter, a contract shall be entered into with a certified transporter to move the waste. Transporter shall be at approval of Owner. Deleading Contractor shall require the certified hazardous waste transporter to fully comply with RCRA and DOT regulations.
- 6. Prior to removal of any hazardous waste the following information must be received in writing by Owner's Lead Inspection Consultant for their review and approval:
 - a. Quality of hazardous waste.
 - b. Type of waste materials.
 - Method of containerizing waste or waste treatment and appropriate licensing, certification and regulatory approvals.
 - d. Proposed waste hauler and disposal route.
 - e. Proposed waste disposal site or landfill.

Once approval is received by Contractor from such Consultant, the waste may be transported as required.

7. Receipts from waste disposal site or landfill must be received and approved by Owner and Lead Inspection Consultant prior to approval of completion of the applicable phase of work.

E. Cost for Disposal of Hazardous Waste

1. The cost for the correct disposal of all waste of this project shall be included in the Total Base Bid, including the lead removal waste to be disposed as hazardous waste listed in this Section, and according to 40 CFR 241, 261, and 262.

The cost for the disposal as hazardous waste shall include all fees, permits, excise tax, labor, materials, profit, overhead, waste transfer costs, and all other costs incidental to hazardous disposal, including Land-Ban requirements. Also included shall be the cost for all storage dumpsters, permit fees, transport, reduction (on-site or off-site), additional testing, and disposal fees.

2. Contractor shall submit to its approved laboratory for testing, samples of each type of component removed as part of the work of this project. The Base Bid shall include minimum requirements for testing of materials required by the disposal sites, hazardous and non-hazardous, and as referred to in this Section.

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT

All material and equipment proposed to be used on this project shall be subject to the acceptance of the Owner and Architect, including:

- A. Polyethylene Sheeting, minimum thickness of six (6)-mil.
- B. Plastic Bags, minimum thickness of (6)-mil.
- C. Duct Tape, up to 3-inch width.
- D. Lead Warning Signs, as required by the DLWD regulations, and OSHA Hazard Communication requirements.
- E. Flexible Duct for ventilation units (if required).
- F. Spray Adhesive, fire retardant.
- G. Personal Protective Equipment, NIOSH approved respirators.
- H. Ventilation Units with HEPA filtration and exhaust fans.

I, HEPA Vacuums.

- J. Other materials, tools and equipment necessary for lead based paint removal.
- K Trisodium-Phosphate (TSP) and product data.
- L. Cloth Tarpaulin.
- M. Semi-Paste non-caustic stripper, as needed: NUTEC-002A Industrial Semi-Paste paint stripper, or approved equal.

PART 3 - EXECUTION

3.1 GENERAL

A. Approvals and Inspection

All temporary facilities, work procedures; equipment, materials, services, and agreements must strictly adhere to and meet this Section along with EPA, OSHA regulations and recommendations as well as Federal, State, and local regulations. Where there exists overlap of these regulations, the most stringent one applies. All work performed by the Contractor is further subject to approval of the Owner and/or Architect.

- B. Damage and Repairs to the Work Site
 - 1. Removal shall be performed without damage to the building, including, but not limited to, structural members, landscaping, ceilings, floors, walls, siding, electrical fixtures or exterior fixtures and components. The Contractor shall provide protection of these items and materials as part of the work area preparation. Where lead paint removal activity causes damage, the Contractor shall patch, repair, replace or otherwise restore the damaged items to their original condition, with similar or better materials, at no additional cost to the Owner. This includes repair of surfaces damaged during component removal as described herein, prior to the commencement of replacement activities by the Contractor or trades.'
 - Existing damage not needing repair includes damage to fixtures being removed. Contractor shall confirm on-site, the components not needing repair of damage prior to any removal work.

C. Isolation Work Areas

All lead work areas shall remain isolated from all other trades of the project and remain inaccessible to the public. Contractor shall monitor the access to the lead removal work areas. Refer to Pre-Construction Submittals for requirement of Owner and Architect

approval of work areas.

D. Personnel Sampling Paint Removal Contractor

- Perform personnel air sampling during all lead paint removal work to determine worker exposure limits. The results of such sampling shall be posted, provided to individual workers, and submitted to Owner and Architect as described herein.
- 2. Provide sampling to check personal exposure levels. Representative sampling shall be taken for the duration of the work shift or for eight hours, whichever is less, Personal samples need not be taken for repeated working conditions 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). Personal sampling shall be as outlined in OSHA Standard 29 CFR 1926-62.
- 3. Air sampling results shall be transmitted to the Owner and individual workers available at the job site in written form no more than forty-eight (48) hours after the completion of a sampling cycle. The reporting document shall list each sample's result, sampling time and date, personnel monitored and their social security numbers, flow rate, sample duration, sample yield, cassette size, and analysts' name and company, and shall include an interpretation of the results. Air sample analysis results will be reported in micrograms/cubic meter (ug/m3)
- 4. The Contractor's testing lab shall be an AIHA accredited for analysis of metals. Contractor shall submit for Owner's review and acceptance the name and address of the laboratory, certification(s) of AIHA accreditation for metal analysis, listing of relevant experience in air lead analysis, and presentation of a documented Quality Assurance and Quality Control Program.
- 5. Air monitoring frequency will be established in accordance with the requirements set forth in 29 CFR 1926-62.

E. Work Review

- The Architect may review the Contractor's work practices prior to the start of and during all lead-based paint removal related work and will report any violations of Section 02091 to the Owner. If the Contractor fails to correct deficiencies within 24 hours, the Architect will request that work be stopped and the Owner will be contacted to intervene. The on-site Inspector representing the Architect or Owner may stop the work at any time due to violation of regulations and violation of Specification requirements.
- F. Respirators and Protective Clothing

- 1. Personal protection, in the form of disposable coveralls and NIOSH approved respirators, is required for all workers, supervisors, and visitors entering the work area during the removal and cleaning operations.
- 2. Work clothes shall consist of disposable full-body Tyvek ® or other impermeable coveralls, head covers, gloves, boot or shoe covers, and eye protection.
- 3. Supply workers and supervisory personnel with NIOSH approved respirators and HEPA filters. Respiratory protection shall be implemented for all work performed under this Section unless Architect approves lesser requirements. The respirators shall be sanitized and maintained according to the manufacturer's specifications. Disposable respirators shall not be considered acceptable under any circumstances.
- 4. Respirators shall be individually assigned to removal workers for their exclusive use. All respiratory protection shall be provided to workers in accordance with the written submitted respiratory protection program, which includes all items in OSHA 29 CFR 1910,134 (b) (1-11) A copy of this program shall be kept at the work site, and shall be posted in the clean area.
- 5. Workers must perform negative and positive pressure fit test each time a respirator is put on, whenever the respirator design so permits. Powered air purifying respirators shall be tested for adequate flow as specified by the manufacturer.
- 6. Workers shall be given a Qualitative Fit Test in accordance with procedures detailed in OSHA 29 CFR 1920.1025, Appendix D, Qualitative Fit Test Protocols, for all respirators to be used on this removal project.
- 7. All persons leaving the removal area must remove their personal protective equipment before leaving the containment. Coveralls shall be removed inside out to minimize the dispersal of lead dust.
- 8. Under no circumstances shall workers or supervisory personnel eat, drink, smoke, chew gum, or chew tobacco in the work area; to do so shall be grounds for the Architect to stop all removal operations.
- 9. As with additional clothing, all footwear shall be left inside the clean area until the completion of the job and then shall be HEPA vacuumed or discarded as contaminated waste.
- G. The Contractor is responsible for using safe procedures and complying with OSHA and DWLD regulations to avoid electrical hazards.
 - 1. Contractor shall comply with all Federal, State and local regulations and ordinances regarding lead waste storage.

3.2 OCCUPANT PROTECTION

A. General:

- 1. During the course of removal activities, the protection of the public, building occupants, and workers from other trades and building contents shall be the responsibility of both the general contractor and the Contractor.
- 2. Conduct paint removal work off-site in a secure and controlled environment.
- 3. Maintain polyethylene barriers, as long as needed for the safe and proper completion of the work. Any breeches in the work area barriers shall be corrected immediately as necessary during the workday with such breeches reported immediately to the Owner. Work will not be allowed to commence until all barriers are in place and air testing equipment has been set-up and working.
- 4. All debris must be properly bagged and removed from work areas daily.
- 5. Clean Area: The Contractor shall select a clean area outside of the removal and decontamination unit areas for workers to change into protective equipment. This area shall contain warm water hand washing facilities (potable water), clean cloths, storage for a HEPA vacuum, and respirator storage space. Table, chairs and a rest facility shall also be available at this location. Contaminated equipment or personnel shall not be permitted in this area. The floors and walls shall be covered with six-mil polyethylene sheeting.
- 6. Contractor shall comply with proper notification requirements of this Section prior to commencement of work.

3.3 REMOVAL METHODS

- A. Removal General
 - For surfaces in which the components are removed, all visible debris, caulking, sealers, and run-off paint shall be removed, and any excess paint on the structure from which the component was removed shall be removed by the Contractor.
 - 2. At no time will wire brushing, flame torching, sanding or the use of heat guns be allowed on this project.

B. Paint Removal:

- 1. General: This shall include the removal of paint from components identified to be abated in the scope of work of this Specification. Paint removal shall follow the below listed requirements. Refer also to related articles in this Section.
- 2. Paint removal shall occur to remove all visible paint down to a point where no more than 2 well-adhered coats are remaining. At least 90% of all surface areas shall be bare wood.
- 3. If the paint removal process damages the component, Contractor shall replace component or repair the damaged surface during the removal process, under full work area preparation as identified in the Specification. At no time will the use of abrasive or mechanical strippers /sanders or dry scraping be allowed for use in paint removal or surface repair work of this Contract.
- 4. Acceptable Methods: Hand scrapping should be done wherever possible (see 1.5A), as first priority. For areas where hand scrapping is not sufficient, the following methods may be employed:
 - Paint removal occurring on wood surfaces shall be performed using accepted chemical strippers paste products, or wet scraping methods. The use of caustic pastes on this project is not permitted. Worker protection shall be increased to include chemical resistant, non-permeable gloves and face shields, Protect floors and adjacent painted surfaces. Any damage to these surfaces will be repaired or the damaged material replaced at no cost to the Owner.
- 5. All paint chips, slurry, waste, and debris generated from paint removal shall be removed immediately upon generation during the work.
- 6. Paint and component removal at windows and doorways shall occur only when proper barriers and protection are in place and approval has been given regarding barrier set-up and methods of removal.
- 7. Paint removal occurring at exterior trim and woodwork shall not cause damage to existing wood or trim components. Any damage shall be repaired.
- 8. In all cases of paint removal, the Contractor shall wait to coordinate the painting of the materials until after receiving a visual inspection and approval from the Licensed Inspector performing the removal re-inspection.

3.4 FINAL CLEAN-UP PROCEDURES

A. Clearance Testing

1. Clearance testing will be performed after the final clean-up has been completed and all surfaces are dry, and the area has passed a visual

inspection by the Architect, Visual inspection. clearance within the exterior work areas shall determine completion of exterior removal.

Contractor shall pay for all additional costs until the clearance level is achieved. Reinspection will then be performed to verify compliance with the mandated levels. The cost of additional testing shall be paid by the Contractor by subtracting the cost for laboratory analysis and Inspector's time from the Contract total.

END OF SECTION 02 91 00

SECTION 08 01 52 – HISTORIC WOOD WINDOW RESTORATION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Removal of existing spring balance system components at each window jamb and stiles of each sash.
- 2. Removal of window sash to off-site facility for lead paint removal (see Section 02 91 00 "Paint Removal")
- 3. Preservation and restoration of historic wood window sashes.
- 4. Filling of former spring balance channels in stiles of each sash with wood "Dutchmen," set in existing spring balance channels with epoxy adhesives.
- 5. Preservation and restoration of historic wood window sills and trim, including epoxy consolidation and patching of severely weathered exterior wood sills (see Section 01 22 00 "Unit Prices").
- 6. Repair of existing historic window hardware, and replacement of damaged or missing existing hardware with new hardware.
- 7. New sash weight pulleys and bronze sash chains, utilizing original sash weights still in sash weight pockets. Add additional sash weights as required to balance weight of new insulated glazing. Provide new sash weights if originals are missing from sash weight pockets (see Section 01 22 00 "Unit Prices").
- 8. Removal and replacement of existing insulated glass units with new thermal glazing.
- B. Contractor to review this section, window restoration drawings, and existing window conditions, and prepare bid on complete preservation and restoration to the requirements of these Construction Documents.

C. Related Sections:

- 1. Section 01 22 00 "Unit Prices"
- 2. Section 02 90 00 "Lead-Containing Paint Considerations"
- 3. Section 02 91 00 "Paint Removal"
- 4. Section 09 90 00 "Exterior Painting"

1.2 DEFINITIONS

A. Window: Includes window frame, sashes, sills, trim and related hardware.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples:

- 1. Proposed replacement hardware.
 - a. Sash weight pulleys, sash chains, supplemental sash weights, sash locks and sash lifts.
- 2. Wood used for replacement.
 - a. 12" length showing grain and tooling for wood "Dutchmen." Clearly mark wood species being proposed for use.
- 3. Thermal glazing used for replacement.
 - a. 12" square samples.
- 4. Bronze weather-stripping for jambs, sills and meeting rails of windows.

1.4 QUALITY ASSURANCE

- A. Employ only workers with at least five (5) years documentable experience with use of materials and methods described herein. Window restoration sub-contractor must have successfully completed a minimum of three (3) similar restoration projects involving building listed on the National Register of Historic Places.
- B. The sub-contractor shall submit to the Architect the names and addresses of contact persons and project architects for at least three previously completed projects.
- C. All wood window restoration work must be performed in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, as published by the National Park Service.
- D. Mockups: Build mockups to demonstrate aesthetic effects and set quality standards for materials and execution and for fabrication and installation. Approved mockups will be incorporated into the work.
 - 1. Locate mockups on the building where directed by Architect.
 - a. Wood Window Repair: Prepare one window unit to serve as mockup to demonstrate sample repairs of wood window members, including frame, sash, sill, glazing, and hardware.
- E. Manufacturer's Data: Provide four (4) copies of manufacturer's data for all materials.
- F. Scaffolding, Staging and Hoisting: Scaffolding, staging, and hoisting shall be provided by the General Contractor.

- G. AWI Quality Standard: Comply with applicable requirements in AWI's "Architectural Woodwork Quality Standards" for construction, finishes, grades of wood windows, and other requirements.
- H. Pre-installation Conference: Conduct conference at Project site.

PART 2 - PRODUCTS

2.1 GLAZING COMPOUND

- A. For shop application: Silicone setting bed for glazing (color to be dark brown, to blend with interior color of window sash surface). Glazing compound to be one-part polyurethane, elastomeric sealant/adhesive.
 - 1. Basis-of-design product is to be SIKA Sikaflex-1a, or other Architect-approved equal.
- B. For field spot glazing: Glazing compound to be one-part polyurethane, elastomeric sealant/adhesive.
 - 1. Basis-of-design product is to be SIKA Sikaflex-1a, or other Architect-approved equal.

2.2 REPLACEMENT GLASS MATERIALS

A. Wood Windows:

- 1. REPLACEMENT INSULATED GLAZING
 - a. Float Glass: ASTM C 1036, Type I, Quality-Q3, Class I (clear) unless otherwise indicated.
 - b. Thickness: To match existing.
 - c. Special coatings: N/A
 - d. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1) PPG Industries, Inc.
 - 2) Pilkington North America
 - 3) Cardinal Glass Industries

2.3 REPLACEMENT WOOD MATERIALS

- A. Wood: Clear fine-grained lumber; kiln dried to a moisture content of 6 to 12 percent at time of fabrication; free of visible finger joints, blue stain, knots, pitch pockets, and surface checks larger than 1/8 inch deep by 2 inches wide.
 - 1. Species: Heart Pine, Spanish Cedar or Mahogany

2.4 WOOD REPAIR MATERIALS

- A. Wood Consolidant: Ready-to-use product designed to penetrate, consolidate, and strengthen soft fibers of wood materials that have deteriorated due to weathering and decay and designed specifically to enhance the bond of wood-patching compound to existing wood.
 - 1. Products: Subject to compliance with requirements, provide the following:
 - a. Abatron, Inc.; LiquidWood.
 - b. ConServ Epoxy LLC; Flexible Epoxy Consolidant 100.
 - c. Wood Care Systems; ROTFIX.
- B. Wood-Patching Compound: Two-part epoxy-resin wood-patching compound; knife-grade formulation as recommended by manufacturer for type of wood repair indicated, tooling time required for the detail of work, and site conditions. Compound shall be designed for filling voids in damaged wood materials that have deteriorated due to weathering and decay. Compound shall be capable of filling deep holes and spreading to feather edge.
 - 1. Products: Subject to compliance with requirements, provide the following:
 - a. Abatron, Inc.; LiquidWood with WoodEpox.
 - b. Advanced Repair Technology, Inc.; Primatrate with Flex-Tec HV.
 - c. West System Inc.; West System. Epoxy Adhesive
 - d. Araldite, Huntsman International LLC, New Hampshire

2.5 WINDOW HARDWARE

- A. General: All hardware that is from the original construction of the building and which is in serviceable condition, is to be cleaned, lubricated and reinstalled on the window it was mounted to, prior to beginning of work. Broken hardware will be collected by contractor, placed in sealable, clear plastic bag w/ window number written legible on plastic in black permanent marker and delivered to Owner in a sturdy container.
- B. All window hardware shall smoothly operate, tightly close, and securely lock each wood window.
- C. Replacement Window Hardware: Replace existing damaged, missing or non-historic window hardware with new hardware to match original hardware.
- D. Material and Design of Replacement Hardware:
 - 1. Replacement Window Hardware:
 - a. Window Sash Pulley

1) Basis of Design: Smith Restoration Sash window sash pulley, PBB-225

a) Material: Bronze

b) Finish: Oil Rubbed

- c) Contact Info: Smith Restoration Sash, 122 Manton Avenue, Unit #714, Providence, Rhode Island 02909. 401-351-1222. www.smithrestorationsash.com
- 2) Or Architect-Approved Equal such as Phelps, Architectural Resource Center, or House of Antique Hardware.
- 3) The design goal is to install new sash weight pulleys that match the existing rabbet left from the removal of the original sash pulleys. Only use a manufacturer that is capable of fabricating pulleys with a rounded face plate that matches the length and width of the original units.

b. Window Sash Chains

- 1) Basis of Design: Smith Restoration Sash Chain
 - a) Weight Capacity Designation: #45.
 - b) Material: Solid Bronze.
 - c) Contact Info: Smith Restoration Sash, 122 Manton Avenue, Unit #714, Providence, Rhode Island 02909. 401-351-1222. www.smithrestorationsash.com
- 2) Or Architect-Approved Equal such as Phelps, Architectural Resource Center, or House of Antique Hardware.

c. Window Sash Locks

- 1) Basis of Design: Original surviving cast bronze hardware and similar replacements from House of Antique Hardware, located at 802 NE Davis Street in Portland, Oregon, 97232 www.houseofantiquehardware.com
 - a) Material: Bronze
 - b) Finish: Oil Rubbed
- 2) Or Architect-Approved Equal such as Phelps, Architectural Resource Center or Smith Restoration Sash.

d. Window Sash Lifts

- 1) Basis of Design: Original surviving cast bronze hardware.
 - a) Material: Bronze
 - b) Finish: Oil Rubbed
- 2) Or Architect-Approved Equal such as Phelps, Architectural Resource Center, House of Antique Hardware or Smith Restoration Sash.

e. Window Sash Counterweights

1) Basis of Design: Original surviving sash weights.

- 2) Or Architect-Approved Equal such as Phelps, Architectural Resource Center, Smith Restoration Sash or House of Antique Hardware.
- E. Window Hardware Finish: All hardware is to have an oil-rubbed bronze finish.

2.6 EXTERIOR PAINT MATERIALS (see Section 09 90 00 "Exterior Painting")

- A. Paint Systems: The products listed are manufactured by Sherwin Williams. Equivalent products by other manufacturers may be submitted for review and approval by Owner and Architect. Provide manufacturer's best quality paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
- B. Material compatibility: Provide primers and finish coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
 - 1. Existing Exterior Woods and New Dutchmen Patches
 - a. Prime all bare wood before applying 1st coat primer.
 - b. 1st Coat: Sherwin Williams Exterior Oil-Based Primer
 - c. <u>2nd Coat</u>: Sherwin Williams Duration Exterior Coating K Series at 2.8 mils dry film thickness.
 - d. 3rd Coat: Sherwin Williams Duration Exterior Coating K Series at 2.8 mils dft.

2.7 WEATHER STRIPPING

- A. Window jambs, sill and meeting rail:
 - 1. Spring bronze weather stripping sized to fit window sashes.
 - a. Basis-of-Design: William A. Kilian Hardware Co., or Architect-approved equal.

2.8 MISCELLANEOUS MATERIALS

A. Borate Preservative Treatment: Inorganic, borate-based solution, with disodium octaborate tetrahydrate as the primary ingredient; manufactured for preserving weathered and decayed wood from further damage by decay fungi and wood-boring insects; complying with AWPA P5; containing no boric acid.

B. Cleaning Materials:

1. Detergent Solution: Solution prepared by mixing 2 cups of tetrasodium polyphosphate, 1/2 cup of laundry detergent that contains no ammonia, 5 quarts of 5 percent sodium hypochlorite bleach, and 15 quarts of warm water for each 5 gal. of solution required.

- 2. Mildewcide: Provide commercial proprietary mildewcide or a solution prepared by mixing 1/3 cup of household detergent that contains no ammonia, 1 quart of 5 percent sodium hypochlorite bleach, and 3 quarts of warm water.
- C. Adhesives: Wood adhesives for exterior exposure, with minimum 15- to 45-minute cure at 70 deg F, in "gunnable" and liquid formulations as recommended by adhesive manufacturer for each type of repair.
- D. Metal Fasteners: No metal fasteners in visible locations. Use metals that are noncorrosive and compatible with each material joined.
 - 1. Match existing fasteners in material and type of fastener unless otherwise indicated.
- E. Silicone Joint-Sealant: Exterior joints in vertical surfaces and horizontal non-traffic surfaces which will NOT be painted.
- F. Neutral-Curing Silicone Joint Sealant: ASTM C 920.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. BASF Building Systems.
 - b. Dow Corning Corporation.
 - c. GE Advanced Materials Silicones.
 - d. May National Associates, Inc.
 - e. Pecora Corporation.
 - f. Polymeric Systems, Inc.
 - g. Schnee-Morehead, Inc.
 - h. Sika Corporation; Construction Products Division.
 - i. Tremco Incorporated.
 - 2. Type: Single component (S) or multicomponent (M).
 - 3. Grade: non-sag (NS).
 - 4. Class: 50.
 - 5. Uses Related to Exposure: Non-traffic (NT).
 - 6. Joint Locations:
 - a. Joints between wood and other materials where sealant is indicated.
 - 7. Joint-Sealant Color: As selected by Architect from manufacturer's full range of opaque colors.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect adjacent materials from damage by restoration treatment of historic windows.

- B. Stabilize windows with loose or weakened pieces, prior to moving.
- C. Clearly mark sash on bottom surface of meeting rail (upper sash) and bottom rail (lower sash).
- D. Clean existing windows of mildew, algae, moss, plant material, loose paint, grease, dirt, and other debris by scrubbing with bristle brush or sponge and detergent solution. Scrub mildewed areas with mildewcide. After cleaning, rinse thoroughly with fresh water. Allow to dry before repairing or painting.
- E. Condition "Dutchmen" wood replacement members to prevailing humidity conditions at installation areas before installing.
- F. Provide temporary painted-plywood enclosures to window openings during work on window sashes.
 - 1. Secure to prevent weather and intrusion
 - 2. Repair damage related to temporary installation of plywood enclosures.
 - 3. 30% of temporary protection in each room shall be transparent.

3.2 HISTORIC TREATMENT PROCEDURES, GENERAL

- A. General: Have historic treatment of windows directed and performed by a qualified historic treatment specialist. Remove window sashes from openings, protect openings from weather and repair window sashes on a horizontal surface and then reinstall. In treating historic items, disturb them as minimally as possible and as follows:
 - 1. Stabilize and repair windows to reestablish structural integrity and weather resistance while maintaining the existing form of each item.
 - a. The work includes all window accessory components: i.e., parting beads, stops, cords, pulleys, sash lifts, sash locks, additional sash weights, and other elements required for proper functioning.
 - 2. Remove coatings from exterior face of sashes to expose areas requiring repair and to expose and arrest deterioration.
 - 3. Replace or reproduce historic hardware items, where indicated or scheduled, and as required during the work.
- B. Mechanical Abrasion: Do not use abrasive methods such as sanding, wire brushing, or power tools except as approved by Architect.
- C. Repair or Replacement of Existing Hardware: Dismantle existing historic window hardware wherever possible, and restore to proper operation.
 - 1. Replace broken hardware with pre-approved replacement hardware matching historic appearance.

3.3 REPAIR WOOD WINDOWS:

- A. Match existing materials and features, retaining as much original material as possible when performing repairs.
- B. Unless otherwise indicated, repair wood windows by consolidating, patching, splicing, or otherwise reinforcing wood with new wood, matching existing wood, or with salvaged, sound, original wood.
- C. Repair wood windows by limited replacement matching existing material.
- D. Protection of Openings: Where sash or windows are indicated for removal, cover resultant openings with temporary enclosures so that openings are weather-tight during repair period. Provide secure opening protection at all window openings. Provide at least one transparent panel in each room where temporary protection is installed.
 - 1. Where exterior storm windows are present, they may be used for securing the opening provided they are secured against the opening.
- E. Identify removed windows, sash, and members with numbering system corresponding to window locations to ensure reinstallation in same location. Key windows, sash, and members to Drawings showing location of each removed unit. Place number tack units in a location that will be concealed after reinstallation.

3.4 WOOD PATCH-TYPE REPAIR

- A. General: Patch wood members that are damaged and exhibit depressions, holes, or similar voids, and that have limited rotted or decayed wood.
 - 1. Treat weathered window sills with wood consolidant, prior to application of patching compound. Allow treatment to harden before filling voids with patching compound.
 - 2. Remove rotted or decayed wood down to sound wood.
- B. Apply wood-patching compound to fill depressions, nicks, cracks, and other voids created by removed or missing wood.
 - 1. Apply patching compound in layers as recommended by manufacturer until the void is completely filled.
 - 2. Finish patch surface to match contour of adjacent wood member. Sand patching compound smooth and flush, matching contour of existing wood member.

3.5 WOOD MEMBER-REPLACEMENT REPAIR

A. General: Replace parts of or entire wood window members at locations indicated on Drawings and where damage is too extensive to patch.

- 1. Remove sash from windows before performing member-replacement repairs unless otherwise indicated.
- 2. Remove broken, rotted, and decayed wood down to sound wood.
- 3. Custom fabricate new wood to replace missing wood; either replace entire wood member or splice new wood part into existing member. Fabricate replacement members according to AWI Section 1000 requirements for Custom Grade.
- 4. Secure new wood using multiple dowels with epoxy adhesives to ensure maximum structural integrity at each splice. Use only concealed fasteners.
- B. Repair remaining depressions, holes, or similar voids with patch-type repairs.
- C. Glazing: Re-glaze units prior to reinstallation.
- D. Reinstall units removed for repair into original openings.

3.6 WEATHERSTRIPPING

- A. Size weather-stripping slightly less than thickness of sash.
- B. Cut length of weather-stripping ¼-inch beyond top of lower sash and bottom of upper sash, cut base of lower sash weather strip to butt tight to sill along whole length, following slope if sill slopes at inner sash.
- C. Nail weather stripping into sash track with bronze nails at 1-1/2 inch spacing.
- D. Ensure that windows slide to full extent of motion and do not catch tops or bottoms of weather-stripping.

END OF SECTION 08 01 52.93

SECTION 09 90 00 - EXTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes historic treatment of painting as follows:
 - 1. Exterior Substrates:
 - a. Remove paint down to bare wood on exterior face of window sashes.
 - b. Remove paint down to bare wood on window sills (see Unit Price No. 1).
 - c. Provide monochromatic painting of historic window sash surfaces.
 - Intent is to prepare previously painted surfaces to accept new finish coats that will be well adhered, thorough covering and long-lived to include all surfaces designated on drawings including:
 - a) Window sashes.
 - b) Window sills.

1.2 Related Sections:

A. Division 8 Section 08 01 52 "Historic Wood Window Restoration."

1.3 DEFINITIONS

A. The term "paint", as used herein, means all coating system materials including primers, emulsions, epoxy, enamels, sealers, fillers, stains and other applied materials whether used as prime, intermediate, or finish coats.

1.4 SUBMITTALS

- A. Colors shall be in accordance with the schedule provided by the Owner, and all tinting and matching shall be to the satisfaction of the Owner.
- B. The minimum number of colors will be one (1).
 - 1. For painted wood, prepare three samples on site.

1.5 SAFETY

- A. The painting contract shall comply with State and Federal statutes for compliance with OSHA regulations for the safety of workers and occupants in the premises.
- B. The rules for Renovation, Restoration and Painting as promulgated by the Commonwealth of Massachusetts shall apply to this project.

1.6 QUALITY ASSURANCE

- A. Mockups: Provide mockups for each type of coating system and substrate indicated and each color and finish required to demonstrate aesthetic effects and set quality standards for materials and execution. Duplicate appearance of approved Sample submittals.
 - 1. Surface-Preparation Mockups: On existing surfaces using applicable specified methods of cleaning and other surface preparation, provide mockup sample of at least one window sash and one window sill.
 - 2. Coating Mockups: On existing surfaces using applicable specified methods of painting, provide mockup sample of at least one window sash and one window sill.
- B. Engage an experienced painting firm to perform work of this Section. Firm shall have completed work on buildings of similar age and construction with a record of successful inservice performance.
- C. Provide finish coats which are compatible with the prime coats used.
- D. Pre-installation Conference: Conduct conference at Project site.

1.7 SEQUENCING AND SCHEDULING

- A. Perform historic treatment of painting in the following general sequence:
 - 1. Dismantle existing surface-mounted objects and hardware except items indicated to remain in place. Tag items with location identification and protect.
 - 2. Verify that temporary protections have been installed.
 - 3. Examine condition of surfaces to be painted.
 - 4. Remove existing paint to bare wood.
 - 5. Apply paint system.
 - 6. Reinstall dismantled surface-mounted objects and hardware, except as otherwise indicated.

1.8 PRODUCT HANDLING

- A. Delivery of materials: Deliver all materials to the job site in original, new, unopened containers bearing the manufacturer's name and label, and showing at least the following information:
- B. Name or title of the material;
- C. Fed. Spec. number, if applicable;
- D. Manufacturer's stock number;
- E. Manufacturer's name;
- F. Contents by volume for major constituents;

- G. Thinning instructions;
- H. Application instructions.
- I. Protection: Use all means necessary to protect the materials of this Section before, during and after installation and to protect the work and materials of all other trades.
- J. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the Owner and at no additional cost to the Owner.

1.9 JOB CONDITIONS

- A. Surface temperatures: Do not apply solvent-thinned paints when the temperature of surfaces to be painted and the surrounding air temperature are below 50 degrees F unless otherwise permitted by the manufacturer's printed instructions as approved by the Owner. Do not apply varnish, lacquer or enamel finish when the air temperature is below 60 degrees F.
- B. Surface temperatures: Do not apply paint in snow, rain, fog or mist; or when the relative humidity exceeds 85%; or to damp or wet surfaces, unless otherwise permitted by the manufacturer's printed instructions as approved by the Owner. Applications may be continued during inclement weather within the temperature specified by the paint manufacturer during application and drying periods.
- C. Do not paint exterior surfaces while surfaces are exposed to the hot sun.

PART 2 - PRODUCTS

2.1 CLEANING MATERIALS

- A. Water: Potable.
- B. Detergent Solution: Solution prepared by mixing 2 cups (0.5 L) of tetrasodium polyphosphate, 1/2 cup (125 mL) of laundry detergent that contains no ammonia, 5 quarts (5 L) of 5 percent sodium hypochlorite bleach, and 15 quarts (15 L) of warm water for each 5 gal. (20 L) of solution required.
- C. Mildewcide: Commercial proprietary mildewcide or a job-mixed solution prepared by mixing 1/3 cup (80 mL) of household detergent that contains no ammonia, 1 quart (1 L) of 5 percent sodium hypochlorite bleach, and 3 quarts (3 L) of warm water.
- D. Abrasives for Ferrous Metal Cleaning: Aluminum oxide paper, emery paper, fine steel wool, steel scrapers, and steel-wire brushes of various sizes.
- E. Rust Remover: Manufacturer's standard phosphoric acid-based gel formulation, also called "naval jelly," for removing corrosion from iron and steel.

2.2 PAINT REMOVERS

- A. <u>Manufacturers</u>: Subject to compliance with requirements, provide products by one of the following:
 - 1. ABR Products, Inc.
 - 2. <u>Back to Nature Products Company.</u>
 - 3. <u>Cathedral Stone Products, Inc.</u>
 - 4. Dumond Chemicals, Inc.
 - 5. <u>Hydroclean; Hydrochemical Techniques, Inc.</u>
 - 6. PROSOCO, Inc.
- B. Low-Odor, Solvent-Type Paint Remover: Manufacturer's standard low-odor, water-rinsable solvent-type gel formulation for removing paint and coatings from masonry, stone, wood, plaster, and metal; and containing no methanol or methylene chloride.

2.3 EXTRA STOCK

A. Upon completion of the work of this Section, deliver to the Owner a minimum of one gallon of each color of paint used on the work.

2.4 EXTERIOR PRIMERS

- A. Exterior Wood Primer for Satin and Full-Gloss Alkyd Enamels: Factory-formulated, alkyd primer for exterior application.
 - 1. Products:
 - a. Sherwin Williams Company; A-100 Exterior Oil Stain Blocking Primer
 - b. Benjamin Moore Company; 024/C094 Fresh Start Alkyd Primer
 - c. Or Architect-approved equivalent.

2.5 EXTERIOR FINISH COATS

- A. Exterior Wood Semi-Gloss Acrylic Latex: Factory-formulated, Satin, acrylic latex for exterior application.
 - 1. Products:
 - a. Sherwin Williams Paint Company; Duration Exterior Latex Satin Coating.
 - b. Benjamin Moore Company; Impervex Satin latex enamel.
 - c. Or Architect-approved equivalent.

2.6 APPLICATION EQUIPMENT

A. Brush application: For all painted wood work, with no exception.

2.7 OTHER MATERIALS

A. All other materials, not specifically described but required for a complete and proper

installation of the work of this Section, shall be new, first-quality of their respective kinds, and as selected by the Contractor subject to the approval of the Owner.

- B. Turpentine: Pure gum spirits of turpentine conforming to Fed. Spec. TT-T-801.
- C. Drier: Conform to Fed. Spec. TT-D-65.
- D. Tinting Materials: Best quality, ground in pure boiled linseed oil, lime proof, and non-fading.

2.9 PATCHING MATERIALS

A. Wood Patching: See Section 08 01 52 "Historic Wood Window Restoration" for wood patching procedures and materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions for compliance with requirements for maximum moisture content and other conditions affecting performance of the painting work. Comply with paint manufacturer's written instructions for inspection.
- B. Maximum Moisture Content of Substrates: Do not begin application of coatings unless moisture content of exposed surface is below the maximum value recommended in writing by paint manufacturer and not greater than the following maximum values when measured with an electronic moisture meter appropriate to the substrate material:
 - 1. Wood: 15 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
 - 1. If existing surfaces cannot be prepared to an acceptable condition for proper finishing by using specified surface-preparation methods, notify Owner in writing.
- D. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
 - 1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Painting Specification Manual" applicable to substrates indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable. If removal is impractical or impossible because of size or weight of item, provide surface-applied

protection before surface preparation and finishing.

- 1. After completing finishing operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. General: Use only the gentlest, appropriate method necessary to clean surfaces in preparation for painting. Clean all surfaces, corners, contours, and interstices.
- D. Detergent Cleaning: Wash surfaces by hand using clean rags, sponges, and bristle brushes. Scrub surface with detergent solution and bristle brush until soil is thoroughly dislodged and can be removed by rinsing. Use small brushes to remove soil from joints and crevices. Dip brush in solution often to ensure that adequate fresh detergent is used and that surface remains wet. Rinse with water applied by clean rags or sponges.
- E. Solvent Cleaning: Use solvent cleaning to remove oil, grease, smoke, tar, and asphalt from painted or unpainted surfaces before other preparation work. Wipe surfaces with solvent using clean rags and sponges. If necessary, spot-solvent cleaning may be employed just prior to commencement of paint application, provided enough time is allowed for complete evaporation. Use clean solvent and clean rags for the final wash to ensure that all foreign materials have been removed. Do not use solvents, including primer thinner and turpentine, that leave residue.
- F. Mildew: Clean off existing mildew, algae, moss, plant material, loose paint, grease, dirt, and other debris by scrubbing with bristle brush or sponge and detergent solution. Scrub mildewed areas with mildewcide. Rinse with water applied by clean rags or sponges.

3.3 PAINT REMOVAL

- A. General: Remove paint to bare wood. Ease edges of well adhered paints to reduce "island" effect. Repair defects including dents and gouges. Remove burrs. Where cleaning methods have been attempted and further removal of the paint is required because of incompatible or unsatisfactory surfaces for repainting, remove paint to extent required by conditions.
 - 1. Brushes: Use brushes that are resistant to chemicals being used.
- B. Paint Removal with Hand Tools: Remove paint manually using hand-held scrapers, wire brushes and steel wool. Do not use other methods except as approved by Owner. Use curved hand tools on curved moldings.
- C. Assume 4-5 applications of chemical paint remover to reach bare wood.
- D. Paint removal to adhere to the guidelines of the Massachusetts Lead Renovation, Repair and Painting Rule (RRP Rule).

3.4 SUBSTRATE REPAIR

A. General: Repair substrate surface defects that are inconsistent with the surface appearance of adjacent materials and finishes.

B. Wood Substrate:

1. See Section 08 01 53 "Historic Wood Window Restoration."

3.5 PROTECTION OF SURFACES

A. Protect all finish materials from damages, drips, splashes, spatters, cuts or tears.

3.6 PAINTING SCHEDULE, GENERAL

- A. Paint will be acceptable provided that the paint meets or exceeds the quality of paint specified and that the paint may be tinted as required to provide an acceptable color match and appropriate degree of gloss, acceptable to the Owner.
- B. Number of coats scheduled is minimum for all work.

3.7 EXTERIOR FINISH SCHEDULE: A. Painted Wood:

- 1. 1 coat primer.
- 2. Film Thickness Wet/Dry 3.8 mils / 1.2 mils.
- 3. 2 finish coats.
- 4. Film Thickness Wet/Dry 3.8 mils / 1.2 mils.

3.8 PAINT APPLICATION, GENERAL

- A. General:
- B. Slightly vary the color of succeeding coats. Do not apply additional coats until each complete coat has been inspected and approved. Only the inspected and approved coats of paint will be considered in determining the number of coats applied.
- C. Sand, dust, tack rag and caulk between coats.
- D. Apply exterior paint to wood surfaces that have been properly prepared. Avoid painting surfaces while they are exposed directly to the hot sun, and refrain from painting during windy or threatening weather.
- E. Drying:
- F. Allow sufficient drying time between coats. Modify the period as recommended by the material manufacturer to suit adverse weather conditions.
- G. Oil-base paints shall be considered dry for recoating when the paint feels firm, does not deform or feel sticky under moderate pressure of the thumb, and the application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.
- H. Brush application:

- Brush out and work all brush coats onto the surfaces in an even film. Cloudiness, spotting, laps, brush marks, runs, sags, ropiness, and other surface imperfections will not be acceptable.
 Make edges of paint adjoining other materials or colors sharp and clean without overlapping.
- J. Rolling application: Not Allowed.
- K. Apply clear finishes to produce surface films without cloudiness, holidays, lap marks, brush marks, runs, ropiness, or other surface imperfections.

3.10 CLEANUP AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Do not scratch or damage adjacent finished surfaces. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Owner, and leave in an undamaged condition.
- C. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.11 COMPLETION

- A. Completed work shall match the approved Samples for color, texture, and coverage. Remove, refinish, or repaint all work not in compliance with the specified requirements.
- B. Cleaning: At the completion of the work, remove all paint and varnish spots and any oil, grease, or other stains caused by this work from floors, walls, glass, fixtures, hardware, equipment and other surfaces, leaving their finishes in satisfactory condition. Remove all equipment, materials and debris caused by work of this Section and leave the site in a clean condition insofar as this work is concerned.
- C. Retouching: Touch up and repair any work under the Contract which, for any reason, has been damaged during the construction work. All finished work applied under this Section shall have perfect surfaces when completed work is ready for inspection for substantial completion.

END OF SECTION 09 90 00