

project no.0334.04

project manual

Eldridge Street Project
Interior Restoration
New York, New York

Issued for Bid July 24, 2007

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SECTION 00100 - INVITATION TO BID**PART 1 GENERAL**

1.01 INVITATION

- A. Qualified contractors are invited to submit a proposal for work at the Eldridge Street Synagogue, a national and local landmark structure located at 12 Eldridge Street, in the Lower East Side of New York, New York.

1.02 SCHEDULE

- A. The bidding documents will be distributed by request to qualified bidders by the Construction Manager, Terry Higgins. Tel: (201) 394-3128 Fax: (201) 221-8130 and are available on the LMDC website.
- B. MANDATORY pre-bid walk-through of the project will be scheduled and held at the project site: 12 Eldridge Street, New York, New York.
- C. Requests for Information (RFI's) will be received by facsimile only by the Construction Manager, Terry Higgins at (201) 221-8130.
- D. Responses to RFI's will be provided via addendum.
- E. Separate sealed bids will be received by the Architect at the address given in Section 00200 – Instruction to Bidders until 5:00pm August 24, 2007. All bids must be submitted on the bid forms provided.
- F. A single copy of a completed and executed Vendex, Construction Employment Reports and all Department of Labor Services forms must be submitted with the bid.
- G. Bids shall stand open for acceptance for a period of one hundred and twenty (120) days after the date of opening.

1.03 PROJECT SCOPE

- A. The bidding documents include drawings and project manual all identified as Issued for Bid dated July 24, 2007, that have been prepared by Walter Sedovic Architects (Architect).
- B. The work consists generally of partitions systems and interior finishes, wood window and door restoration, miscellaneous finish carpentry, cabinets and shelving, woodwork restoration, architectural metalwork, furnishings and accessories.
- C. The work will be contracted as a single contract.
- D. The work of this contract is to be coordinated with the work of other concurrent contracts.

1.04 MISCELLANEOUS REQUIREMENTS

- A. Award will be made to the lowest responsible bidder, who, in the opinion of the Owner and Architect, is qualified to do the work.
- B. The right is reserved, if in the Owner's judgment, the Owner's interest will be promoted thereby, to reject any Proposal or all Proposals, to waive any informality in any Proposal received or to afford any Bidder and opportunity to remedy any deficiency resulting from a minor informality or irregularity.
- C. At the Owner's request, within the time period required by the Owner, the successful bidder shall procure, execute, and deliver to the Owner and maintain a Performance bond and a Labor and Material Bond in an amount of the Contract not less than one hundred (100%) percent of

the total amount of the Contract awarded to Contractor by the Owner. Said bonds must be issued by a surety company approved by the Owner and licensed to transact the business of surety in the State of New York. Contractor shall provide a separate price for meeting bonding requirements.

- E. The work at the Eldridge Street Project is funded in part by a grant from the Lower Manhattan Development Corporation (LMDC) with a Pass-through Contract. LMDC must approve all work of this Contract. Administration of the grant imposes record-keeping and paperwork requirements on the Contractor. Each bidder shall familiarize him/herself with all regulations and necessary submittals expected by the HUD/LMDC during the actual execution of the Project. It is the bidder's responsibility to comply with all US Department of Housing and Urban Development (HUD) and LMDC regulations included in references and meet all requirements regarding: vendex approval, prevailing rates, submittals, payment schedules, or any other regulation imposed by the LMDC in regard to this grant. Reporting forms are included in the Project Manual. The Contractor is responsible for the cost of complying with HUD/LMDC requirements.
1. Bidder is responsible for Subcontractor compliance with applicable HUD/LMDC regulations in regard to this grant.
 2. Prevailing wage shall be paid for work performed on site. Each bidder shall familiarize him/herself with "Making Davis-Bacon Work – A Contractor's Guide to Prevailing Wage Requirements for Federally-Assisted Construction Projects."
- F. The Eldridge Street Synagogue has been determined to possess intrinsic and architectural significance and is a New York City Landmark, is on The National Register of Historic Places and is a National Historic Landmark. The Contractor shall not be judge of relative significance of any feature, nor of the impact of any or all proposed alterations. This judgment is entirely the responsibility of the Architect. Consequently, no work shall be performed on this property and on elements shall be altered, removed, reused, or taken from the premises without the written approval of the Architect as being consistent with the Contract Documents. All care shall be taken to perform all the work of this project following the best practice and to the highest standards of historical restoration. All care must also be taken to protect and preserve the original materials and historic fabric of this building.
- G. The Contractor acknowledges that the building is an Orthodox Jewish Synagogue. Neither the Contractor nor his agents, subcontractor shall do anything in performing the work that can be interpreted to be inconsistent with the use and reputation of the Synagogue as an Orthodox house of worship.
1. Work will not be performed inside the Project on Jewish Holidays and any Sabbath. The Jewish Holidays for the Calendar Year 2007-2008 likely to be affected by the work of this project are listed in Section 01100 of the Project Manual.
- G. Bidders must have a minimum of five (5) years successful experience in similar restoration projects with designated landmark status. Qualified General Contractors must have skilled workers, trained, experienced, and familiar with restoration of similar buildings. In addition to the Bid Form, submit a list of 5 comparable projects, dates of completion, construction costs, contact names, and telephone numbers.
- H. All applicable Federal, State, or other laws, orders, rules, and regulations of agencies or authorities having jurisdiction over construction work in the locality of the Project, and prevailing wages, labor standards, and working hours shall be deemed to be included in the Contract as if more fully and at length set forth herein.

- I. The project Owner, The Eldridge Street Project, is a not-for-profit organization and is exempt from sales and compensating use taxes of the State of New York and of any city or county in the State of New York for materials that will become an integral component part of the Project. The Contractor acknowledges that the Contract amount stated herein has been based upon the appropriate rules and regulations pertaining to Sales Tax requirements. No reimbursements will be made for sales tax payment in connection with the construction of the project.

PART 2 PRODUCTS- NOT USED.

PART 3 EXECUTION- NOT USED.

END OF SECTION

SECTION 00200 - INSTRUCTIONS TO BIDDERS**PART 1 GENERAL**

1.01 OBTAINING DOCUMENTS

- A. Copies of the Bidding Documents are available from: Construction Manager, Terry Higgins.
Tel: 201-394-3128 Fax: 201-221-8130 and can be downloaded from the LMDC website.

1.02 DEFINITIONS

- A. The proposed Contract Documents consist of:
1. The form of Agreement between the Owner and Contractor: "Standard Form of Agreement Between Owner and Contractor: AIA Document A-101-1997 Edition". Available at Architect's office for review if requested.
 2. Conditions of the Contract: "General Conditions of the Contract for Construction: AIA Document A-201-1997 Edition". Available at Architect's office for review if requested.
 4. Specifications, dated 24 July 2007.
 5. Addenda issued prior to execution of the Contract
- B. Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract that modify or interpret the Bidding documents by additions, deletions, clarifications, or corrections.
- C. A Bid is the complete and properly signed proposal to do the Work for the sums stipulated therein. A bid is considered complete if it is submitted according to the terms of the Bidding Documents.
- D. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.
- E. An alternate Bid (or Alternate) is the amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.
- F. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment, or services for a portion of the Work identified in the Bidding Documents.
- G. A Bidder is a person or entity who submits a Bid.
- H. A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment or labor for a portion of the Work.
- I. The Successful Bidder and the Successful Contractor are the Bidder to whom the Owner makes an award.
- J. Definitions established in the General Conditions of the Contract for Construction, or in the other Contract Documents are applicable to the Bidding Documents

1.03 BIDDER'S REPRESENTATION

- A. By making a Bid, the Bidder represents that:
1. The Bidder has carefully examined the Bidding documents, the requirements are clear, and he/she concurs with them. The Bid is made in full agreement with those requirements.
 2. The Bidder understands the requirements of the Bidding Documents to the extent that such documentation relates to the Work for which the Bid is submitted, for other portions of the Project, if any, being bid concurrently or presently under construction.

3. The Bidder and appropriate Sub-bidders have visited the site, become familiar with local conditions under which the Work is to be performed and have correlated the Bidder's personal observations with the requirements of the Bidding Documents.
4. The Bid is based upon the materials, equipment, and systems required by the Bidding Documents without exception or qualification.
5. The Bidder has not colluded with any other person in regard to any Bid or sub-bid submitted.

1.04 BIDDING DOCUMENTS

- A. Documents are available only in complete sets, and available upon request to qualified Contractors.
 1. Bidding Documents will be issued to Sub-bidders or others only when specifically offered in the Invitation to Bid.
 2. Bidders shall use complete sets of Bidding documents in preparing Bids. The Owner and Architect assume no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
 3. Copies of the Bidding documents are made available for the sole purpose of obtaining Bids on the Work. No license or permission is granted for any other use of the Bidding Documents.

1.05 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

- A. The Bidder shall carefully study and compare the Bidding Documents with each other, and with the site and local conditions. He/She shall request documents for other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted. If inconsistencies or ambiguities are discovered, the Bidders shall immediately report them to the Architect.
- B. Requests for clarification or interpretation of the Bidding Documents shall be made in writing.
- C. Interpretations, corrections and changes of the Bidding Documents will be made by written Addendum. Interpretations, corrections, and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them.

1.06 SUBSTITUTIONS

- A. The materials, products, and equipment described in the Bidding documents establish the standard required for the function, dimension, appearance, and quality to be met by any proposed substitution.
- B. No substitution will be considered prior to receipt of Bids unless the written request for approval has been received by the Architect one week prior to bid due date. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment, or other portions of the Work including changes in the work of other contracts that incorporation of the proposed substitution would require shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution will be final.
- C. If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.
- D. No substitutions will be considered after the Contract award unless specifically provided in the Contract Documents.

1.07 ADDENDA

- A. Addenda will be delivered promptly by the issuing office to all registered Bidders.
- B. Addenda concerning technical matters will not be issued later than the stipulated day prior to the date for receipt of Bids. The Owner reserves the right to issue an Administrative Addendum at any time, withdrawing the request for Bids or postponing the date for receipt of Bids.

1.08 BID FORM AND PROCEDURES

- A. In order to receive consideration, make all bids on the forms provided: Section 00300 - Bid Form, provided with the Bid Documents in accordance with the following:
 - 1. Bids shall be submitted on forms identical to the form supplied in Bidding Documents.
 - 2. Completely fill in all blanks on the bid form. Use typewriter or permanent ink.
 - 3. Express sums in both words and figures. In case of discrepancy between the two, the amount written in words shall govern.
 - 4. Inter-lineation, alteration, and erasures must be clearly legible and initialed by the signer of the Bid.
 - 5. Bids shall not contain any recapitulation of the work to be done.
 - 6. No oral, telephonic, facsimile (fax), or electronic Bid will be considered.
 - 7. No Bid received after the date fixed for the receipt of Bids will be considered. Late bids will be returned to senders unopened.
 - 8. All requested alternates shall be bid. If no change in the Base Bid is required, enter "No Change".
 - 9. Note the receipt of addenda in the appropriate space. If no addenda have been received, insert the word "NONE". Failure to acknowledge addenda may result in rejection of the Bid.
 - 10. On each copy of the Bid, include the legal name of the Bidder and a statement that defines the circumstance of ownership and control. The name of each person signing the proposal shall be typed or printed below the signature. When the proposal is signed by an agent of the Bidder, include evidence of current power of attorney. In every case, the proposal shall show the present business address of the Bidder, at which address communications will be received and service of notices accepted.
 - a. If the Bidder is a corporation, the proposal shall be signed in the name of the corporation and sealed by a duly authorized officer of the corporation.
 - b. If the Bidder is a partnership, the proposal shall be signed in the name or title under which the organization is doing business by an officer whose official capacity shall be designated.
 - c. If the Bidder is an individual, he/she shall sign the proposal in person, stating the name or title, if any, under which he/she is doing business.
- B. METHOD OF SUBMISSION
 - 1. Bids must be delivered enclosed in a sealed opaque envelope together with all other documents required to be submitted to the following:
 - Walter Sedovic Architects
 - One Bridge Street, Suite One
 - Irvington, New York 10533
 - Attn: Jill Gotthelf
 - 2. Indicate title of the Work and the name of the Bidder on the outside of the sealed envelope.
 - 3. Deliver Bid to above no later than 5:00pm, August 24, 2007.
 - 4. It is the sole responsibility of the Bidder to see that the Bid is received on time.
- C. BID OPENING

1. The Owner reserves the right to postpone the date and time of the receipt of Bids at any time prior to the date and time announced in this Instructions to Bidders or amendments thereto.
- D. BID SECURITY
1. No bid security will be required.
- E. MODIFICATION OR WITHDRAWAL OF BID
1. A bid may not be modified, withdrawn, or canceled by the Bidder for a period of 120 days following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting their Bid.
 2. Prior to the time and date designated for the receipt of Bids, and Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder.
 3. Withdrawn Bids may be resubmitted up to the date and time designated for receipt of Bids provide that they are then fully in conformance with these Instructions to Bidders.
- F. AWARD OF CONTRACT - REJECTION OF BIDS
1. It is the intent of the Owner to award a Contract for the Work set forth in the Bidding Documents to the lowest responsible Bidder offering the optimum combination of cost, service, and schedule, provided that the apparent Low Bid has been submitted in accordance with the requirements of the Bidding documents and does not exceed the funds available. The Owner shall have the right to waive any informalities or irregularities in a Bid received and to accept the Bid that, in the Owner's judgment, is in the Owner's own best interests.
 3. The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.
 4. The Bidder to whom the award is made will be notified at the earliest possible date. The Owner will award the Contract to the selected Bidder after sufficient time to review all bid proposals. No awards will be made on the day of opening bids.
 5. Owner reserves the right to reject any and all Bids or waive any informality or irregularity in the Bids received whenever such rejection or waiver is in the interest of the Owner. The Owner may or may not consider any Bid on which there is an alteration or departure from the Bid Form, the Instructions to Bidders, or other Contract Documents.
 6. The selected Bidder, upon notification, shall enter into written Contract with the Owner. Further, Contractor shall commence work within fourteen (14) calendar days of notification.
- G. BONDS
1. The selected Contractor shall secure and post a Labor and Materials Payment Bond and a Performance Bond, each in the amount of 100% of the Contract Price and each in a form approved by the Owner. All such bonds shall be issued by a surety acceptable to the Owner.
 2. The Apparent Low Bidder will be required to furnish evidence of his ability to obtain satisfactory Performance and Labor and Materials Payment Bonds in the full amount of the Contract.
 - a. The cost of such bonds shall be added to the Bid in determining the Contract Sum.
 - b. If the Owner requires that bonds be secured from other than the Bidder's usual sources, changes in cost will be adjusted as provided in the Contract Documents.
 - c. The Bidder shall deliver the required bonds to the Owner not later than three days following the date of execution of the Contract. If the work is to be commenced prior

to the execution of the Contract, in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Subparagraph.

- 1) Unless otherwise provided, the bonds shall be written on AIA document A312 Performance bond and Payment Bond. Both bonds shall be written in the amount of the Contract Sum
- 2) The bonds shall be dated on or after the date of the Contract.
- 3) The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

H. QUALIFICATION OF BIDDER

1. Any Bidder may be required to furnish evidence satisfactory to the Owner that they and their proposed subcontractors have sufficient means and experience in the types of work called for to assure completion of the Contract in a satisfactory manner.
2. Any bidder shall comply promptly with all requests for information or to appear for examination, and shall actively cooperate with the Owner in its efforts to determine whether the Bidder is qualified to receive an award.
3. Prior to the award of the Contract, the Owner will notify the Bidder in writing if either the Owner or Architect, if any, after due investigation, has reasonable objections to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objections to a proposed person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid, or (2) submit an acceptable substitute person or entity with an adjustment in the Base Bid or alternate Bid to cover the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder.
4. Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.

I. EXAMINATION

1. Prior to submitting a Bid, each Bidder shall visit the Site of the proposed Work, fully familiarize themselves with existing conditions and the character of the operations to be performed under the proposed Contract, and make such investigations as they shall find necessary so as to fully understand the facilities, physical conditions and restrictions relating to the Work under this Contract.
2. Each Bidder shall thoroughly examine and become familiar with the proposed Contract Documents.
 - a. This project is funded by a pass-through grant from the Lower Manhattan Development Corporation (LMDC). Administration of the grant imposes record-keeping and paperwork requirements on the Contractor. The Prime Contractor (Contractor) must comply with LMDC/HUD regulations included in references and meet all NYC and LMDC Vendex requirements. The Contractor is responsible for the cost of complying with LMDC/HUD requirements.
 - i. Section 00520 - Schedule A- HUD/LMDC Compliance Requirements
 - ii. Form WH-347 Payroll
 - iii. LMDC Standard Business Background Questionnaire
 - iv. Monthly Employment Utilization Report
 - v. Schedule C Attachment C-2 MBE/WBE Compliance Report
 - vi. Federal Labor Standards Provision
 - vii. General Decision NY20070003 Federal Wage Rates including any updates and modifications.

- b. AIA Form A101 Agreement between Owner and Contractor – by reference. On request, the Architect will provide a copy to the bidder for review.
 - c. US Department of Housing and Urban Development (HUD) Davis Bacon Act.
 - i. Prevailing wage shall be paid for work performed on site.
 - ii. Each bidder shall familiarize him/herself with “Making Davis-Bacon Work – A Contractor’s Guide to Prevailing Wage Requirements for Federally-Assisted Construction Projects.” It is the bidder’s responsibility to comply with all regulations regarding: prevailing rates, submittals, payment schedules, or any other regulations imposed by the US Department of Housing and Urban Development in regard to this grant.
3. By submitting a Bid, the Bidder covenants and affirms that:
- a. They have carefully examined the Work Site and Specifications, associated Bid Documents, and any Addendae or Bulletins.
 - b. From their own investigation, they have satisfied themselves of the location and the nature of the Work, the general and local conditions, and all matters which may affect the Work or its performance, and
 - c. As a result of such examination and investigation, they fully understand the conditions of the bidding and will not make any claim for, and waives any right to, damages because of misinterpretation or misunderstanding of the Bid Documents and the conditions of the bidding.

J. INTERPRETATION OF CONTRACT DOCUMENTS

1. Prior to submitting a Bid, if any Bidder is in doubt of the meaning of any part of the proposed Contract Documents, or finds discrepancies in, or omissions from, any part of the proposed Contract Documents, they may submit to the Architect a written request for interpretation in a timely manner before Bids are to be opened.
2. The person submitting the request shall be responsible for its prompt delivery.
3. Interpretation or corrections of proposed Contract Documents will be made only by Addendum, which will be mailed or delivered to each Bidder of Record.
4. The Owner will not be responsible for any other explanations or interpretations of the proposed Contract Documents.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTION - NOT USED.

END OF SECTION

SECTION 00300 – BID FORM

(Reproduce on Bidder's Letterhead)

Date: _____

To: Eldridge Street Project (Owner)
12 Eldridge Street
New York, New York 10001

Re: Eldridge Street Project
Interior Restoration

From: _____
Bidder

The Bidder, having examined the plans and specifications and the existing building, has satisfied himself as to all the quantities and conditions, including the availability of labor and materials, understands that in signing this Proposal he waives all right to plead any misunderstanding of the same. The Bidder proposes to furnish all labor, materials, equipment, and supplies and to carry out the work in accordance with the Contract Documents at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents of which this Proposal is a part.

BASE BID

Dollars _____ \$ _____
(words) *(figures)*

The Cost of **Performance Bond** and **Labor and Materials Payment Bond** shall increase the amount of the Base Bid:

Dollars _____ \$ _____
(words) *(figures)*

Number of Calendar Days required to complete the scope of work: _____ days.

UNIT PRICE

1. Crew Day for work beyond the defined scope. Per Crew Day.

Dollars _____ \$ _____
(words) *(figures)*

Indicate crew size _____ \$ _____

SCHEDULE OF VALUES – Total Equals 100% of the Base Bid

A. Division 01 – General Conditions, including mobilization, protection, temp. facilities, cutting and patching, project closeout: Dollars _____ \$ _____

SCHEDULE OF VALUES - CONTINUED

- B. Division 04 – Masonry work including hearth stone, marble saddle and masonry mortars: Dollars _____ \$ _____
- C. Division 05 - Metal work including metal fabrications and ornamental castings, window guards stairs and cast metal grilles: Dollars _____ \$ _____
- D. Division 06 – Miscellaneous carpentry including rough and framing work, architectural woodwork and architectural woodwork restoration: Dollars _____ \$ _____
- E. Division 07 – Joint Sealers: Dollars _____ \$ _____
- F. Division 08 – Doors & Windows including wood door restoration, wood window restoration, hardware and accessories, glass and glazing: Dollars _____ \$ _____
- G. Division 09 – Finish work including gypsum board assemblies, tile, resilient flooring, carpets and runners, painting, stains and clear coatings: Dollars _____ \$ _____
- H. Division 12 – Furnishings for gift shop and Gural Center including tables, chairs, and vitrines: Dollars _____ \$ _____

LIST OF SUBCONTRACTORS AND SUPPLIERS

The bidder shall submit a proposed list of subcontractors and suppliers he is intending to use on the project. All subcontractors must submit qualifications statement(s) as specified in the respective sections of project manual.

Name/Address: _____ Trade: _____

Name/Address: _____ Trade: _____

Name/Address: _____ Trade: _____

DURATION OF OFFER

The bidder agrees that this bid proposal represents an irrevocable offer to the Owner which may be accepted by the Owner's issuance of a Notice to Proceed in favor of the Bidder, on or before the close of business **one hundred and twenty (120)** calendar days after closing of the Bids.

A Bid may not be modified, withdrawn or canceled by the Bidder for the period of time stipulated in the Invitation to Bid, and each Bidder so agrees in submitting his Bid.

CONSTRUCTION SCHEDULE

Prepare a horizontal bar-chart-type construction schedule with the Bid Form. Provide a separate time bar for each activity and a vertical line to identify the first workday of each week. Use the same breakdown Work indicated in the Schedule of Values.

ADDENDUM RECEIPT

The Bidder acknowledges the following Addenda which have been issued by the Owner and mailed or faxed to the Bidder prior to the date of opening of bids, whether received by the Bidder or not. Such addenda so issued shall form and become part of the Contract Documents.

Addendum No. _____ dated _____

Addendum No. _____ dated _____

Addendum No. _____ dated _____

ERROR CERTIFICATION

The undersigned certifies that the attached list includes any and all defects, errors, inconsistencies, or omissions in the Bidding Documents of which he is aware, either directly, or by notification from any sub-bidder or material supplier.

If none, enter "NONE": _____

In submitting this Bid, the undersigned agrees:

- To accept all provisions of Project Documents, including Drawings and Addenda.
- To enter into and execute an Agreement, if awarded on the basis of this bid, and to furnish a Labor and Material Payment Bond.
- To accomplish the Work in accordance with the Contract Documents, in the time stipulated in the agreement.
- To cooperate in every respect with suppliers and installers of equipment, if any, purchased by the Owner under separate contracts.

The undersigned further attests and affirms that:

- The Bidder has not colluded with any other person in regard to this Bid or any component Sub-bid.
- No person employed by the Owner has exercised influence, provided confidential information, or stands to profit from this Bid or the Work described in the Bid Documents.
- The Bidder is not presently barred from bidding or performing work in any jurisdiction, due to non-compliance with Affirmative Action or Equal Opportunity regulations.

BIDDER

By:

(Signature)

(Printed Name & Title)

(Business Name)

(Business Address)



All spaces must be filled in the bids to be formal. If bidder is a corporation, write state of incorporation. If partnership, give full names of all partners. Attach copy of current Power of Attorney if appropriate.

END OF SECTION

SECTION 00500 - AGREEMENT**FORM OF AGREEMENT**

1.01 AIA Document A101, Owner-Contractor Agreement Form - Stipulated Sum 1997 Edition, forms the basis of Contract between the Owner and Contractor. A copy of this Form of Agreement can be obtained from the Architect at the Contractor's request.

END OF SECTION

SCHEDULE A

*HUD / LMDC COMPLIANCE REQUIREMENTS*I. GENERAL CONDITIONSA. General Compliance

Consultant agrees to comply with the requirements of the HUD regulations concerning CDBG, 24 CFR Part 570, as modified by the waivers and alternative requirements applicable to LMDC and its subrecipients that are published at 67 FR 12042 and 67 FR 36017. Consultant also agrees to comply with all other applicable Federal, state and local laws, regulations, and policies governing the funds provided under this Agreement. Consultant further agrees to utilize funds available under this Agreement to supplement rather than supplant funds otherwise available.

B. Workers' Compensation

Consultant shall provide Workers' Compensation Insurance coverage for all of its employees involved in the performance of this Agreement.

C. Insurance and Bonding

Consultant shall carry sufficient insurance coverage to protect contract assets from loss due to theft, fraud, or undue physical damage, and as a minimum shall purchase a blanket fidelity bond covering all employees in an amount equal to cash advances from the Society.

Consultant shall comply with the bonding and insurance requirements of 24 CFR §§ Part 84.31 and 84.48, including but not limited to the following insurance to the extent stated:

1. Commercial General Liability Insurance providing both bodily injury (including death) and property damage insurance in a limit not less than Two Million Dollars (\$2,000,000) aggregate and One Million Dollars (\$1,000,000) per occurrence. Such insurance is to be written on an occurrence basis. The Society and LMDC shall be named as additional insureds.
2. Automobile Liability and Property Damage Insurance, if applicable, in an amount not less than \$1,000,000 combined single limit for both bodily injury and property damage.
3. Workers' Compensation coverage for employers liability and disability benefits as required by the State of New York.
4. Excess Liability Insurance in an amount not less than \$10,000,000.

5. Certificates of Insurance for all of the aforementioned coverages shall be provided to the Society prior to the commencement of work under this Agreement. The Society and LMDC shall be named as additional insureds on each such certificate.

II. ADMINISTRATIVE REQUIREMENTS

A. Financial Management

1. Accounting Standards

Consultant agrees to comply with 24 CFR §§ 84.21-84.28 and agrees to adhere to the accounting principles and procedures required therein, utilize adequate internal controls, and maintain necessary source documentation for all costs incurred.

2. Cost Principles

Consultant shall administer the Program in conformance with OMB Circular A-87, "Cost Principles for State, Local, and Indian Tribal Governments," A-122 "Cost Principles for Non-Profit Organizations," or A-21, "Cost Principles for Educational Institutions," as applicable. These principles shall be applied for all costs incurred whether charged on a direct or indirect basis.

B. Documentation and Record-Keeping

1. Records to be Maintained

Consultant shall maintain all records required by the HUD regulations specified in 24 CFR § 570.506 that are pertinent to the activities to be funded under this Agreement. Such records shall include but not be limited to:

- a. Records providing a full description of each activity undertaken;
- b. Records demonstrating that each activity undertaken meets one of the National Objectives of the CDBG program;
- c. Records required to determine the eligibility of activities;
- d. Records required to document the acquisition, improvement, use or disposition of real property acquired or improved with CDBG assistance;
- e. Records documenting compliance with the fair housing and equal opportunity components of the CDBG program;
- f. Financial records as required by 24 CFR §§ 85.20 and 570.502; and
- g. Other records necessary to document compliance with Subpart K of 24 CFR Part 570 (24 CFR §§ 570.600-570.614).

2. Retention

Consultant shall retain all records pertinent to expenditures incurred under this Agreement for a period of four (4) years after the termination of all activities funded under this Agreement. Records for non-expendable property acquired with funds under this Agreement shall be retained for four (4) years after final disposition of such property. Records for any displaced person must be kept for four (4) years after he/she has received final payment or for a reasonable period of time as requested by the Society. Notwithstanding the above, if there is a litigation, claim, audit, negotiation or other action that involves any of the records cited and that has started before the expiration of the four-year period, such records must be retained until completion of the action and resolution of all issues, or the expiration of the four-year period, whichever occurs later.

Consultant shall index the records that must be maintained and retained in this subparagraph B. At the end of the four-year period following the completion or termination of all activities funded under this Agreement, or on earlier request by LMDC, Consultant shall produce to LMDC the index and all records maintained in accordance with this subparagraph B.

3. Disclosure

Consultant understands that personal client information collected under this Agreement is private and the use or disclosure of such information, when not directly connected with the administration of the Society's or Consultant's responsibilities with respect to services provided under this Agreement, is prohibited by the Privacy Act, 5 U.S.C. § 552a, unless written consent is obtained from such person receiving service and, in the case of a minor, that of a responsible parent or guardian.

4. Property Records

Consultant shall maintain real property inventory records that clearly identify properties purchased, improved or sold. Properties retained shall continue to meet eligibility criteria and shall conform with the "changes in use" restrictions specified in 24 CFR § 570.503(b)(8), where applicable.

5. Audits and Inspections

All Consultant records with respect to any matters covered by this Agreement shall be made available to the Society, LMDC, HUD, their designees or the Federal Government, at any time during normal business hours, as often as LMDC or HUD deems necessary, to audit, examine, and make excerpts or transcripts of all relevant data. Any deficiencies noted in audit reports must be fully cleared by Consultant within 30 days after receipt by Consultant . Failure of Consultant to comply with the above audit requirements will constitute a violation of this Agreement and may result in the withholding of future payments. Consultant hereby agrees to have an annual agency audit conducted in accordance with current LMDC policy concerning subrecipient audits and OMB Circular A-133.

C. Procurement

1. Compliance

Consultant shall comply with current LMDC policies concerning the purchase of equipment and shall maintain inventory records of all non-expendable personal property as defined by such policies as may be procured with funds provided herein. All program assets (unexpended program income, property, equipment, etc.) shall revert to LMDC upon termination or completion of this Agreement.

2. OMB Standards

Consultant shall procure all materials, property, or services in accordance with the requirements of 24 CFR § 85.36, and shall subsequently follow 24 CFR Part 85 as modified by 24 CFR § 570.502, covering utilization and disposal of property.

3. Travel

Consultant shall obtain written approval from the Society for any travel outside the New York City metropolitan area with funds provided under this Agreement.

III. PERSONNEL AND PARTICIPANT CONDITIONS

A. Civil Rights

1. Compliance

Consultant agrees to comply with all applicable civil rights laws, rules, and ordinances of the City of New York and the State of New York and with Title VI of the Civil Rights Act of 1964 , as amended, Title VIII of the Civil Rights Act of 1968 as

amended, Section 104(b) and Section 109 of Title I of the Housing and Community Development Act of 1974 as amended, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Executive Order 11063, and with Executive Order 11246 as amended by Executive Orders 11375, 11478, 12107 and 12086.

2. Nondiscrimination

Consultant will not discriminate against any employee or applicant for employment because of race, color, creed, religion, ancestry, national origin, sex, disability or other handicap, age, marital/familial status, or status with regard to public assistance. Consultant will take affirmative action to insure that all employment practices are free from such discrimination. Such employment practices include but are not limited to the following: hiring, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff, termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting agency setting forth the provisions of this nondiscrimination clause.

3. Land Covenants

This Agreement is subject to the requirements of Title VI of the Civil Rights Act of 1964 (Public Law 88-352) and 24 CFR §§ 670.601 and 670.602. In regard to the sale, lease, or other transfer of land acquired, cleared or improved with assistance provided under this Agreement, Consultant shall cause or require a covenant running with the land to be inserted in the deed or lease for such transfer, prohibiting discrimination as herein defined, in the sale, lease or rental, or in the use or occupancy of such land, or in any improvements erected or to be erected thereon, providing that LMDC and the United States are beneficiaries of and entitled to enforce such covenants. Consultant, in undertaking its obligation to carry out the program assisted hereunder, agrees to take such measures as are necessary to enforce such covenant, and will not itself so discriminate.

4. Section 504

Consultant agrees to comply with any Federal regulations issued pursuant to compliance with Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794), which prohibits discrimination against the handicapped in any Federally assisted program. The Society shall provide Consultant with any guidelines necessary for compliance with that portion of the regulations in force during the term of this Agreement.

B. Affirmative Action

1. Compliance with E.O. 11246

Consultant agrees that it shall be committed to carry out, pursuant to LMDC's specifications, an Affirmative Action Program to provide equal opportunity in employment in keeping with the principles as provided in President's Executive Order 11246 of September 24, 1966.

2. M/WBE

Consultant will use its best efforts to afford small and minority-owned and women-owned business enterprises the maximum practicable opportunity to participate in the performance of this Agreement. As used in this Agreement, the term "minority and woman-owned business enterprise" ("M/WBE") means a business at least fifty-one percent (51%) owned and controlled by minority group members or women. For the purpose of this definition, 'minority group members' are Afro-Americans, Spanish-speaking, Spanish surnamed or Spanish-heritage Americans, Asian-Americans, and American Indians. Consultant may rely on written representations by businesses regarding their status as minority and woman-owned female business enterprises in lieu of an independent investigation.

Consultant shall comply with and cause each of its subcontractors to comply with the provisions of Schedule C of the Society's subrecipient agreement with LMDC relating to non-discrimination and affirmative action, incorporated herein by reference. Consultant shall make best efforts to comply with the provisions of Schedule C relating to affirmative action.

3. Access to Records

Consultant shall furnish and cause each of its subcontractors or subcontractors to furnish all information and reports required hereunder and will permit access to its books, records and accounts by the Society, LMDC, HUD or its agent, or other authorized Federal officials for purposes of investigation to ascertain compliance with the rules, regulations and provisions stated herein.

4. Notifications

Consultant will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Consultant, advising the labor union or worker's representative of Consultant's commitments hereunder, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

5. EEO/AA Statement

Consultant will, in all solicitations or advertisements for employees placed by or on behalf of Consultant, state that it is an Equal Opportunity or Affirmative Action employer.

6. Subcontract Provisions

Consultant will include the provisions of Sections III.A (Civil Rights) and III.B (Affirmative Action) in every subcontract or purchase order, specifically or by reference, so that such provisions will be binding upon each of its subcontractors.

C. Employment Restrictions

1. Prohibited Activity

Consultant is prohibited from using funds provided herein or personnel employed in the administration of the program for: political activities; sectarian or religious activities; lobbying; political patronage; and nepotism activities.

2. Labor Standards

Consultant agrees to comply with the requirements of the Secretary of Labor in accordance with the Davis-Bacon Act as amended, the provisions of Contract Work Hours and Safety Standards Act (40 U.S.C. § 327 et seq.) and all other applicable Federal, state and local laws and regulations pertaining to labor standards insofar as those acts apply to the performance of this Agreement. Consultant shall maintain documentation that demonstrates compliance with hour and wage requirements of this part. Such documentation shall be made available to the Society for review upon request.

Consultant agrees that, except with respect to the rehabilitation or construction of residential property containing less than eight (8) units, all contractors engaged under contracts in excess of \$2,000 for construction, renovation or repair work financed in whole or in part with assistance provided under this Agreement, shall comply with Federal requirements adopted by HUD pertaining to such contracts and with applicable

requirements of the regulations of the United States Department of Labor, under 29 CFR Parts 1, 3, 5 and 7 governing the payment of wages and ratio of apprentices and trainees to journey workers; provided that, if wage rates higher than those required under the regulations are imposed by state or local law, nothing hereunder is intended to relieve Consultant of its obligation, if any, to require payment of the higher wage. In all such contracts subject to such regulations, Consultant shall cause or require to be inserted in full provisions meeting the requirements of this paragraph.

3. “Section 3” Clause

a. Compliance

Compliance with the provisions of Section 3 of the HUD Act of 1968, as amended, and as implemented by the regulations set forth in 24 CFR Part 135, and all applicable rules and orders issued hereunder prior to the execution of this Agreement, shall be a condition of the Federal financial assistance provided under this Agreement and binding upon the Society, Consultant and any of Consultant's subcontractors. Failure to fulfill these requirements shall subject the Society, Consultant and any of Consultant's subcontractors, their successors and assigns, to those sanctions specified by this Agreement. Consultant certifies and agrees that no contractual or other disability exists which would prevent compliance with these requirements.

Consultant further agrees to comply with these “Section 3” requirements and to include the following language in all subcontracts executed under this Agreement:

The work to be performed under this Agreement is a project assisted under a program providing direct Federal financial assistance from HUD and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended (12 U.S.C. § 1701).

Section 3 requires that to the greatest extent feasible opportunities for training and employment be given to low- and very low-income residents of the project area, and that contracts for work in connection with the project be awarded to business concerns that provide economic opportunities for low- and very low-income persons residing in the metropolitan area in which the project is located.

Consultant certifies and agrees that no contractual or other legal incapacity exists which would prevent compliance with these requirements.

b. Notifications. Consultant agrees to send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or understanding, if any, a notice

advising said labor organization or worker's representative of its commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.

c. Subcontracts. Consultant will include this Section 3 clause in every subcontract and will take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the grantor agency. Consultant will not subcontract with any entity where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR Part 135 and will not let any subcontract unless the entity has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.

D. Conduct

1. Subcontracts

a. Monitoring. Consultant will monitor all subcontracted services on a regular basis to assure contract compliance. Results of monitoring efforts shall be summarized in written reports and supported with documented evidence of follow-up actions taken to correct areas of noncompliance.

b. Content. Consultant shall cause all of the provisions of this Agreement in its entirety to be included in and made a part of any subcontract executed in the performance of this Agreement.

c. Selection Process. Consultant shall undertake to insure that all subcontracts let in the performance of this Agreement shall be awarded on a fair and open competition basis. Executed copies of all subcontracts shall be given to the Society along with documentation concerning the selection process.

2. Hatch Act

Consultant agrees that no funds provided, nor personnel employed under this Agreement, shall be in any way or to any extent engaged in the conduct of political activities in violation of Chapter 15 of Title V United States Code.

3. Conflict of Interest

Consultant agrees to abide by the provisions of 24 CFR § 570.611 with respect to conflicts of interest, and covenants that it presently has no financial interest and shall not acquire any financial interest, direct or indirect, which would conflict in any manner or degree with the performance of services required under this Agreement. Consultant

further covenants that in the performance of this Agreement no person having such a financial interest shall be employed or retained by Consultant hereunder. These conflict of interest provisions apply to any person who is an employee, agent, consultant, officer, or elected official or appointed official of Consultant, or of any designated public agencies or subrecipients that are receiving funds from HUD under the CDBG program.

4. Lobbying

Consultant hereby certifies that:

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

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

c. It will require that the certification language of this subparagraph 5 be included in the award documents for all sub awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subcontractors shall certify and disclose accordingly:

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

5. Copyright

If this Agreement results in any copyrightable material or inventions, LMDC and/or HUD reserves the right to royalty-free, non-exclusive and irrevocable license to

reproduce, publish or otherwise use and to authorize others to use, the work or materials for government purposes.

6. Religious Organization

Consultant agrees that funds provided under this Agreement will not be utilized for religious activities, to promote religious interests, or for the benefit of a religious organization in accordance with the Federal regulations specified in 24 CFR §570.200(j).

IV. ENVIRONMENTAL CONDITIONS

Consultant agrees to comply with the following requirements insofar as they apply to the performance of this Agreement:

1. Clean Air Act, 42 U.S.C. § 7401, *et seq.*;
2. Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251, *et seq.*, as amended, 1318 relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder;
3. Environmental Protection Agency (“EPA”) regulations pursuant to 40 CFR Part 50, as amended.



LOWER MANHATTAN DEVELOPMENT CORPORATION
STANDARD BUSINESS BACKGROUND QUESTIONNAIRE

INSTRUCTIONS

- This Questionnaire shall be completed on behalf of the Firm by an individual who is knowledgeable about the past and present operations of the firm and its policies.
- Firms intending to bid as joint venturers should submit a separate Questionnaire for each joint venturer.
- Whenever more space is needed to answer any question, or you wish to give further explanation, complete by attaching extra pages.
- All questions must be answered. If a particular question does not apply, the response must state "Not Applicable" ("NA").
- Any suits, liens, judgments, litigation, violations, and administrative or court actions under appeal must be disclosed.

NOTE: Please indicate whether you believe that any of the information supplied herein is confidential and should be exempt from disclosure under the New York Freedom of Information Law: _____yes, _____no. If you checked "yes" you must identify the information you feel is confidential by placing an asterisk in front of the appropriate question number(s) and attach an additional sheet(s) explaining the basis for such claim(s).

DEFINITIONS

For purposes of this Questionnaire, the following terms shall have the following meanings:

- A. "Affiliate" shall mean any person or entity that is directly or indirectly controlled by the person or entity to which the question relates, or any person or entity that directly or indirectly controls such person or entity. For purposes of this definition, control means the power to direct the management of the firm, person or other entity, whether through ownership of shares, the right to designate the Board of Directors, contract or otherwise.
- B. "Principal" shall mean any person who is or has been, within the past five (5) years, either an owner of five percent (5%) or more of the firm's shares, one of the firm's five (5) largest shareholders or a director, officer, partner or proprietor of the Firm.
- C. "Key Person" shall mean any individual, not identified in this Questionnaire as a Principal, who participates in policy making, financial decisions, or the Firm's operations in relation to the LMDC project.

GENERAL INFORMATION

- LEGAL NAME OF FIRM (hereafter, the "Firm") _____
 DBA NAME, IF ANY _____
 MAILING ADDRESS _____ PHONE NO. (____) _____
 CITY _____ COUNTY _____ STATE _____ ZIP _____ FAX NO. (____) _____
 ACTUAL LOCATION _____
 FIRM HEADQUARTERS (if different) _____
 E-MAIL ADDRESS _____ WEB SITE _____
- CONTACT NAME FOR QUESTIONNAIRE _____ TITLE _____ PHONE NO. _____
- TYPE OF FIRM (check only one) CORPORATION PARTNERSHIP PROPRIETORSHIP JOINT VENTURE LLC LLP
- HOW MANY YEARS HAS THE FIRM BEEN IN BUSINESS? _____ UNDER THE SAME NAME? _____ FORMER NAME(S): _____
- 4a. WAS THE FIRM PURCHASED AS AN EXISTING BUSINESS BY ITS PRESENT OWNER(S) NO YES (IF YES PROVIDE INFORMATION)
 DATE PURCHASED ___/___/___ PREVIOUS OWNER(S) NAME(S): _____
- WHAT IS THE FIRM'S BONDING RANGE? \$ _____ SINGLE PROJECT \$ _____ AGGREGATE (ALL PROJECTS)
- ARE YOU CERTIFIED MBE _____ WBE _____ IF SO, BY WHOM? _____

OWNERSHIP, MANAGEMENT, AFFILIATION

7. **Principals:** Identify each person who is, or has been within the past five (5) years, an owner of five percent (5.0%) or more of the Firm's shares, or one of the five (5) largest shareholders or a director, an officer, a partner or a proprietor. Fill in name, % owned, office held and indicate by Y or N whether the individual is a director, officer, partner or Key Person:

FIRST NAME	MI	LAST NAME	DATE OF BIRTH	% OWNED	DIRECTOR (Y OR N)	OFFICER (Y OR N)	TITLE	PARTNER (Y OR N)	KEY PERSON (Y OR N)

8. **Key Persons:** Identify any individual, not listed in your answers to question 7 and identified as a Principal, who participates in policy making, financial decisions or the Firm's operations in relation to the LMDC project:

FIRST NAME	MI	LAST NAME	DATE OF BIRTH	TITLE

9. **Ownership of Other Firms:** Identify any other firms in which, now or in the past five (5) years, the Firm or any Principals or Key Persons, either owned or owns five percent (5.0%) or more of the shares of, or was or is one of the five (5) largest shareholders, a director, officer, partner or proprietor of such other firm:

FEDERAL ID NO.	% OWNED	FIRM/COMPANY NAME	FIRM/COMPANY ADDRESS

10. **Affiliates:** Identify any Affiliate not listed in your answers to question 9.

FEDERAL ID NO.	COMPANY NAME	ADDRESS

11. Identify the name and types of any professional or occupational license(s) (e.g., attorney, CPA, architect, engineer, securities, insurance, etc.) ever held by the Firm, Principal or Key Person and provide the information below.

TYPE OF LICENSE	LICENSING AUTHORITY	INDIVIDUAL NAMED ON LICENSE	LICENSE NUMBER	DATE HELD FROM (MO/YR TO MO/YR)

12. Are any persons identified in your answers to questions 7, 8, or 10:

- (a) Present or past employees of the LMDC No _____ Yes _____
- (b) Related by kinship or marriages to any present or past employees of the LMDC? No _____ Yes _____

If you answered "yes" to questions 12(a) or 12(b), provide name(s) of such individual(s) and indicate his or her relationship to the current/former LMDC employee.

FINANCIAL INFORMATION

13. Attach a copy of the Firm's most recent audited annual financial statement, include (if any) the auditor's report and accompanying footnotes.

14. For the purpose of this contract, is any other person or entity guaranteeing the performance of, or otherwise providing financial assistance to, your Firm? If so, describe the form of assistance and list the name(s) and federal tax identification number(s) ("TIN") of each person or entity:

FORM OF ASSISTANCE	INDIVIDUAL	COMPANY NAME	FEDERAL TIN	ADDRESS

OTHER INFORMATION

15. For the Firm or any individual, firm or Affiliate identified in questions 7 through 10 above; (a) list and describe all judgments, liens or claims over \$25,000 filed against the Firm, individual, firm or Affiliate and remaining undischarged or unsatisfied for more than ninety (90) days; and (b) list and describe all liquidated damages assessed. Also list any litigation currently pending against the Firm, individual, firm, or Affiliate, if the judgment sought relates to the type of work to be performed for the LMDC, or could have a material adverse financial impact on the Firm, individual, firm or Affiliate.

INDIVIDUAL, FIRM OR AFFILIATE	LIENS, CLAIMS, LITIGATION INDEX/DOCKET NO.	LIQUIDATED DAMAGES

16. Within the past five (5) years has the Firm, Principal, Key Person, or Affiliate been the subject of any of the following (respond to each question and describe in detail the circumstances of each affirmative answer; attach additional pages if necessary):
- (a) a judgment of conviction for any business-related conduct constituting a crime under state or Federal law? No_____ Yes_____
 - (b) a criminal investigation or indictment for any business-related conduct constituting a crime under state or Federal law? No_____ Yes_____
 - (c) a grant of immunity for any business-related conduct constituting a crime under state or Federal law? No_____ Yes_____
 - (d) any felony or misdemeanor charges pending that were filed either before or during their employment or affiliation with the Firm? No_____ Yes_____
 - (e) a Federal or state suspension or debarment? No_____ Yes_____
 - (f) a finding of non-responsibility by any government agency? No_____ Yes_____
 - (g) a denial or revocation of prequalification? No_____ Yes_____
 - (h) a voluntary exclusion from bidding/contracting agreement? No_____ Yes_____
 - (i) any administrative or civil action seeking specific performance or restitution on any public works contract except any disputed work proceeding? No_____ Yes_____
 - (j) an OSHA Citation and Notification of Penalty containing a violation classified as serious? No_____ Yes_____
 - (k) an OSHA Citation and Notification of Penalty containing a violation classified as willful? No_____ Yes_____
 - (l) a prevailing wage or supplement payment violation? No_____ Yes_____
 - (m) a state labor law violation deemed willful? No_____ Yes_____
 - (n) any other federal or state citations, notices, violation orders, pending administrative hearings or proceedings or determinations of a violation of any labor law or regulation? No_____ Yes_____
 - (o) any criminal investigation, felony indictment or conviction concerning formation of, or any business association with, any allegedly false or fraudulent women's, minority or disadvantaged business enterprise? No_____ Yes_____
 - (p) any denial, decertification, revocation or forfeiture of Women's Business Enterprise, Minority Business Enterprise or Disadvantaged Business Enterprise status? No_____ Yes_____
 - (q) rejection of a low bid on a local, state or federal contract for failure to meet statutory affirmative action or M/WBE requirements? No_____ Yes_____
 - (r) consent order with the NYS Department of Environmental Conservation, or a federal, state or local government enforcement determination involving a violation of federal or state environmental laws? No_____ Yes_____
 - (s) any citations, notices, violation orders, pending administrative hearings or proceedings or determinations for violations of:
 - Federal, state or local health laws, rules or regulations? No_____ Yes_____
 - Federal, state or local environmental laws, rules or regulations? No_____ Yes_____
 - unemployment insurance or workers compensation coverage or claim requirements? No_____ Yes_____
 - ERISA (Employee Retirement Income Security Act)? No_____ Yes_____
 - Federal, state or local human rights laws? No_____ Yes_____
 - Federal or state security laws? No_____ Yes_____
 - a request to withdraw a bid submitted to a public owner or any claim of an error on a bid submitted to a public owner? No_____ Yes_____
 - (t) any bankruptcy or reorganization proceeding? No_____ Yes_____
 - (u) any suspension or revocation of any business or professional license, certificates or certifications? No_____ Yes_____
 - (v) a denial of application an for a professional or trade license? No_____ Yes_____

17. Within the past five (5) years has the Firm, Principal, or Key Person (respond to each question and detail the circumstances of each affirmative answer; attach additional pages if necessary):

- (a) filed or submitted to any government agency, employee or representative any document that the Firm, Affiliate, Principal or Key Person knew to contain a false statement or false information? No___ Yes___
- (b) falsified any business record? No___ Yes___
- (c) given or offered to give money or any thing of value or any benefit to any labor official or public servant with intent to influence that person with respect to his or her official acts, duties or decisions as a labor official or public servant? No___ Yes___
- (d) given or offered to give money or any thing of value or any benefit to any official or employee of a business with intent to induce that person or employee to engage in unethical or illegal business practices? No___ Yes___
- (e) agreed with any person to submit a proposal, price or bid below prevailing market rate? No___ Yes___
- (f) been sued or paid a settlement of claim related to the performance of professional services? No___ Yes___

18. Within the past five (5) years, has the Firm ever:

- (a) failed to file any required tax returns or failed to pay any applicable Federal, state or New York City taxes, or other assessed New York City charges including, but not limited to, water and sewer charges? No___ Yes___
- (b) had, or does it presently have, any delinquent Federal, state or New York City taxes outstanding? No___ Yes___

If you answered "yes" to questions 18(a) or 18(b), supply details.

19. Provide any supplemental information the Firm desires to have considered as part of its response to this Questionnaire.

CERTIFICATION

The undersigned recognizes that this Questionnaire is submitted for the express purpose of inducing the LMDC to award a contract or approve a subcontract; acknowledges that the LMDC may in its discretion, by means which it may choose, determine the truth and accuracy of all statements made herein; authorizes the LMDC, the United States Department of Housing and Urban Development, or their agents to contact any entity named in this Questionnaire and any attachments for the purposes of verifying the information supplied; acknowledges that the intentional submission of false or misleading information may constitute a felony under New York Penal Law Section 210.40 or a misdemeanor under Penal Law Section 210.35 or Section 210.45, and may also be punishable by a fine of up to \$10,000 or imprisonment of up to five years under 18 U.S.C. Section 1001; and represents that the information submitted in this Questionnaire and any attached pages is true, accurate and complete.

Sworn to before me this _____ day of _____, _____ .

Signature of Officer

Notary Public

Title

Commission Expiration Date

COMPANY NAME: ADDRESS: TELEPHONE NUMBER: FEDERAL ID NO.: CHECK IF NOT-FOR-PROFIT: _____				PROJECT NAME: PROJECT LOCATION: COUNTY: _____ ZIP: _____ REPORTING PERIOD: Month Year				CONTRACTOR START DATE: _____ ESTIMATED COMPLETION DATE: PERCENT OF JOB COMPLETED (for reporting period): CONTRACT NO.: CONTRACT AMOUNT: \$ _____				COMPANY EMPLOYMENT DATA							
				A. TOTAL COMPANY EMPLOYEES (at the <i>Beginning of project</i>) Male Female _____		B. TOTAL COMPANY EMPLOYEES (at <i>the end of project</i>) Male Female _____		C. NET INCREASE (applies only to changes, if any, in Company's Employee makeup at the end of project)											
								TOTAL MALE		TOTAL FEMALE									
								C1. EMPLOY- EES	C2. OCCUPA- TIONAL CODES/# OF EMPLOYEES	C3. EMPLOY- EES	C4. OCCUPA- TIONAL CODES/# OF EMPLOYEES								
TOTAL TRAINEES																			
GRAND TOTAL																			

CERTIFICATION: I, _____ (Print Name), the _____ (Title), do certify that (i) I have read this Monthly Employment Utilization Report and (ii) to the best of my knowledge, information and belief the information contained herein is complete and accurate.

SIGNATURE _____ DATE _____

MONTHLY EMPLOYMENT UTILIZATION REPORT
Instructions for Completion

The Monthly Employment Utilization Report ("MEUR") is to be completed by each subject contractor (both Prime and Sub) and signed by a responsible official of the company. The reports are to be filed by the 5th day of each month during the term of the project, and they shall include the total work-hours for each employee classification in each trade in the covered area for the monthly reporting period. The prime contractor is responsible for submitting its subcontractors report, along with its own. Additional copies of this form may be obtained from Lower Manhattan Development Corp. ("LMDC").

Minority: Includes Blacks, Hispanics, Native Americans, Alaskan Natives, and Asian and Pacific Islanders, both men and women.

1. Worker Hours of Employment (a-e):
 - a) All Worker Hours: The total number of male hours, the total number of female hours, and the total of both male and female hours worked under each classification.
 - b) through e) Minority Worker Hours The total number of male hours and the total number of female hours worked by each specified group of minority worker in each classification.

2. Number of Workers (a-b):
 - a) All Workers Total number of males and total number of females working in each classification of each trade in the contractor's aggregate workforce during reporting period.
 - b) Minority Workers Total number of male minorities and total number of female minorities working in each classification, in each trade in the contractor's aggregate workforce during reporting period.

3. Construction Trade: Only those construction crafts which contractor employs in the covered area.
Construction Trades include: Field Office Staff (Professionals and Office/Clerical), Laborers, Equipment Operators, Surveyors, Truck Drivers, Iron Workers, Carpenters, Cement Masons, Painters, Electricians, Plumbers and Other.

Note: LMDC may demand payroll records to substantiate work hours listed on the Monthly Employment Utilization Report, if discrepancies should arise.

OCCUPATIONAL CODES

Officials/Administrators	100
Professionals	110
Technicians	120
Sales Workers	130
Office & Clerical	140
Craft Workers	150
Operatives	160
Laborers	170
Service Workers	180

FORWARD TO THE RESPONSIBLE LMDC PROJECT MANAGER

Lower Manhattan Development Corp.
One Liberty Plaza, 20th Floor
New York, NY 10006
P (212) 962-2300
F (212) 962-2431

SCHEDULE C, Attachment C-2

MBE/WBE COMPLIANCE REPORT
CONSTRUCTION
 (to be filed monthly)

PROJECT SPONSOR/DEVELOPER: _____

LMDC AA REPRESENTATIVE: **BEVERLY BOBB**

ADDRESS: _____

PROJECT NAME: _____

PROJECT START DATE: _____ PERCENT COMPLETE: _____

TELEPHONE: _____

ACTUAL COMPLETION: _____

CONTACT PERSON: _____

Attach M/WBE contract documentation, i.e. executed contracts, signed purchase orders or canceled checks. This report should be completed by an officer of the reporting company, and forwarded to the LMDC AA Representative with the appropriate documentation.

PRIME CONTRACTOR (Name, Address, Contact Person and Phone)	TYPE OF CONTRACT (Trade/Service)	CONTRACT AMOUNT	SUB CONTRACTOR NO. & AMT.	MBE/WBE SUBCONTRACTOR (Name, Address, Contact Person and Phone)	SCOPE OF SERVICES	AMOUNT CONTRACTED TO MBE/WBE

CERTIFICATION:
 I, _____ (Print Name), the _____ (Title), do certify that (i) I have read this Compliance Report and (ii) to the best of my knowledge, information and belief the information contained herein is complete and accurate.

SIGNATURE _____ DATE _____

FORWARD TO THE RESPONSIBLE LMDC PROJECT MANAGER

Lower Manhattan Development Corp.
One Liberty Plaza, 20th Floor P (212) 962-2300
New York, NY 10006 F (212) 962-2431

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

- (1)** The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2)** The classification is utilized in the area by the construction industry; and
- (3)** The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where

appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part

of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section I(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section I(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under 29 CFR 5.5 (a)(3)(i) and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll

period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the

journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 of this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration . . . makes, utters or publishes any statement knowing the same to be false . . . shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable only where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subpara-

graph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in sub paragraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable only where the amount of the prime contract exceeds \$100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, 40 USC 3701 et seq.

(3) The Contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

GENERAL DECISION: **NY20070003** 02/16/2007 NY3

Date: February 16, 2007

General Decision Number: **NY20070003** 02/16/2007

Superseded General Decision Number: NY20030003

State: New York

Construction Types: Building, Heavy, Highway and Residential

Counties: Bronx, Kings, New York, Queens and Richmond
Counties in New York.

BUILDING & RESIDENTIAL CONSTRUCTION PROJECTS (includes single
family homes and apartments up to and including 4 stories),
HEAVY AND HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	02/09/2007
1	02/16/2007

ASBE0012-001 01/01/2007

	Rates	Fringes
Asbestos Workers/Insulator includes application of all insulating materials, protective coverings, coatings and finishing to all types of mechanical systems.....	\$ 44.41	25.67
Hazardous Material Handler.....	\$ 24.45	8.50

BOIL0005-001 01/01/2007

	Rates	Fringes
Boilermaker.....	\$ 44.98	28.95+a

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Thanksgiving Day, Memorial
Day, Independence Day, Labor Day and Good Friday, Friday
after Thanksgiving, Christmas Eve Day and New Year's Eve

BRNY0001-001 07/01/2006

	Rates	Fringes
Bricklayer.....	\$ 42.95	19.21
Stonemason.....	\$ 53.14	20.38

BRNY0001-002 07/01/2005

	Rates	Fringes
Pointer, cleaner and caulker.....	\$ 34.73	17.50

BRNY0003-001 01/01/2006		
	Rates	Fringes
Terrazzo Finisher.....	\$ 38.37	22.75
Terrazzo Worker.....	\$ 39.68	22.75

BRNY0004-001 01/01/2006		
	Rates	Fringes
Marble Setter.....	\$ 45.53	20.00

BRNY0020-001 01/01/2006		
	Rates	Fringes
Marble Finisher.....	\$ 37.98	20.15

BRNY0024-001 07/01/2006		
	Rates	Fringes
Bricklayer MARBLE POLISHERS.....	\$ 35.76	16.55

BRNY0052-001 12/01/2006		
	Rates	Fringes
Tile Layer.....	\$ 40.92	21.33

BRNY0088-001 12/01/2006		
	Rates	Fringes
Tile Finisher.....	\$ 33.55	17.90

CARP0001-009 07/01/2005		
	Rates	Fringes
Carpenters: Carpenters & Soft floor layers.....	\$ 40.25	30.36

CARP0740-001 07/01/2005		
	Rates	Fringes
Millwright.....	\$ 38.13	35.40

CARP1456-004 07/01/2005		

	Rates	Fringes
Dock Builder & Piledrivermen		
DOCKBUILDERS.....	\$ 40.27	29.86

 CARP1456-005 07/01/2005

	Rates	Fringes
Diver Tender.....	\$ 36.44	29.86
Diver.....	\$ 49.79	29.86

 CARP1536-001 07/01/2003

	Rates	Fringes
Carpenters:		
TIMBERMEN.....	\$ 34.47	26.05

 ELEC0003-001 05/12/2005

	Rates	Fringes
Electrician		
Electricians.....	\$ 43.00	32.84
Jobbing, and maintenance and repair work.....	\$ 24.80	12.87+a

PAID HOLIDAYS:

- a. New Years Day, Martin Luther King, Jr.'s Birthday,
 Washington's Birthday, Memorial Day, Independence Day,
 Labor Day, Columbus Day, Election Day, Thanksgiving Day,
 the day after Thanksgiving Day, and Christmas Day

 ELEC1049-001 04/02/2006

QUEENS COUNTY

	Rates	Fringes
Line Construction (Substation and Switching structures pipe type cable installation and maintenance jobs or projects; Railroad electrical distribution/transmission systems maintenance (when work is not performed by railroad employees) Overhead and Underground transmission/distribution line work. Fiber optic, telephone cable and equipment)		
Groundman.....	\$ 22.86	13.93
Heavy Equipment Operator....	\$ 30.48	13.93

Lineman and Cable Splicer...\$	38.10	13.93
Tree Trimmer.....\$	23.06	9.84

 ELEV0001-002 03/17/2006

	Rates	Fringes
Elevator Mechanic		
Elevator Constructor.....\$	43.99	18.115+a+b
Modernization and Repair....\$	35.33	17.965+a+b

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Good Friday, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

PAID VACATION: An employee who has worked less than 5 years shall receive vacation pay credit on the basis of 4% of his hourly rate for all hours worked; an employee who has worked 5 to 15 years shall receive vacation pay credit on the basis of 6% of his hourly rate for all hours worked; an employee who has worked 15 or more years shall receive vacation pay credit on the basis of 8% of his hourly rate for all hours worked.

 ENGI0014-001 07/01/2006

	Rates	Fringes
Pavement equipment operator		
Asphalt Plants.....\$	40.93	21.60+a
Asphalt roller.....\$	48.33	21.60+a
Asphalt spreader.....\$	46.03	21.60+a
Power Equipment Operator (HEAVY & HIGHWAY)		
GROUP 1.....\$	64.07	21.60+a
GROUP 2.....\$	52.89	21.60+a
GROUP 3.....\$	54.54	21.60+a
GROUP 4.....\$	53.28	21.60+a
GROUP 5.....\$	52.23	21.60+a
GROUP 6.....\$	50.15	21.60+a
GROUP 7.....\$	51.08	21.60+a
GROUP 8.....\$	49.63	21.60+a
GROUP 9.....\$	48.56	21.60+a
GROUP10.....\$	46.48	21.60+a
GROUP11.....\$	43.42	21.60+a
GROUP12.....\$	44.35	21.60+a
GROUP13.....\$	44.72	21.60
GROUP14.....\$	33.79	21.60+a
GROUP15.....\$	31.40	21.60+a
Steel erector		
Compressors, Welding Machines.....\$	33.97	21.60+a
Cranes, Hydraulic Cranes, 2 drum derricks,		

Forklifts, Boom Trucks.....	\$ 56.34	21.60+a
Three drum derricks.....	\$ 58.61	21.60+a
Utility Laborer		
Horizontal boring rig.....	\$ 47.20	21.60+a
Off shift compressors.....	\$ 39.27	21.60+a
Utility Compressors.....	\$ 31.21	21.60+a

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Tower crane

GROUP 2: Backhoes, power shovel, Hydraulic clam shells, moles and machines of a similar type

GROUP 3: Mine hoists and crane, etc. used as mine hoists

GROUP 4: Gradalls, keystones, cranes (with digging buckets), bridge cranes, trenching machines, vermeer cutter and machines of a similar nature

GROUP 5: Piledrivers, derrick boats, tunnel shovels

GROUP 6: All drills, and machines of a similar nature

GROUP 7: Back filling machines, cranes, mucking machines, dual drum pavers

GROUP 8: Mixers (concrete w/loading attachments), concrete pavers, cableways, land derricks, power house (low pressure units), concrete pumps

GROUP 9: Concrete plants, well drilling machines, stone crushers double drum hoist, power house (other than above)

GROUP 10: Concrete mixers

GROUP 11: Elevators

GROUP 12: Concrete breaking machine, Hoists (single drum), load masters, locomotive and dinkies over 10 tons

GROUP 13: Vibratory console

GROUP 14: Compressors (portable 3 or more in battery), tugger machine (caissons), well point pumps, chum drill

GROUP 15: Boilers, (high pressure, compressors (portable, single, or 2 in battery, not over 100' apart), pumps (river cofferdam and welding machines (except where arc is operated by members of local 15) push button machines, all engines irrespective of power (power pac) used to drive auxilliary equipment, air, hydraulic etc.

PREMIUMS ON CRANES (Crawler or Truck):

- 100' to 149' boom - add .50
- 150' to 249' boom - add .75
- 250' to 349' boom - add 1.00

350' to 450' boom - add 1.50

Premiums for Cranes on Steel Erection:

100' to 149' boom - add 1.75
150' to 249' boom - add 2.00
250' to 349' boom - add 2.25
350' to 450' boom - add 2.75
Tower crane - add 2.00

FOOTNOTE:

a. Paid Holidays: New Year's Day; Lincoln's Birthday; Washington's Birthday; Memorial Day; Independence Day; Labor Day; Veterans Day; Columbus Day; Election Day; Thanksgiving Day; and Christmas Day; provided the employee works one day the payroll week in which the holiday occurs.

ENGI0014-002 07/01/2006

	Rates	Fringes
Power Equipment Operator		
BUILDING & RESIDENTIAL		
GROUP 1.....	\$ 53.00	21.60+a
GROUP 2.....	\$ 56.05	21.60+a
GROUP 3.....	\$ 51.24	21.60+a
GROUP 4.....	\$ 46.73	21.60+a
GROUP 5.....	\$ 35.32	21.60+a

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Double drum

GROUP 2: Stone derrick, cranes, hydraulic cranes, boom trucks

GROUP 3: 4 pole Hoist, Single Drum Hoists

GROUP 4: Fork lift, house cars, plaster (platform machine), plaster bucket, concrete pump and all other equipment used for hoisting material

GROUP 5: Compressors, welding machines (cutting concrete work), paint spraying, sand blasting, pumps (with the exclusion of concrete pumps), house car (settlement basis only), all engines irrespective of power (power pac) used to drive auxiliary equipment, air, hydraulic, etc., boilers

Premiums for Cranes:

100'-149' boom - add 1.75
150'-249' boom - add 2.00
250'-349' boom - add 2.25
350'-450' boom - add 2.75
Tower cranes add 2.00

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Lincoln's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day,

Columbus Day, Election Day, Thanksgiving Day, and Christmas Day, provided the employee works one day in the payroll week in which the holiday occurs

 IRON0040-002 07/01/2006

BRONX, NEW YORK, RICHMOND

	Rates	Fringes
Ironworker, Structural.....	\$ 37.90	45.63

 IRON0046-003 07/01/2005

	Rates	Fringes
Ironworker METALLIC LATHERS.....	\$ 40.55	27.37

 * IRON0197-001 01/01/2007

	Rates	Fringes
Ironworker STONE DERRICKMAN.....	\$ 38.36	34.73

 IRON0361-002 07/01/2006

KINGS, QUEENS

	Rates	Fringes
Ironworkers: (STRUCTURAL).....	\$ 37.90	45.63

 IRON0580-001 07/01/2006

	Rates	Fringes
Ironworker, Ornamental.....	\$ 38.60	34.90

 LABO0006-001 07/01/2003

	Rates	Fringes
Laborers: BUILDING CONSTRUCTION CEMENT AND CONCRETE WORKERS.....	\$ 31.50	15.27

 LABO0029-001 07/01/2001

	Rates	Fringes
Laborers: Heavy Blasters (hydraulic trac		

drill).....	\$ 32.08	16.70
Blasters.....	\$ 31.53	16.70
Hydraulic Trac Drill.....	\$ 28.38	16.70
Jackhammers, Chippers, Spaders, Concrete Breakers, All Other Pneumatic Tools, Walk Behind Self-Propelled Hydraulic Asphalt and Concrete Breaker.....	\$ 27.14	16.70
Powder Carriers.....	\$ 24.50	16.70
Wagon; Airtrac; Quarry Bar Drill Runners.....	\$ 27.83	16.70

LABO0078-001 12/01/2003

	Rates	Fringes
Asbestos Worker ASBESTOS (Removal, Abatement, Encapsulation or Decontamination of asbestos); LEAD; & HAZARDOUS WASTE LABORERS (Hazardous Waste, Hazardous Materials, Biochemical and Mold Remediation, HVAC, Duct Cleaning, Re-spray Fireproofing, etc.....	\$ 25.50	6.81

LABO0079-001 01/01/2005

	Rates	Fringes
Laborers Building Construction Mason Tenders.....	\$ 28.00	16.39
Demolition Laborers Tier A.....	\$ 28.00	14.99
Tier B.....	\$ 17.70	8.95

CLASSIFICATIONS

TIER A: Responsible for the removal of all interior partitions and structural partitions that can consist of sheet rock, block or masonry. Also, all structural slab openings for ducts, mechanical, shafts, elevators, slab openings and exterior walls where the building is not being completely demolished.

TIER B: Responsible for shoveling of debris into containers, pushing containers from the inside to the outside of the building.

LABO0147-001 07/01/2003

Rates	Fringes
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Laborers:

LABORERS.....\$ 28.86 30.51

FREE AIR TUNNEL WORKERS Tunnel Workers (including Maintenance Men, Inside Muck Lock Tenders, Pump Men, Electricians, Cement Finishers, Caulkers, Hydraulic Men, Shield Men, Monorail Operators, Motor Men, Conveyor Men, Powder Carriers, Pan Men, Riggers, Chuck Tenders, Track Men Painters, Nippers, Brakemen, Cable Men, Hose Men, Grout Men, Gravel Men, Form Workers, Concrete Workers, Tunnel Laborers, Mole Nipper (one (1) Mole Sipper per Working Shaft per Shift for up to and including Two (2) Moles)

LABO0731-001 07/01/2005

Rates Fringes

Laborers:

Building, Heavy and Residential

UNSKILLED.....\$ 33.59 18.69
UTILITY LABORER.....\$ 33.44 18.69

Paid Holidays: Labor Day and Thanksgiving Day

LABO1010-001 07/01/2001

Rates Fringes

Laborers:

HIGHWAY CONSTRUCTION

Fence Installer & Repairer.\$ 28.84 15.55+a
FORMSETTERS.....\$ 32.04 15.55+a
LABORERS.....\$ 28.94 15.55+a
Landscape Planting & Maintenance.....\$ 28.84 15.55+a
Maintenance Safety Surface.\$ 28.44 15.55+a
Slurry/Sealcoater/Play Equipment Installer.....\$ 28.69 15.55+a
Small Equipment Operator (Not Operating Engineer).....\$ 28.94 15.55+a
Small Power Tools Operator.\$ 28.44 15.55+a

FOOTNOTES:

a. PAID HOLIDAYS: Memorial Day, Fourth of July, Labor Day, Columbus Day, Election Day and Thanksgiving Day, provided the employee has worked one (1) day in the calendar week in which the said holiday occurs.

LABO1018-001 07/01/2001

Rates Fringes

Laborers:

Asphalt Rakers.....	\$ 32.36	15.55+a
Asphalt Tampers.....	\$ 29.92	15.55+a
Landscape Planting & Maintenance Fence Installer/Maintenance.....	\$ 29.81	15.55+a
Line Striping Installers...	\$ 29.56	15.55+a
Play Equipment/Safety Surface Installer.....	\$ 29.31	15.55+a
Screedman/Micropaver.....	\$ 32.73	15.55+a
Shoveler, General Laborers/ All other incidental work.....	\$ 29.81	15.55+a
Slurry/Sealcoater.....	\$ 29.31	15.55+a
Small Equipment Operator...	\$ 29.56	15.55+a

FOOTNOTE:

a. Paid Holidays: Memorial Day, Independence Day, Labor Day, Columbus Day, Election Day, Veterans Day, and Thanksgiving Day

PAIN0009-001 05/01/2006

	Rates	Fringes
Glazier.....	\$ 35.40	25.90
Painters:		
Painters, Drywall Finishers, Lead Abatement Worker (Bridge Work).....	\$ 33.50	18.85
Spray, Scaffold and Sandblasting.....	\$ 36.50	18.85

PAIN0806-001 10/01/2006

	Rates	Fringes
Painters:		
Structural steel and Bridge.	\$ 43.00	26.47

PAIN1974-001 07/07/2005

	Rates	Fringes
Painters:		
Drywall Tapers/Pointers.....	\$ 35.32	16.42

PLAS0260-001 07/01/1999

BRONX, NEW YORK AND RICHMOND COUNTIES:

	Rates	Fringes
Plasterer.....	\$ 27.91	15.55

PLAS0260-002 07/01/1999

KINGS AND QUEENS COUNTIES

	Rates	Fringes
Plasterer.....	\$ 27.91	15.16

 PLAS0530-001 02/04/2004

	Rates	Fringes
Plasterer		
DRYWALL PLASTERERS.....	\$ 31.00	15.55

 PLAS0780-001 07/01/2006

	Rates	Fringes
Cement Mason.....	\$ 41.00	23.10

 PLUM0001-001 07/01/2006

	Rates	Fringes
Plumber		
JOBING AND ALTERATIONS		
Any repair and/or		
replacement of the		
present plumbing system		
that does not change the		
existing roughing.....	\$ 20.97	7.43
PLUMBERS:.....	\$ 45.51	28.90

 PLUM0638-001 07/05/2006

	Rates	Fringes
Plumber		
SERVICE FITTERS.....	\$ 26.30	2.55
SPRINKLER FITTERS,		
STEAMFITTERS.....	\$ 43.82	32.72

Service Fitter work shall consist of all repair, service and maintenance work on domestic, commercial and industrial refrigeration, air conditioning and air cooling, stoker and oil burner apparatus and heating apparatus etc., including but not exclusively the charging, evacuation, leak testing and assembling for all machines for domestic, commercial and industrial refrigeration, air conditioning and heating apparatus. Also, work shall include adjusting, including capacity adjustments, checking and repairing or replacement of all controls and start up of all machines and repairing all defects that may develop on any system for domestic, commercial and industrial refrigeration and all air conditioning, air cooling, stoker and oil burner apparatus and heating apparatus regardless of size or type.

 ROOF0008-003 04/01/2006

	Rates	Fringes
Roofer (including Built Up, Composition and Single Ply).....	\$ 33.08	22.47

SHEE0028-002 08/03/2006

	Rates	Fringes
Sheet metal worker.....	\$ 41.55	32.73

TEAM0282-001 07/01/2005

	Rates	Fringes
Truck drivers:		
TRUCK DRIVERS:		
Asphalt.....	\$ 31.235	23.6025+a+b
Euclids & Turnapulls.....	\$ 31.80	23.6025+a+b
High Rise.....	\$ 32.31	23.6525+a+b

FOOTNOTES:

PAID HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Election Day, Veterans' Day (Armistice Day), Thanksgiving Day and Christmas Day. Employees working two (2) days in the calendar week in which a holiday falls are to be paid for such holiday, provided that they shape each remaining workday during such calendar week.

b. VACATION: For each 15 days worked within the contract year an employee will receive one day's vacation with pay with a maximum vacation of 3 weeks per year.

TEAM0813-001 12/01/1998

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 19.49	3.61+a
GROUP 2.....	\$ 19.76	3.61+a
GROUP 3.....	\$ 19.90	3.61+a
GROUP 4.....	\$ 20.23	3.61+a
GROUP 5.....	\$ 20.40	3.61+a
GROUP 6.....	\$ 21.29	3.61+a
GROUP 7.....	\$ 22.40	3.61+a
GROUP 8.....	\$ 19.90	3.61+a

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Martin Luther King, Jr.'s Birthday, Presidents' Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Thanksgiving Day, Christmas Day, Employee's Birthday, Two (2) Personal Days, and any holiday or day of mourning proclaimed as such by the State or

Federal Government.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Closed body trucks with self contained loading unit up to and including 22 yard capacity

GROUP 2: Open trucks, rack body or trucks with no self contained mechanical loading device, up to 22 yard capacity. One-container tractor hoist

GROUP 3: 10 wheel, open trucks, container loaders, dino-master, over-cab loaders, rack body trucks, or any trucks 22 yards to and including 25 yards capacity

GROUP 4: Rubbish and garbage trucks, 26 yards to and including 31 yards

GROUP 5: Single axle working non-compactor containers up to 15 yards capacity on rubbish and garbage removal

GROUP 6: Roll-off trucks up to and including 42 yard capacity

GROUP 7: Roll-off truck with more than 42 yard capacity or any tractor trailer trucks

GROUP 8: One-container tractor hoist on construction and alteration debris removal

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on

- a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

SECTION 00700 - GENERAL CONDITIONS

FORM OF GENERAL CONDITIONS

1.01 AIA Document A201, General Conditions of the Contract for Construction, 1997 Edition, is the General Conditions between the Owner and Contractor. A copy of the General Conditions of the Contract for Construction can be obtained from the Architect at the Contractor's request.

1.02 SUPPLEMENTARY CONDITIONS

A. Refer to Document 00800 for amendments to these General Conditions.

END OF SECTION

SECTION 00800 - SUPPLEMENTARY CONDITIONS**INTENT**

- 1.01 These Supplementary Conditions amend and supplement the General Conditions defined in Document 00700 and other provisions of the Contract Documents as indicated below. All provisions that are not so amended or supplemented remain in full force and effect.
- 1.02 The terms used in these Supplementary Conditions which are defined in the General Conditions have the meanings assigned to them in the General Conditions.
- 1.03 MODIFICATIONS TO AIA A201
- 1.04 ARTICLE 3.6 - TAXES
- A. Add the following subparagraph:
1. 3.6.2: The Owner will obtain an exemption certificate for the Contractor for taxes on certain Products or items, for purchasing Products or items for the Work.
- 1.05 ARTICLE 11 - INSURANCE AND BONDS
- A. Add the following subparagraph:
1. 11.1.4: Contractor's General Liability shall include, separately, the Owner and the Architect as additional Insureds. These certificates shall be on file with the Owner and the Architect, each as an individual certificate holder, prior to the commencement of the Work.
 - a. Provide a 100-percent Performance Bond on AIA A312.
 - b. Provide a 100-percent Payment Bond on AIA A311.
 - c. Deliver bonds within 3 days after execution of the Contract.

END OF SECTION

SECTION 01100 - SPECIFIC REQUIREMENTS**PART 1 GENERAL****1.01 RELATED DOCUMENTS**

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

1.02 PROJECT IDENTIFICATION

- A. Project Title:
 - Eldridge Street Project
 - Interior Restoration
- B. Location:
 - 12 Eldridge Street
 - New York, New York 10002
- C. All references to the term Owner throughout these Specifications shall mean:
 - The Eldridge Street Project
- D. Construction Manager:
 - 1. Terry Higgins has been engaged as Construction Manager for this Project to serve as an advisor to the Owner and to provide assistance in administering the Contract for Construction between the Owner and each Contractor, according to a separate contract between Owner and Construction Manager.

1.03 ABBREVIATED WRITTEN SUMMARY

- A. The Drawings and Specifications are intended to provide sufficient information regarding scope and quality of work required. The Contractor shall provide all materials and labor that may reasonably be assumed necessary to provide a complete and finished project, whether or not these items are specifically indicated in the Contract Documents.
- B. Briefly, and without force and effect on the Contract Documents, the general scope of work may be summarized as follows:
 - 1. The work consists of furnishing all plant, labor, materials, equipment, tools, and services of performing all operations required in connection with interior work including partitions systems, interior finishes, wood windows, wood doors, hardware and accessories, wood door restoration, miscellaneous finish carpentry, cabinets and shelving, woodwork restoration, architectural metalwork, furnishings and accessories.

1.04 ESTIMATED QUANTITIES

- A. Some sections of these Specifications may include estimated quantities for the work described. these quantities are offered only as a general guideline for the express purpose of assisting the Contractor in understanding general scope of work involved. Quantities are not definitive, there is no guarantee of their accuracy, and their inclusion herein DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO VERIFY ALL QUANTITIES PRIOR TO BIDDING. It is understood that there are a variety of methods for producing quantity take-offs, and the Contractor shall develop a bid based upon their own method of calculating quantity take-offs. NO adjustments in the accepted bid will be made on the basis of variations in the quantities included herein and the actual work.

1.05 HISTORIC PRESERVATION

- A. The Eldridge Street Synagogue is a New York City Historic Landmark, is listed on the National Register of Historic Places and is a National Landmark, comprising important architectural and historical attributes. Accordingly, the Contractor shall take all measures required, and as herein specified, to protect and preserve the site throughout the course of this work. This requirement pertains to the specified work itself and to related aspects of the work, such as access, temporary facilities, fire safety, security, protection of adjacent materials and construction, and salvage.
- B. All care must be also taken to protect and preserve the original materials and historic fabric of this building. Any historical or archaeological artifacts discovered in the course of the work shall remain property of the Owner.
- C. The Contractor shall recognize that all aspects and elements of the property may potentially contribute to the historic significance of the building, and the Contractor shall not be judge of relative significance of any feature, nor the impact of any or all proposed alterations. This judgment is entirely the responsibility of the Owner and Architect. All care shall be taken to perform all the work of this project following the best practice and to the highest standards of historical restoration.

1.06 MISCELLANEOUS PROVISIONS

- A. The project Owner, The Eldridge Street Project, is a not-for-profit organization and is exempt from sales and compensating use taxes of the State of New York and of any city or county in the State of New York for materials that will become an integral component part of the Project. The Contractor acknowledges that the Contract amount stated herein has been based upon the appropriate rules and regulations pertaining to the Sales Tax requirements. No reimbursements will be made for the sales tax payment in connection with the construction of the project.

1.07 SUBMITTALS

- A. Make all submittals in accordance with Section 01330 - Submittals.
- B. Schedule of Values and Construction Schedule at least seven (7) days prior to the Contractor's anticipated start date. This information shall form the basis of all Contractor payment requisitions.
- C. Coordinate submittals with proper sequence of the work to avoid delaying progress of work.
- D. Check submittals for accuracy, completeness, dimensions, compliance with the requirements and intent of the Specifications, and other similar pertinent information.
- E. For samples, provide units identical with final condition of proposed materials or products for the work. Include an appropriate range of samples (generally not fewer than three (3) units) where unavoidable variations must be expected. Provide full set of optional samples where Architect's selection is required.
- F. For product data, include manufacturer's standard printed recommendations for application and use.
- G. Refer to Section 01330 for additional specific requirements for submittals.

1.09 CONTRACTOR'S PERSONNEL

- A. Qualification of personnel:
 - 1. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary trades and familiar with the specialized requirements and methods needed for the proper performance of the work of this Contract. Project Foreman shall be on site daily during the course of the work, shall speak the English language fluently, and shall have a

minimum of five (5) years experience working on similar structures. All workers directly involved in this project shall have a minimum of three (3) years experience working on similar structures.

2. Additional specific qualifications for certain work, if any, are defined in individual sections.
3. In acceptance or rejection of the work, no allowance will be made for lack of skill on the part of the workers.
4. Comply with all the Lower Manhattan Development Corporation MBE/WBE requirements.

1.10 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 1995 16-division format and CSI/CSC's "MasterFormat" numbering system.

1.11 CONTRACTOR'S SUBCONTRACTORS

- A. Proposed subcontractors must be identified on the Bid Form. The Owner reserves the right to review and approve/disapprove any subcontractors.

1.12 CONTRACTOR'S USE OF PREMISES

- A. The Contractor acknowledges that the building is an Orthodox Jewish Synagogue owned by a New York religious corporation. Neither the Contractor nor his agents, subcontractors, or workers shall do anything in performing the work that can be interpreted to be inconsistent which the use and reputation of the Synagogue as an Orthodox house of worship. Food will not be brought into the Synagogue unless it be kosher. No smoking will be allowed in the Synagogue. All male workers must cover their heads while in the Synagogue.
 1. Work will not be performed inside the Building or on the Building Site on the following days: the first and second days of Rosh Hashanah, Yom Kippur, the first two days of Sukkot, Shemini Atzereth, Simchat Torah, the first day of Chanukah, Purim, the first and last two days of Passover, the first and second day of Shavuoth, Tisha B'Av, and any Sabbath. The foregoing days start one hour before sunset on the day prior to the holiday.
 2. Jewish Holidays for Calendar Years 2006 / 2007 are as follows:

a. Tisha B'Av	July 24, 2007
b. Rosh Hashana	Sept 13, 2007
c. Yom Kippur	Sept 22, 2007
d. Sukkot	Sept 27-Oct 5, 2007
e. Shemini Atzereth	Oct 4, 2007
f. Simchat Torah	Oct 5, 2007
g. Chanukah	Dec 5, 2007
h. Purim	March 21, 2008
i. Passover	Apr 3, 2007
j. Shavuoth	May 23, 2007
- B. Contractor shall not have exclusive possession of the site. There will be multiple contracts under construction during the work of this contract. All work must be coordinated with the work of other contracts.
- C. The building will be in full-time normal use during the period of construction. All work shall be performed in such a manner as not to interfere with the functions and business of the Owner insofar as possible.
 1. The Owner has the right to temporarily stop or suspend work at any time throughout the duration of this project, with or without advance notice, when the work of this project specifically interferes with operations of the Owner, or the Owner's tenants', business.

Such temporary stoppages or suspensions shall be provided for by the Contractor at no additional cost to the Owner.

- D. Contractor shall at all times conduct operations in a manner that ensures the safety of the building and its occupants. Contractor shall not obstruct passage to or from any part of the existing building in operation except by permission of the Owner. Contractor shall pay particular attention to maintaining clear access to all required exits.
- E. Personnel in the employ of the Contractor, or any of his Subcontractors, are not permitted to use the building or its facilities unless specifically directed by the Architect or the Owner.
- F. Workers creating nuisances directed towards occupants or visitors to the building shall be subject to dismissal by the Contractor at the order of the Architect or Owner.
- G. Keep all areas clean and unobstructed. All areas are to be kept broom clean daily. Maintain and store all tools and equipment in a neat and orderly manner.
- H. A time schedule of work shall be submitted to and approved by the Owner and the Architect before the work commences.
- I. The Contractor shall provide a schedule of the work anticipated for the following week by the previous Thursday.

1.13 ACCESS TO BUILDING AND SITE

- A. Access to site for removal and delivery of the benches shall be made only from approved locations. Contractor shall maintain public access streets and sidewalks free of dirt and debris resulting from deliveries, and shall obtain all required permits for use of public thoroughfares.
- B. Contractor shall provide and maintain all scaffolding, ladders, ramps, stairs, hoists, chutes, derricks, etc. as required for proper access and execution of the work. All such equipment and apparatus and their construction and arrangement shall conform to the requirements of applicable regulations.

1.14 MAINTENANCE OF SITE AND ADJOINING PROPERTY

- A. Maintain the site after order to start work, through Final Acceptance.
- B. Contractor shall be responsible for the safety and well-being of the project site and adjoining property, including structures; sidewalks, paving, curbs and roadways; landscaping and fences; waste lines, water, gas electric, telephone, cable, and other utilities and their related mains, pipes, conduits, etc. Contractor shall at his own expense, except as otherwise specified, protect same and maintain them in as good a condition as that existing at the start of the work. Contractor shall be responsible for any necessary repairs, replacements, or cleaning arising from the work and related operations.
- C. All pavements, sidewalks, roads, and approaches to fire hydrants shall be kept clear at all times.
- D. Upon completion of the work, Contractor shall thoroughly clean up all areas affected by the work, directly and indirectly, as required to restore these areas to the state of cleanliness existing at the start of this project. In general, cleaning shall include the removal of rubbish and construction debris, stains, smears, foot tracks, dust, and the like.

1.15 SITE SECURITY

- A. Contractor shall be responsible for maintaining security during working hours to prevent loss of property, illegal entry, or any other activity that may affect the building and its contents. Contractor shall take every reasonable precaution to prevent any such occurrence during non-

working hours.

1.16 FIRE SAFETY PRECAUTIONS

- A. Smoking is not allowed in or on the building.
- B. Open flames and heat-generating equipment will not be allowed on the building. Such equipment shall be used only in locations approved by the Architect, at ground level, and, as required, within enclosures designated specifically for fire safety and containment.
- C. The Contractor shall provide and maintain, in good working order, at least two (2) class A fire extinguishers, in locations providing ready access to the work force. Other Class type extinguishers shall be provided in like number, as required by the work being performed.
- D. All tarpaulins used on this project shall be flameproof type as defined and approved by the New York Board of Standards and Appeals.
- E. Contractor shall take all necessary precautions to prevent fire, or the spread of fire, that may result from this work.
- F. **NO STORAGE OF FLAMMABLE SUBSTANCES OR DEBRIS RESULTING FROM OR USED IN CONJUNCTION WITH FLAMMABLE SUBSTANCES WILL BE ALLOWED IN THE ALLEYS OR INSIDE THE BUILDING.** In addition, the Contractor shall remove rubbish and construction debris on a regular basis and keep the project site clean and free from hazard.

1.17 CONSTRUCTION DURING INCLEMENT WEATHER OR RAIN

- A. Protect all materials and work from damage due to rainy, cold, or freezing weather, as well as severe weather conditions.
- B. Contractor shall be responsible for maintaining the building weathertight through Final Acceptance of the work.

1.18 TEMPORARY FACILITIES

A. General:

- 1. Provide and maintain facilities, services, and utilities required for the most efficient execution of the work, including but not limited to, those listed below. Contract amount shall include all costs of obtaining required permits, approvals, and meters. Remove temporary facilities when no longer required and restore affected areas to their prior condition.

B. Power and Water:

- 1. Contractor may use the site's existing electrical service for power, provided that such use is in compliance with all requirements specified herein, and that the system is restored to its prior condition upon completion of the work.
- 2. All costs of installation and maintenance of temporary power shall be paid for by the Contractor; however, the cost of electrical current consumed shall be paid for by the Owner.
- 3. Contractor may use the building's existing water supply, provided the only connection made is at existing valve locations, and that such use is in compliance with all requirements specified herein.
 - a. Provide an Owner-approved vacuum breaker at all connections to exiting water supply.

- b. All costs for pumps, hoses, fittings, and other equipment required for the temporary connection of water to complete the work shall be paid for by the Contractor; however, the cost of water shall be paid for by the Owner.
 - c. Contractor shall ascertain prior to the installation of temporary power and water that the existing systems are able to safely sustain the additional applied loads. No guarantee is made of their adequacy, and should the Contractor determine that the existing systems will not be adequate for the intended uses, the Contractor shall bear all costs for providing and maintaining independent temporary service of electricity, water, or both.
 - d. Electricity and water shall be strictly preserved.
- C. Drinking Water:
- 1. Drinking water for workers shall be provided by the Contractor
- D. Sanitary Facilities:
- 1. Designated restrooms at the building shall be available for the Contractor's use. Contractor shall be responsible for the daily cleaning of these facilities.
- E. Telephone:
- 1. Telephone service at the site is not available for use, except by special arrangement with the Owner.

1.19 STORAGE FACILITIES

- A. Contractor shall provide temporary storage facilities as required for the storage of equipment and materials. Storage facilities shall be in compliance with all governing regulations and placed only in location approved by Architect and Owner.
- B. Security of storage facilities is fully the responsibility of the Contractor. The Architect and Owner shall not be held liable for claims arising from theft, damage or other incidents related to their installation, use or maintenance.

1.20 MATERIALS AND EQUIPMENT

- A. Deliver, handle and store products in accordance with manufacturer's recommendations and by methods and means that will prevent damage, deterioration, and loss including theft. Control delivery schedules to minimize long-term storage products at site and overcrowding of construction spaces.
 - 1. Neatly pile, store, and protect materials in approved storage areas.
- B. Factory packaged products shall be delivered in manufacturer's original and unopened containers.
- C. Contractor's workers shall be available to receive and unload materials and equipment delivered to site. No materials or equipment shall be delivered to site unless workers are available.

1.21 OCCUPATIONAL SAFETY AND HEALTH

- A. Notice shall specify the name of the Contractor, the number of this Contract, the date of the incident, the location (street address and borough) of the incident, the identity of the persons or things injured, damaged, or lost, and the name of the insurance carrier that issued the commercial liability insurance policy. Such notice shall be sent to the Insurance Unit, NYC Comptroller's Office, 1 Centre Street- Room 1222, New York, NY 10007 and copied to the

Owner and Architect.

- B. If any person or property sustains any loss, damage, cost, expense, or injury arising out of the operations of the Contractor and/or its Subcontractors in the performance of this Contract or from the Contractor's and/or its Subcontractor's failure to comply with any of the provisions of this Contract or of the Law, the Contractor shall indemnify, defend, and hold the Owner, the Architect, the City, its employees and agents harmless against any and all claims, liens, demands, judgments, penalties, fines, liabilities, settlements, damages, costs, and expenses of whatever kind or nature (including without limitation, attorney's fees and disbursements), known or unknown, contingent or otherwise, arising from or in any way related to such operations, or failure to comply with any of the provisions of this Contract or of the Law. Insofar as the facts and Law relating to any claim would preclude the Owner, the Architect, and the City from being completely indemnified by the Contractor, (a) the Owner, the Architect, and the City shall be partially indemnified by the Contractor, or (b) where the claim arises from an injury to the Contractor's employee(s), the Contractor shall be liable to the Owner, the Architect, and the City under this Contract for partial or complete indemnification and/or contribution to the fullest extent of the Law.
- C. The Contractor shall defend at his own expense, indemnify, and hold the Owner, Architect, and the City harmless from any and all claims (even if the allegations of the suit are without merit) or judgments for damages (including, but not limited to, delay damages from Other Contractors) and from costs and expenses to which the Owner, the Architect, and the City may be subjected or which they might suffer or incur allegedly arising out of or in connection with any operations of the Contractor and/or its Subcontractors, or their failure to comply with the provisions of this Contract or of the Laws. Insofar as the facts and Law relating to any claim would preclude the Owner, the Architect, and the City from being completely indemnified by the Contractor, (a) The Owner, the Architect, and the City shall be partially indemnified by the Contractor, or (b) where the claim arises from an injury to the Contractor's employee(s), the Contractor shall be liable to the Owner, the Architect, and the City under this Contract for partial or complete indemnification and/or contribution to the fullest extent provided by Law.
- D. The provisions of this Article shall not be deemed to create any new right of action in favor of third parties against the Contractor, the Owner, the Architect, or the City.
- E. The Contractor shall observe and comply with all applicable safety and health standards promulgated by the Secretary of Labor under Section 107 of the Contractor Work Hours and Standards Act, published in 29 CFR Part 1513 and adopted by the Secretary of Labor as the "Occupational Safety and Health Act of 1970", as amended. Such safety and health standards shall apply to Contractor and Contractor's employees as well as to all subcontractors and their employees.

1.22 ENVIRONMENTAL SAFETY AND PROTECTION

- A. Contractor shall designate one person, the project foreman or other, to enforce strict discipline on activities related to the generation of wastes, pollution of air, water, or soil, generation of noise, and similar harmful or deleterious effects that violate regulations or reasonably may irritate persons at, or in the vicinity of, the project site.

1.23 PROJECT MEETINGS

- A. The Contractor, the Architect and the Owner, shall attend on-site meetings as required for the purpose of discussing the progress and execution of the work. Meetings shall be of two types:
1. Initial job meeting prior to the onset of work; and
 2. Subsequent meetings as required for review of the work in progress at Eldridge Street

Synagogue.

1.24 PAYMENT

- A. Applications for Payment and Schedule of Values shall be made in accordance with Payment Procedures Section 01290. All paperwork required for compliance with HUD/LMDC reporting must be submitted prior to processing of applications for payment.

1.25 PROJECT CLOSEOUT

- A. Project Closeout Procedures will be preformed in accordance with Section 01770 - Closeout Procedures.
- B. Contractor shall Submit to the Architect written certification that work is substantially complete and request, in writing, a final inspection. Architect will inspect work within (10) calendar days of receipt of request.
- C. Should Architect determine that work is substantially complete, the Architect will prepare a Punch List of deficiencies that need to be corrected before final acceptance and issue of Notice of Substantial Completion, with deficiencies noted.
- D. After the Punch List deficiencies have been corrected, a Letter of Final Acceptance will be issued by the Architect.
- E. Contractor shall be responsible for the work of the Contract until the date of the Letter of Final Acceptance.

1.26 AS-BUILTS

- A. Contractor shall record, in a manner acceptable to the Architect, any deviation in the completed work from the Specifications. This Submittal shall be in accordance with Sections 01330 - Submittals and 01770 - Closeout Procedures, and is a specific requirement for Project Closeout.

1.27 WARRANTIES AND BONDS

- A. Refer to the General Conditions for terms of the Contractor's special warranty of workmanship and materials.
- B. Disclaimers and limitations:
 - 1. Manufacturer's disclaimers and limitations on product warranties (guarantees) do not relieve the Contractor of the warranty of the work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
- C. Provide to the Owner, in writing, at the time of Project Closeout a warranty covering:
 - 1. All materials and workmanship associated with the masonry work, for a period of ten (10) years from the Date of Final Acceptance.
- D. Warranty shall specify Contractor's response time categorically for defined emergencies and non-emergencies.

1.28 CONTRACTOR'S SECURITY, GUARANTEE, AND INSURANCE

- A. As further security for the faithful performance of this Contract, the Owner shall deduct, and retain until the Substantial Completion of the Work, five percent (10%) of the value of the Construction Work certified for payment in each partial payment voucher until the amount so deducted equals five percent (5%) of the Contract Price. All Subcontractors shall provide for not less than five percent (5%) retainage. At the request of the Contractor, the Owner may in his or

her discretion specify a lower or no retainage in instances where the retainage herein provided for would be inappropriate.

- B. At the time of Substantial Completion of Work, all contract funds for said phase will be released, less twice the value of the final punch list and the value of the liens and judgments arising out of this Contract that have not been bonded.
- C. To the fullest extent allowed by law, the subcontractor shall defend, indemnify and hold harmless The Eldridge Street Project Inc., and their agents and employees and LMDC from and against all claims, damages, losses, and expenses, including but not limited to attorney's fees, arising out of or resulting from events at the site or relating to the work by the subcontractor or any other officer, employee, agent or representative of the subcontractor.
- C. During performance of the Work and up to the date of the Final Acceptance, the Contractor shall effect and maintain, or shall cause to be effected and maintained, with companies reasonably satisfactory to LMDC and the Owner the types and amounts of insurance listed in Section 00521- Schedule A and in compliance with the requirements of 24CRF SS Part 84.31 and 84.48 including, but not limited to:
1. Commercial General Liability Insurance providing both bodily injury (including death) and property damage insurance in a limit not less than Two Million Dollars (\$2,000,000) aggregate and One Million Dollars (\$1,000,000) per occurrence. Such insurance is to be written on an occurrence basis. The Owner, Architect, Owner's Representative, CM and LMDC shall be named as additional insureds.
 - a. The subcontractor shall procure and at all times during the term of this contract maintain a policy of primary commercial general liability insurance covering all operations of the subcontractor whether such operations be that of the subcontractor or by anyone directly or indirectly employed by them. The policy shall be a commercial general liability occurrence form policy covering but not limited to bodily injury, property damage, personal injury, broad form blanket contractual liability, broad form property damage, products completed operations with minimum limits as set forth herein.
 - b. Subcontractor's policy shall be so written as to include The Eldridge Street Project, Inc., The Lower Manhattan Development Corporation, The CM, & Architect as additional insured as their interest may appear.
 2. Automobile Liability and Property Damage Insurance, if applicable, in an amount not less than \$1,000,000 combined single limit for both bodily injury and property damage.
 3. Workers' Compensation coverage for employers liability and disability benefits as required by the State of New York, for all persons employed by the Contractor in connection with the Work.
 4. Excess Liability Insurance in an amount not less than \$10,000,000.
 5. Certificates of Insurance for all of the aforementioned coverages shall be provided to the Society prior to the commencement of work under this Agreement. The Society and LMDC shall be named as additional insureds on each such certificate.
 6. Umbrella Liability in the minimum amounts of Five Million Dollars (\$5,000,000) per Occurrence, and Five Million Dollars (\$5,000,000) General Aggregate.
 7. Property- All risk coverage for the Work on a repair and replacement basis, including an agreed amount clause not less than the full replacement value of the Work. Coverage shall include, but shall not be limited to, fire, extended coverage, vandalism, malicious mischief, collapse, and associated perils. The policy(ies) shall be endorsed to include the interest of the Owner, LMDC, Architect, Construction Manager, and all Subcontractors, as their interests may appear; shall contain a waiver of subrogation against any named insured, and shall be payable to the insured, as its interests may appear; and the proceeds thereof, if any,

when paid, except such portion or portions not yet paid for by the Owner (which shall be payable directly to the Contractor), shall be delivered to and retained by the Owner in a separate account as security for the performance by the Contractor of its obligations hereunder and shall be released to the Contractor, as provided in this Contract, as such performance progresses.

8. Any architect or professional engineer retainer by the Contractor in connection with the Project shall be registered in New York State and shall furnish professional liability insurance in an amount no less than One Million Dollars (\$1,000,000) and shall maintain such insurance for a period of two (2) years following the completion of all the Work.
9. Any deductibles or self-insured retentions must be declared to, and approved by, the Department.
10. Requirements that Subcontractors provide insurance pursuant to this Section shall be satisfied if the Subcontractor carries such insurance from commencement of Work under the Subcontract through and including Final Acceptance of the Work covered by the Subcontract.
11. Liability for products and completed operations includes a minimum discovery period of three (3) years.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTION - NOT USED.

END OF SECTION

SECTION 01250 - CONTRACT MODIFICATION PROCEDURES**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and Division 1 Specification sections apply to the work of this Section.

1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.

1.03 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions".

1.04 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal Requests issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 20 days after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and trade discounts.
 - c. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 5. Comply with requirements in Division 1 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Form: Use AIA Document G709 for Proposal Requests.

1.05 ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, base each Change Order proposal on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
 - 3. Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the Purchase Order amount or Contractor's handling, labor, installation, overhead, and profit. Submit claims within 21 days of receipt of the Change Order or Construction Change Directive authorizing work to proceed. Owner will reject claims submitted later than 21 days after such authorization.
 - 1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
 - 2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

1.06 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

1.07 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 PRODUCTS- NOT USED.

PART 3 EXECUTION- NOT USED.

END OF SECTION

SECTION 01330 - SUBMITTALS**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting shop drawings, product data, samples, project photographs, and other submittals
- B. Number of copies of submittals.
- C. Submittal procedures.

1.03 RELATED SECTIONS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Specific Requirements, and other Division 1 Specification sections, apply to the work of this Section.
- B. Project Meetings are described in Section 01312.
- C. Section 01770 - Closeout Procedures, for submitting warranties, project record documents, and operation and maintenance manuals.

1.04 DESCRIPTION OF SUBMITTALS

- A. The types of submittals required in this Section include product data, samples, mock-ups, and miscellaneous work-related submittals. Individual submittal requirements are specified in applicable sections for each unit of work.
- B. Definitions: Work-related submittals of this Section are categorized for convenience as follows:
 - 1. **PRODUCT DATA** include standard printed information on materials, products, and systems; not specially-prepared for this project, other than the designation of selections from among available choices printed therein.
 - 2. **SHOP DRAWINGS** include specially-prepared graphics illustrating technical information specific to this project; they shall not be in standard printed form that is intended for general distribution and application to a number of projects. Shop drawings may include drawings, field sketches, diagrams, measurements, calculations, data sheets, performance curves, schedules, patterns, templates, instructions, and similar forms of information.
 - 3. **SAMPLES** include both fabricated and unfabricated physical examples of materials, products and units of work; both as complete units and as smaller portions of units or work; either for limited visual inspection or (where indicated) for more detailed testing and analysis.
 - 4. **MOCK-UPS** are a special form of samples, which are too large or otherwise inconvenient for handling in specified manner for transmittal of sample submittals. A mock-up is a special installation that demonstrates the materials, tools, and techniques to be used in the finished work. Approved mock-ups shall be the quality control standard by which all additional work is approved or rejected.
 - 5. **MISCELLANEOUS SUBMITTALS** related directly to the work (non-administrative) include warranties, maintenance agreements, workmanship bonds, project photographs, survey data and reports, physical work records, quality testing and certifying reports, copies of industry standards, record drawings, field measurements data, operating and

- maintenance manuals, overrun stock, and similar information, devices and materials applicable to the work and not processed as shop drawings, product data, or samples.
6. PROJECT PHOTOGRAPHS showing conditions before, during, and after repair shall be taken by Contractor and submitted to Architect. Photographs may be transmitted in digital format.

1.05 CONTRACTOR'S RESPONSIBILITY

- A. Architect's review and approval shall not relieve the Contractor from responsibility for error or for proper coordination and assembly of materials and equipment with other work; nor from responsibility for furnishing materials and labor not indicated on approved submittals, but required by the contract documents for completion of the work.
- B. Submittals are for information and record.

1.06 GENERAL SUBMITTAL PROCEDURES

- A. Transmit each submittal with AIA Form G810.
- B. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- C. Identify Project, Contractor, Subcontractor, or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- D. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- E. Submittals shall be submitted by Contractor. Submittals that are received from sources other than through Contractor's office will be returned "without action".
- F. Do not transmit submittals until Contractor has confirmed compliance with requirements of contract documents .
- G. Deliver submittals to Architect at business address or at regularly scheduled progress meetings.
- H. Coordinate preparation and processing of submittals with performance of the work so that work will not be delayed by submittals. Coordinate and sequence different categories of submittals for same work, and for interfacing units of work, so that one will not be delayed for coordination with another.
- I. For each submittal for review, allow 10 business days excluding delivery time to and from the Contractor. Where submittal must be held for coordination, Contractor will be so advised without delay.
- J. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- K. Provide space for Contractor and Architect review stamps.
- L. When revised for resubmission, identify all changes made since previous submission.
- M. Distribute copies of reviewed submittals as appropriate to subcontractors, suppliers, governing authorities and others as necessary for proper performance of the work. Show such distributions on transmittal forms. Instruct parties to promptly report any inability to comply with requirements.
- N. Submittals not requested will not be recognized or processed.

1.07 SPECIFIC-CATEGORY SUBMITTAL PROCEDURES

- A. General: Except as otherwise indicated in individual work sections, comply with requirements specified herein for each indicated category of submittal. Provide and process intermediate submittals, where required between initial and final, similar to initial submittals.
- B. Product Data: Collect required data into one submittal for each unit of work or system, and mark each copy to show which choices and options are applicable to project. Include manufacturer's standard printed recommendations for application and use, compliance with standards, application of labels and seals, notation of field measurements that have been checked, and special coordination requirements. Maintain one set of product data (for each submittal) at project site, available for reference by Architect and others.
1. Submittals: Do not submit product data, or allow its use in the project, until Contractor has confirmed compliance with requirements of contract documents. Submittal is for information and record, unless otherwise indicated. Initial submittal is final submittal unless returned promptly by Architect marked with an "Action" which indicates an observed non-compliance.
- 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: Include the following information, as applicable:
 - a. Dimensions.
 - b. Identification of products.
 - c. Fabrication and installation drawings.
 - d. Roughing-in and setting diagrams.
 - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - f. Shopwork manufacturing instructions.
 - g. Templates and patterns.
 - h. Schedules.
 - i. Design calculations.
 - j. Compliance with specified standards.
 - k. Notation of coordination requirements.
 - l. Notation of dimensions established by field measurement.
 2. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
 3. Number of Copies: Submit one correctable, translucent, reproducible print and one blue- or black-line print of each submittal. Architect will return the reproducible print.
- D. Samples: Provide units identical with final condition of specified materials or products for the work. Provide full set of optional samples where Architect's selection is required. Include information with each sample to show general description, source or product name and manufacturer, limitations, and compliance with standards. Samples are submitted for review and confirmation of color, pattern, texture, and "kind" by Architect. Architect will not "test" samples (except as otherwise indicated) for compliance with other requirements, which are therefore the exclusive responsibility of the Contractor.
- E. Mock-ups: Where mock-ups and similar samples are indicated in individual work sections recognized as a special type of sample, comply with requirements for "samples" to greatest extent possible, and process transmittal forms to provide a record of activity.
1. Maintain approved mock-ups in a protected area throughout the course of the work.
 2. Locations of mock-ups shall be selected jointly by the Contractor and the Architect.
 3. Approved mock-ups may be incorporated into the finished work.

- F. Standards: Where copy submittal is indicated, and except where specified integrally with "Product Data" submittal, submit a single copy for Architect's use. Where workmanship at project site and elsewhere is governed by standards, furnish additional copies to fabricators, installers, and others involved in performance of the work.
 - 1. Other Action: Where submittal is returned for other reasons, with Architect's explanation included, it will be returned with the marking - "No Action."
- G. General Distribution: Provide additional distribution of submittals (not included in foregoing copy submittal requirements) to subcontractors, suppliers, governing authorities, and others as necessary for proper performance of the work. Include such additional copies in transmittal to Architect where required to receive "Action" marking before final distribution. Show such distributions on transmittal forms.

1.08 ACTION OF SUBMITTALS

- A. Architect's Action: Whereas action and return is required or requested, Architect will review each submittal, mark with "Action", and where possible return within two (2) weeks of receipt. Where submittal must be held for coordination, Contractor will be so advised without delay.
 - 1. Final Unrestricted Release: Work may proceed, provided it complies with contract documents, when submittal is returned with the marking - "Approved."
 - 2. Final-But-Restricted Release: Work may proceed, provided it complies with notations and corrections on submittal and with contract documents, when submittal is returned with the following marking - "Approved as Noted."
 - 3. Returned for Resubmittal: Do not proceed with work. Revise submittal in accordance with notations thereon, and resubmit without delay to obtain a different action marking. Do not allow submittals (or unmarked submittals where a marking is required) to be used in connection with performance of the work when returned with the following marking - "Disapproved, Resubmit."
 - 4. Other Action: Where submittal is returned for other reasons, with Architect's explanation included, it will be returned with the following marking- "No Action."

PART 2 PRODUCTS

2.01 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
 - 1. Number of Copies: Submit two copies of each submittal, unless otherwise indicated. Architect will not return copies.
- B. Contractor's Construction Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation."
- C. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- D. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements.
- F. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements and, where required, is authorized for this specific Project.
- G. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements. Include evidence of manufacturing experience where required.

- H. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements.
- I. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.
- J. Preconstruction Test Reports: Prepare 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.
- K. Compatibility Test Reports: Prepare 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.
- L. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, 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.
- M. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements. 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.
- N. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements in Division 1 Section "Closeout Procedures".
- O. Design Data: Prepare 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.
- P. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:
1. Preparation of substrates.
 2. Required substrate tolerances.
 3. Sequence of installation or erection.
 4. Required installation tolerances.
 5. Required adjustments.
 6. Recommendations for cleaning and protection.
- Q. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:
1. Name, address, and telephone number of factory-authorized service representative making report.
 2. Statement on condition of substrates and their acceptability for installation of product.
 3. Statement that products at Project site comply with requirements.
 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.

5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 6. Statement whether conditions, products, and installation will affect warranty.
 7. Other required items indicated in individual Specification Sections.
- R. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- S. Material Safety Data Sheets: Submit information directly to Owner. If submitted to Architect, Architect will not review this information but will return it with no action taken.

PART 3 EXECUTION – NOT USED**END OF SECTION**

SECTION 01420 - DEFINITIONS & STANDARDS**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Supplementary Conditions, Specific Requirements, and other Division 1 Specification sections, apply to this Section.

1.02 DESCRIPTION OF REQUIREMENTS

A. General:

1. This section specifies procedural and administrative requirements for compliance with governing regulations and codes and standards imposed upon the Work. These requirements include obtaining permits, licenses, inspections, releases and similar documentation, as well as payments, statements, and similar requirements associated with regulations, codes and standards.
 - a. The term "regulations" is defined to include laws, statues, ordinances, and lawful orders issued by governing authorities, as well as those rules, conventions, and agreements within the construction industry that effectively control the performance of the work regardless of whether they are lawfully imposed by governing authorities or not.
2. Governing Regulations:
 - a. Refer to General and Supplementary Conditions for requirements related to compliance with governing regulations.
 - b. Refer to HUD/LMDC requirements for Federal contracts, with reference to funding by LMDC as a Pass-through Contract for a portion of the Project.

B. DEFINITIONS

1. General Explanation:
 - a. A substantial amount of specification language constitutes definitions for terms found in other contract documents, including the Drawings which must be recognized as diagrammatic in nature and not completely descriptive of requirements indicated thereon. Certain terms used in the Contract Documents are defined in this article. Definitions and explanations of this Section are not necessarily either complete or exclusive, but are general for the Work to the extent not stated more explicitly in another provision of the Contract or Contract Documents.
2. [T]he Eldridge Street Project: Entire phrase, the Owner.
3. [T]he Project or the project: the work of this Contract.
4. [T]he Eldridge Street Synagogue: When capitalized, the entity represented by the Owner.
5. [T]he synagogue: In lower case, the building.
6. [T]he State: The State of New York.
7. HUD/LMDC: US Department of Housing and Urban Development/Lower Manhattan Development Corporation.
8. General Requirements:
 - a. The provisions or requirements of all Division 1 sections apply to entire work of Contract and, where so indicated, to other elements of work which are included in the project.
9. Indicated:
 - a. The term "indicated" is a cross-reference to graphic representations, notes, or schedules on the drawings, to other paragraphs or schedules in the specifications, and to similar means of "scheduled," and "specified" are used in lieu of "indicated," it is for the purpose of helping the reader locate the cross-reference, and no limitation of

- location is intended except as specifically noted.
10. Directed, Requested, etc.:
 - a. Where not otherwise explained, terms such as "directed," "requested," "authorized," "selected," "approved," "required," "accepted," and "permitted" mean "directed by Architect," "requested by Architect," etc. However, no such implied meaning will be interpreted to extend Architect's responsibility into Contractor's area of construction supervision.
 11. Approve:
 - a. Where used in conjunction with Architect's response to submittal, requests, applications, inquiries, reports and claims by Contractor, the meaning of the term "approved" will be held to limitations of Architect's responsibilities and duties as specified in General and Supplementary Conditions. In no case will "approval" by Architect be interpreted as a release of Contractor from responsibilities to fulfill requirements of the contract documents.
 12. Project Site:
 - a. The space available to Contractor for performance of the work, either exclusively or in conjunction with others performing other work as part of the project. The extent of project site is shown on the Drawings.
 13. Furnish:
 - a. Except as otherwise defined in greater detail, the term "furnish" is used to mean supply and deliver to project site, ready for unloading, unpacking, assembly, installation, etc., as applicable in each instance.
 14. Install:
 - a. Except as otherwise defined in greater detail, the term "install" is used to describe operations at project site including unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations, as applicable in each instance.
 15. Provide:
 - a. Except as otherwise defined in greater detail, the term "provide" means furnish and install, complete and ready for intended use, as applicable in each instance.
 16. Installer:
 - a. The term "installer" is defined as "the entity" (person or firm) engaged by the Contractor or its subcontractor or its sub-subcontractor for the performance of a particular unit of work at the project site, including installation, erection, application, and similar required operations. It is a general requirement that Installers be experienced in operations they are engaged to perform.
 17. Testing Laboratory:
 - a. The term "testing laboratory" is defined as an independent entity engaged to perform specific inspections or tests of the work, either at project site or elsewhere; and to report and (if required) interpret results of those inspections or tests.

1.03 FORMAT AND SPECIFICATION EXPLANATIONS

A. Specification Production:

1. None of these explanations will be interpreted to modify substance of requirements. Portions of these specifications have been produced by Architect's standard methods of editing master specifications, and may contain minor deviations from traditional writing formats. Such deviations are a normal result of this production technique, and no other meaning will be implied or permitted.

B. Format Explanation:

1. The format of principal portions of these specifications can be described as follows;

although other portions may not fully comply and no particular significance will be attached to such compliance or non-compliance:

- a. Sections and Divisions: For convenience, basic unit of specification text is a "section," each unit of which is named and numbered. These are organized into related families of sections, and various families of sections are organized into "divisions," which are recognized as the present industry-consensus on uniform organization and sequencing of specifications. The section title is not intended to limit meaning or content of Section, nor to be fully descriptive of requirements specified therein, nor to be an integral part of text.
 - 1) Each Section of Specifications has been subdivided into 3 (or fewer) "Parts" for uniformity and convenience (Part 1- General, Part 2- Products, and Part 3- Execution). These do not limit the meaning of and are not an integral part of text which specifies requirements.
- b. Subordination of Text: Portions of specification text are subordinated to other portions in the following (traditional) manner (lowest level to highest):
 - 1) Indented (from left margin) paragraphs and lines of text are subordinate to preceding text which is not indented, or which is indented by a lesser amount.
 - 2) Paragraphs and lines of text are subordinate to sub-article titles, which are printed in upper- and lower-case lettering.
 - 3) Sub-articles are subordinate to article titles, which are printed in upper-case lettering.
 - 4) Subordination (if any) of certain sections (or portions of sections) to other sections is described within those sections.
- c. Imperative Language: Used generally in specifications. Except as otherwise indicated, requirements expressed imperatively are to be performed by Contractor. For clarity of reading at certain locations, contrasting subjective language is used to describe responsibilities which must be fulfilled indirectly by Contractor, or when so noted, by others.
- d. Section Numbering: Used to facilitate cross-references in contract documents. Sections are placed in Project Manual in numeric sequence; however, numbering sequence is not complete, and listing of sections at beginning of Project Manual (Table of Contents) must be consulted to determine numbers and names of specification sections in the Contract Documents.
- e. Page Numbering: Numbered independently for each Section; recorded in listing of Sections (Table of Contents) in Project Manual. Section number is shown with page number at bottom of each page, to facilitate location of text in Project Manual.
- f. Project Identification: Name and date of the contract documents are recorded on headers and footers of each page of the specifications to minimize possible misuse of specifications, or confusion with other project specifications. State of edition is given in the footer. Only specifications noted as "ISSUED FOR BID", and only those whose date is that given on page one (00400-1) in the Bid Form or in Addendae are valid for preparation of bid for the work of this Contract. Only specifications noted as "ISSUED FOR CONSTRUCTION" are valid for work on this Contract.

C. Specification Content:

1. Because of methods by which this project specification has been produced, certain general characteristics of content, and conventions in use of language are explained as follows:
 - a. Specifying Methods: The techniques of methods of specifying to record requirements varies throughout text, and may include "prescriptive," "open generic-descriptive," "compliance with standards," "performance," or a combination of these. The method used for specifying one unit of work has no bearing on requirements for another unit

of work.

- b. Overlapping and Conflicting Requirements: Where compliance with two or more industry standards or sets of requirements is specified, and overlapping of those different standards or requirements establishes different or conflicting minimums of levels of quality, most stringent requirement (which is generally recognized to be also most costly) is intended and will be enforced, unless specifically detailed language written into the contract documents (not by way of reference to an industry standard) clearly indicates that a less stringent requirement is to be fulfilled. Refer apparently-equal-but-different requirements, and uncertainties as to which level of quality is more stringent to Architect for a decision before proceeding.

- 1) Contractor's Options: Except for overlapping or conflicting requirements, where more than one set of requirements are specified for a particular unit of work, option is intended to be Contractor's regardless of whether specifically indicated as such.

D. Minimum Quality/Quantity:

1. In every instance, quality level or quantity shown or specified is intended as minimum for the work to be performed or provided. Except as otherwise specifically indicated, actual work may either comply exactly with that minimum (within specified tolerances), or may exceed that minimum within reasonable limits. In complying with requirements, indicated numeric values are either minimums or maximums as noted or as appropriate for context of requirements. Refer instances of uncertainty to Architect for decision before proceeding.

E. Specialists' Assignments:

1. In certain instances, specification text requires (or at least implies) that specific work be assigned to specialists or expert entities, who must be engaged for performance of those units of work. These must be recognized as special requirements over which Contractor has no choice or option. These assignments must not be confused with (and are not intended to interfere with) normal application of regulations, union jurisdictions, and similar conventions. One purpose of such assignments is to establish which party or entity involved in a specific unit of work is recognized as "expert" for indicated construction processes or operations. Nevertheless, final responsibility for fulfillment of entire set of requirements remains with Contractor.

F. Trades:

1. Except as otherwise indicated, the use of titles such as "carpentry" in specification text implies neither that the work must be performed by an accredited or unionized tradesperson of the corresponding generic name (such as "carpenter"), nor that specified requirements apply exclusively to work by tradespersons of that corresponding generic name.

G. Abbreviations:

1. The language of specification and other contract documents is of the abbreviated type in certain instances, and implies words and meanings which will be appropriately interpreted. Actual word abbreviations of a self-explanatory nature have been included in the text. Specific abbreviations have been established, principally for lengthy technical terminology and primarily in conjunction with coordination of specification requirements with notations of drawings and in schedules. These are frequently defined at first instance of use. Trade association names and titles of general standards are frequently abbreviated. Singular words will be interpreted as plural and plural words will be interpreted as singular where applicable and where full context of the contract documents so indicates.

1.04 DRAWING SYMBOLS

A. General:

1. Except as otherwise indicated, graphic symbols used on the drawings are those symbols recognized in the construction industry for the purposes indicated. Where not otherwise noted, symbols are defined by Architectural Graphic Standards, published by John Wiley & Sons, Inc., 10th edition.

1.05 GENERAL APPLICABILITY OF STANDARDS

A. Except where more explicit or stringent requirements are written into the contract documents, applicable construction industry standards have the same force and effect (and are made a part of contract documents by reference) as if copied directly into contract documents, or as if copies were bound herewith. Individual specification sections indicate which codes and standards the Contractor must keep available at the project site for reference.

1. Reference Standards (referenced directly in contract documents or by governing regulations) have precedence over non-referenced standards which are recognized in industry for applicability to work.

B. Updated Standards:

1. At the request of the Architect, Contractor, or governing authority, submit a change order proposal where an applicable industry code or standard has been revised and reissued after the date of the contract documents and before the performance of the work affected. The Architect will decide whether to issue the change order to proceed with the updated standard.

C. Conflicting Requirements:

1. Where compliance with two or more standards is specified, and where these standards establish different or conflicting requirements for minimum quantities or quality levels, the most stringent requirements will be enforced, unless the contract documents specifically indicate a less stringent requirement. Refer requirements that are different, but apparently equal, and uncertainties as to which quality level is more stringent to the Architect for a decision before proceeding.

D. Minimum Quantities or Quality Levels:

1. In every instance, the quantity or quality level shown or specified is intended to be the minimum for the work to be provided or performed. Unless otherwise indicated, the actual work may either comply exactly, within specified tolerances, with the minimum quantity or quality specified, or may exceed that minimum within reasonable limits. In complying with these requirements, the indicated numeric values are either minimum or maximum values, as noted, or as appropriate for the context of the requirements. Refer instances of uncertainty to the Architect for decision before proceeding.

E. Copies and Standards:

1. The contract documents require that each entity performing work be experienced in that part of the work being performed. Each entity is also required to be familiar with industry standards applicable to that part of the Work. Copies of applicable standards are not bound with the contract documents.
 - a. Where copies of applicable standards are needed for proper performance of the Work, the Contractor is required to obtain such copies directly from the publication source.
 - b. Although certain copies of standards needed for enforcement of the requirements may be required submittals, the Architect reserves the right to require the Contractor to submit additional copies of these standards as necessary for enforcement of the requirements.

F. Abbreviations and Names:

1. Trade association names and titles of general standards are frequently abbreviated. The following acronyms or abbreviation as referenced in contract documents are defined to mean the associated names. Both names and addresses are subject to change, and are believed to be, but are not assured to be, accurate and up-to-date of contract documents:
 - a. AIA - *American Institute of Architects*, 1735 New York Avenue NW, Washington, D.C. 20006 (202) 626-7300.
 - b. AISC - *American Institute of Steel Construction, Inc.*, 400 N. Michigan Avenue, 8th Floor, Chicago, Illinois 60611 (312) 670-2400.
 - c. AISI - *American Iron and Steel Institute*, 1000 16th St. NW, Washington, D.C. 20036 (202) 452-7100.
 - d. ALSC - *American Lumber Standards Committee*, P.O. Box 210, Germantown, MD 20874 (301) 972-1700.
 - e. ANSI - *American National Standards Institute*, 655 15th Street NW, Washington, D.C. 20015 (202) 639-4090.
 - f. ASC - *Adhesive and Sealant Council*, 1600 Wilson Blvd., Suite 910, Arlington, Virginia 22209 (703) 841-1112.
 - g. ASTM - *American Society for Testing and Materials*, 1916 Race Street, Philadelphia, Pennsylvania 19103 (215) 299-5400.
 - h. AWI - *Architectural Woodwork Institute*, 2310 S. Walter Reed Drive, Arlington, Virginia 22206 (703) 671-9100.
 - i. AWPA - *American Wood Preservers Association*, P.O. Box 849, Stevensville, Maryland 22206 (301) 643-4163.
 - j. AWBP - *American Wood Preservers Bureau*, 2772 S. Randolph Street, Arlington, Virginia 22206 (703) 931-8180.
 - k. BHMA - *Builders Hardware Manufacturers Association*, 355 Lexington Avenue, 17th Floor, New York, New York 10017
 - l. CDA - *Copper Development Association, Inc.* P.O. Box 1840, Greenwich Office Part 2, Greenwich, CT 06836 (203) 625-8210.
 - m. CE - *Corps of Engineers* (U.S. Dept. of the Army), Washington, D.C. 20315
 - n. CS - *Commercial Standard of NBS* (U.S. Dept. of Commerce) Government Printing Office, Washington, D.C. 20402
 - o. DHI - *Door & Hardware Institute*, 7711 Old Springhouse Road, McLean, California 22102 (703) 556-3990.
 - p. FS - *Federal Specification* (General Services Admin.), Bldg. 197, Washington Navy Yard SE, Washington, D.C. 20407 (202) 472-2205.
 - q. HMA - *Hardwood Manufacturer Association*, 2831 Airways Blvd., Memphis, Tennessee 38132 (901) 346-2222.
 - r. NAAMM - *The National Association of Architectural Metal Manufacturers*, 221 N. LaSalle Street, Chicago, Illinois 60601 (312) 346-1600.
 - s. NBS - *National Bureau of Standards* (U.S. Dept. of Commerce), Gaithersburg, Maryland 20234
 - t. NFPA - *National Fire Protection Association*, Batterymarch Park, Quincy, Massachusetts 02269 (617) 770-3000.
 - u. NRCA - *National Roofing Contractors Association*, (708) 299-9070.
 - v. OSHA - *Occupational Safety & Health Administration* (U.S. Dept. of Labor), Government Printing Office, Washington, D.C. 20402 (202) 523-6091.
 - w. PCA - *Portland Cement Association*, 54200 Old Orchard Rd., Skokie, Illinois 60077 (312) 966-6200.
 - x. PS - *Product Standard of NBS* (U.S. Dept. of Commerce), Government

- Printing Office, Washington D.C., 20402.
- y. SPIB - *Southern Pine Inspection Bureau* (Grading Rules), 4709 Scenic Highway, Pensacola, Florida 32594 (904) 434-2600.
 - z. UL - *Underwriters Laboratories, Inc.*, 333 Pfingsten Road, Northbrook, Illinois 60602 (312) 272-8800.
 - aa. WWPA - *Western Wood Products Association* (Grading Rules), 1500 Yeon Bldg., Portland, Oregon 97204 (503) 224-3930.

1.06 GOVERNING REGULATIONS/AUTHORITIES

A. General

1. The procedure followed by the Architect has been to contact governing authorities where necessary to obtain information needed for the purpose of preparing the contract documents. Such information may or may not be of significance in relation to the Contractor's responsibilities for performing the work. Contact governing authorities directly for necessary information and decisions having a bearing on the performance of the work.

1.07 OWNER'S RECORD COPIES

- A. Submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance of the work for the Owner's records.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTION - NOT USED.

END OF SECTION

SECTION 01770 - CLOSEOUT PROCEDURES**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and Division 1 Specification sections apply to the work of this Section.

1.02 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Project Record Documents.
 - 3. Operation and maintenance manuals.
 - 4. Warranties.
 - 5. Instruction of Owner's personnel.
 - 6. Final cleaning.
- B. Related Sections include the following:
 - 1. Division 1 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
 - 2. Divisions 2 through 16 Sections for specific closeout and special cleaning requirements for products of those Sections.

1.03 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. 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.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 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. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 - 7. Complete startup testing of systems.
 - 8. Submit test/adjust/balance records.
 - 9. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 10. Advise Owner of changeover in heat and other utilities.
 - 11. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect 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 Architect, that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for Final Completion.

1.04 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
 1. Submit a final Application for Payment according to Division 1 Section "Payment Procedures."
 2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. 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. Submit pest-control final inspection report and warranty.
 5. 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, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect 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. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.05 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit three copies 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. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.

1.06 PROJECT RECORD DOCUMENTS

- A. General: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.
- B. Record Drawings: Maintain and submit one set of blue- or black-line white prints of Contract Drawings and Shop Drawings.
 1. Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
 - a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.
 - b. Accurately record information in an understandable drawing technique.
 - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
 - d. Mark Contract Drawings or Shop Drawings, whichever is most capable of showing

- actual physical conditions, completely and accurately. Where Shop Drawings are marked, show cross-reference on Contract Drawings.
2. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
 3. Mark important additional information that was either shown schematically or omitted from original Drawings.
 4. Note Construction Change Directive numbers, Change Order numbers, alternate numbers, and similar identification where applicable.
 5. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.
- C. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications. Mark copy to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 3. Note related Change Orders, Record Drawings[, and Product Data], where applicable.
- D. Miscellaneous Record Submittals: Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

1.07 OPERATION AND MAINTENANCE MANUALS

- A. Assemble a complete set of operation and maintenance data indicating the operation and maintenance of each system, subsystem, and piece of equipment not part of a system. Include operation and maintenance data required in individual Specification Sections and as follows:
1. Operation Data:
 - a. Emergency instructions and procedures.
 - b. System, subsystem, and equipment descriptions, including operating standards.
 - c. Operating procedures, including startup, shutdown, seasonal, and weekend operations.
 - d. Description of controls and sequence of operations.
 - e. Piping diagrams.
 2. Maintenance Data:
 - a. Manufacturer's information, including list of spare parts.
 - b. Name, address, and telephone number of Installer or supplier.
 - c. Maintenance procedures.
 - d. Maintenance and service schedules for preventive and routine maintenance.
 - e. Maintenance record forms.
 - f. Sources of spare parts and maintenance materials.
 - g. Copies of maintenance service agreements.
 - h. Copies of warranties and bonds.
- B. Organize operation and maintenance manuals into suitable sets of manageable size. Bind and index data in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, with pocket inside the covers to receive folded oversized sheets. Identify each binder on front and spine with the printed title "OPERATION AND MAINTENANCE MANUAL," Project name, and subject matter of contents.

1.08 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (115-by-280-mm) paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
 - 4. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 PRODUCTS

2.01 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

3.01 DEMONSTRATION AND TRAINING

- A. Instruction: Instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.

3.02 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply 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. 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.
 - 2. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - 3. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - 4. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of

- exterior surfaces. Restore reflective surfaces to their original condition.
5. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 6. Sweep concrete floors broom clean in unoccupied spaces.
 7. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
 8. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
 9. Remove labels that are not permanent.
 10. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - a. Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
 11. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
 12. Replace parts subject to unusual operating conditions.
 13. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 14. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 15. Clean ducts, blowers, and coils if units were operated without filters during construction.
 16. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
 17. Leave Project clean and ready for occupancy.
- C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests. Prepare a report.
- D. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION

SECTION 04060 - MASONRY MORTAR**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Specific Requirements and other Division 1 Specification sections, apply to the work of this Section.

1.02 SCOPE OF WORK

- A. Mortars and grouts are related to the restoration and installation of stone masonry, as indicated on the Drawings and specified herein, and includes, but is not necessarily limited to, the following:
 - 1. Resetting marble thresholds at entrance doors.

1.03 RELATED WORK DESCRIBED ELSEWHERE

- A. Section 04400 - Stone.

1.04 REFERENCE STANDARDS

- A. Comply with ASTM standards indicated in this Section.
- B. Comply with manufacturers' instructions and product literature.
- C. Comply with "The Secretary of the Interior's Standards for the Treatment of Historic Properties".

1.05 QUALIFICATION OF PERSONNEL

- A. Contractor is responsible for certification as required by the mortar manufacturer including all associated costs.

1.06 SUBMITTALS

- A. In accordance with Section 01330, submit the following:
 - 1. Product Data: Including manufacturer's written description, and Material Safety Data Sheets (MSDS) as applicable for:
 - a. Lime Mortar
 - b. Sand
 - 2. Samples:
 - a. N/A.

1.07 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to site in unopened containers/packaging, with labels intact clearly identifying manufacturer, brand, type, and other related pertinent information.
- B. Store materials in a manner that prevents any damage, deterioration or contamination. Store all cementitious materials off the ground and under cover, protected from the elements. Comply with manufacturer's recommendations for minimum and maximum temperature requirements for storage.
- C. Remove any damaged, contaminated, hardened or partially-set material from site immediately and replace with new acceptable material.

1.08 JOB CONDITIONS

- A. Hot Weather Protection:
 - 1. When ambient temperature is above 100° Fahrenheit, or above 90° Fahrenheit with wind 8 mph or greater, maintain temperature of mortar and grout between 70° and 120° Fahrenheit.
 - 2. Cold water may be used when mixing mortar and grout. Ice must be completely melted before adding water to other ingredients.
 - 3. Wet masonry units before use.
 - 4. Use mortar with high water retention.
 - 5. Limit spread of mortar beds to 4 feet.
 - 6. Fog spray completed work to control evaporation until mortar has cured a minimum of 72 hours.
- B. Cold Weather Protection:
 - 1. Do not mix or use mortars when temperature is below 40° Fahrenheit or when it is forecast or expected to drop below 40° Fahrenheit within 12 hours of the installation of the mortar.
 - 2. Do not use antifreeze admixtures or calcium chloride.

PART 2 PRODUCTS

2.01 SETTING MORTAR

- A. Setting mortar shall be composed of lime as determined by the manufacturer and supplier. No portland cement or masonry cements or sand shall be used or added to the mortar.
- B. Setting mortar or lime putty, St. Astier NHL 5 (Chaux 100 naturelle Pure), distributed Virginia Lime Works.
- C. Water: Clean water, free from acids, alkalis, oils, salts, and organic matter, suitable for drinking.
- D. Mix design shall be in accordance with manufacturer's recommendations and approved submittal.
 - 1. Color is to match historic mortar color. Contractor will be provided with Munsell Color.
- E. Setting mortars shall be pre-blended in single containers in a controlled factory environment.
- F. All containers shall be marked including manufacturing date and batch number. Manufacturer to provide samples of proposed materials for mock-up panels at site.

2.02 OTHER MATERIALS

- A. All other materials not specifically described but required for the proper completion of the work shall be as selected by the Contractor subject to the approval of the Architect.
- B. No admixtures shall be used without written approval of Architect.

PART 3 EXECUTION

3.01 MORTAR MIXES

- A. Measuring and Mixing Mortar:
 - 1. Mix a minimum amount of water consistent with proper workability.
 - 2. Empty and clean mixer and tools after each use.
 - 3. Flow of mortar after suction shall be greater than 80 percent of initial flow: ASTM C-91.

3.02 INSTALLATION

- A. Set stone in full beds of mortar.
- B. Tool profile to match adjacent historic joints.

- C. Place mortar within 1 1/2 hour of initial mixing at 80° Fahrenheit and above or within 2 hours at temperatures below 80° F.

END OF SECTION

SECTION 04400 - STONE**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and Division 1 Specification sections apply to the work of this Section.

1.02 SECTION INCLUDES

- A. Marble thresholds at exterior doors.
- B. Bluestone Hearth

1.03 RELATED SECTIONS

- A. Section 04060 - Masonry Mortar.

1.04 SUBMITTALS

- A. See Section 01330 - Submittals, for submittal procedures.
- C. Samples: Submit marble samples to match existing marble thresholds.
- D. Samples: 12" x 12" sample showing color, grade, and finish of stonework required.
- C. Samples: Submit mortar color sample.

1.05 QUALITY ASSURANCE

- A. Stone Fabricator Qualifications: Company specializing in fabricating cut stone with minimum ten years of documented experience.
- B. Allowable Tolerances: Variation in thickness is not to exceed 1/8".

1.06 DELIVERY, STORAGE, AND PROTECTION

- A. Protect stone from discoloration during storage on site.

1.07 PROJECT CONDITIONS

- A. Sequence work to coordinate the installation of stonework with installation of adjacent construction.
- B. Protect stone during storage and construction against moisture, soiling, staining and physical damage.
- C. Handle stone to prevent chipping, breakage, soiling or other damage.

PART 2 PRODUCTS

2.01 STANDARDS:

- A. Marble: ASTM C 503, Classification I – Calcite; free of defects detrimental to appearance or durability.
- B. Bluestone: ASTM C 1528-02 Standard Guide for the Selection of Dimensioned Stoned.
- C. Provide stone which complies with recommendations of the Building Stone Institute, New York, NY 10017.

2.02 MARBLE THREASHOLD:

- A. To match existing in color, veining and finish.
- B. Unit size: full span of opening, depth sufficient for top of installed threshold to be ½ inch above adjacent floor levels, with in accordance with Drawings.

2.03 BLUESTONE:

- A. Furnish bluestone of “natural cleft” finish. Bluestone hearth as dimensioned on plans.
- B. Bluestone: Quarry run blue-gray with only light amount of color variation.

2.03 MORTAR

- A. In accordance with Section 04060 - Masonry Mortar.

2.04 ACCESSORIES

- A. Setting Buttons and Shims: Lead or plastic. Wood shims may not be used.

2.05 FABRICATION

- A. Threshold: Fabricate for 3/8-inch beds and joints.
- B. Bed and Joint Surfaces:
 - 1. Cut or sawn full square for full thickness of unit.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces are ready to receive work of this section.

3.02 PREPARATION

- A. Establish lines, levels, and coursing. Protect from disturbance.
- B. Damp clean prior to installation with edges and surfaces free of dirt or foreign material. Do not use wire brushes or implements that can mark or damage exposed surfaces.

3.03 INSTALLATION - GENERAL

- A. Size units to fit opening dimensions and perimeter conditions. Each sill shall be one continuous piece.
- B. Marble: Set in full mortar setting bed to fully support stone over bearing surface. Use setting buttons or shims to maintain correct joint width.
- C. Bluestone: Set in mud bed to fully support stone over bearing surface.
- D. Make joints watertight, without voids, cracks, excess mortar, or excessive grout
- E. Grout joints. Pack and work grout into voids. Neatly tool to flush surface.

3.04 CLEANING

- A. Remove excess mortar as work progresses, and upon completion of work.
- B. Use non-metallic tools in cleaning operations.
- C. Clean stonework using clean water and bristle brushes. Do not use wire brushes, acid type cleaning agents or other cleaning compounds with caustic or harsh fillers.

3.05 PROTECTION OF FINISHED WORK

- A. Protect stonework from deterioration, discoloration or damage during subsequent construction.
- B. Protect finished work through Substantial Completion.

END OF SECTION

SECTION 05500 - METAL FABRICATIONS**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and Division 1 Specification sections apply to the work of this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Steel Bar Window Guards.
 - 2. Steel framing and supports for applications where framing and supports are not specified in other sections.

1.03 RELATED SECTIONS

- A. Section 04060 – Masonry Mortar

1.04 REFERENCES

- A. American Society for Testing and Materials (ASTM)
- B. American Welding Society (AWS)

1.05 SUBMITTALS

- A. See Section 01330 – Submittals for submittal procedures.
- B. Shop Drawings: Show fabrication details and connections to adjacent work including location of anchor bolts required.
- C. Product Data: Catalog sheets, specifications, and installation instructions as applicable.

1.06 PROJECT CONDITIONS

- A. Field Measurements: Where metal fabrications are indicated to fit walls and other construction, verify dimensions by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.07 COORDINATION

- A. Coordinate installation of anchorages for metal fabrications. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors that are to be embedded in concrete or masonry. Deliver to site in time for installation.

1.08 QUALITY ASSURANCE

- A. Performance and testing must comply with sag, impact, and forced entry resistance tests of ANSI/SMA 6001-1990, American National Standard.

1.09 DELIVERY, STORAGE AND HANDLING

- A. Before and during shipment to site, adequately protect products. Products should be stored in conditions that protect from damage.

1.10 INSPECTION

- A. Verify that size of openings to ensure proper fit of window guards and allowable tolerances.

Verify that openings are plumb level, and provide a solid anchoring surface.

PART 2 PRODUCTS

2.01 MANUFACTURER:

- A. Avant Guards Manufacturing, 219 Cook Street, Brooklyn, NY 11206, 718-366-0010.

2.02 METALS - GENERAL

- A. Metal Surfaces, General: For metal fabrications exposed to view in the completed Work, provide materials with smooth, flat surfaces without blemishes. Do not use materials with exposed pitting, seam marks, roller marks, rolled trade names, or roughness.

2.02 FERROUS METALS

- A. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- B. Steel Rods: ASTM A108.
- C. Steel Plate: ASTM A568.
- D. Hot-rolled steel members: ASTM A36.
- E. Cold-rolled steel members: ASTM A611, Grade C.
- F. Unless otherwise indicated: Hang guards with galvanized 3" x 2" fast pin steel butts and secure in place with hook rods, snap hooks, and chains.
- G. Connection bolts: Stainless Steel
- H. Expansion bolts: stainless steel
- I. Galvanized: Comply with ASTM A123 G90
- G. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.

2.03 FINISH

- A. Galvanized Steel with factory applied baked enamel finish to be selected from manufacturer's standard color chart. Manufacturer supplied touch up paint to match factory applied finish.

2.04 FASTENERS

- A. General: Provide Type 316 stainless-steel fasteners for exterior use and zinc-plated fasteners with coating complying with ASTM B633, Class Fe/Zn 5, where built into exterior walls. Select fasteners for type, grade, and class required.
- B. Bolts and Nuts: Regular hexagon-head bolts, ASTM A307, Grade A (ASTM F568M, Property Class 4.6); with hex nuts, ASTM A563 (ASTM A563M); and, where indicated, flat washers.
- C. Anchor Bolts: ASTM F1554, Grade 36.
- D. Machine Screws: ASME B18.6.3 (ASME B18.6.7M).
- E. Lag Bolts: ASME B18.2.1 (ASME B18.2.3.8M).
- F. Plain Washers: Round, carbon steel, ASME B18.22.1 (ASME B18.22M).
- G. Lock Washers: Helical, spring type, carbon steel, ASME B18.21.1 (ASME B18.21.2M).
- H. Expansion Anchors: Anchor bolt and sleeve assembly with capability to sustain, without

failure, a load equal to six times the load imposed when installed in unit masonry and equal to four times the load imposed when installed in concrete, as determined by testing per ASTM E 488, conducted by a qualified independent testing agency.

- J. Toggle Bolts: FS FF-B-588, tumble-wing type, class and style as needed.

2.05 LOCKS AND HARDWARE

- A. 3" x 2" fast pin butts brass pin hinges, to have 2 hinges for guards under 5'-0" and 3 hinges per guard 5'-0" and over.
- B. Lock Options: Exterior Cam Lock

2.05 GROUT

- A. Nonshrink, Metallic Grout: Factory-packaged, ferrous-aggregate grout complying with ASTM C 1107, specifically recommended by manufacturer for heavy-duty loading applications.

2.06 FABRICATION, GENERAL

- A. Shop Assembly: Preassemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
- B. Shear and punch metals cleanly and accurately. Remove burrs.
- C. Ease exposed edges to a radius of approximately 1/32 inch (1 mm) unless otherwise indicated. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- D. Weld corners and seams continuously to comply with the following:
1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 2. Obtain fusion without undercut or overlap.
 3. Remove welding flux immediately.
 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
- E. Provide for anchorage of type indicated; coordinate with supporting structure. Fabricate and space anchoring devices to secure metal fabrications rigidly in place and to support indicated loads.
- F. Cut, reinforce, drill, and tap metal fabrications as indicated to receive finish hardware, screws, and similar items.
- G. Fabricate joints that will be exposed to weather in a manner to exclude water, or provide weep holes where water might otherwise accumulate.
- H. Allow for thermal movement resulting from the following maximum change in ambient and surface temperatures by preventing buckling, opening up of joints, overstressing of components, failure of connections, and other detrimental effects. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
- I. Form exposed work true to line and level with accurate angles and surfaces and straight sharp edges.
- J. Remove sharp or rough areas on exposed traffic surfaces.

- K. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners where possible. Use exposed fasteners of type indicated or, if not indicated, Phillips flat-head (countersunk) screws or bolts. Locate joints where least conspicuous.

2.07 SHELF ANGLES

- A. Fabricate shelf angles from steel angles of sizes indicated on drawings and for attachment to concrete framing. Provide horizontally slotted holes to receive 3/4-inch (19-mm) bolts, spaced not more than 6 inches (150 mm) from ends and 24 inches (600 mm) o.c., unless otherwise indicated.
- B. Galvanize shelf angles to be installed in exterior walls.

2.08 MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Provide steel framing and supports indicated and as necessary to complete the Work.
- B. Fabricate units from galvanized structural-steel shapes, plates, and bars of welded construction, unless otherwise indicated. Fabricate to sizes, shapes, and profiles indicated and as necessary to receive adjacent construction retained by framing and supports. Cut, drill, and tap units to receive hardware, hangers, and similar items.
- C. Erect window guard doors square and true. Plumb and align faces in a single plane.

2.13 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Finish metal fabrications after assembly.
- C. Factory applied thermoplastic polyester powder coat. Baked to a mar-resistant finish.

2.14 STEEL AND IRON FINISHES

- A. Galvanizing: Hot-dip galvanize items as indicated to comply with applicable standard listed below:
 - 1. ASTM A 123, for galvanizing steel and iron products.
 - 2. ASTM A 153/A 153M, for galvanizing steel and iron hardware.
- B. Preparation for Shop Priming: Prepare uncoated ferrous-metal surfaces to comply with minimum requirements indicated below for SSPC surface-preparation specifications and environmental exposure conditions of installed metal fabrications:
 - 1. Exteriors (SSPC Zone 1B): SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
- C. Apply shop primer to uncoated surfaces of metal fabrications, except those with galvanized finishes and those to be embedded in concrete, Comply with SSPC-PA 1, "Paint Application Specification No. 1," for shop painting.

PART 3 EXECUTION

3.01 INSTALLATION, GENERAL

- A. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing metal fabrications to in-place construction. Include threaded fasteners for concrete and masonry inserts, toggle bolts, through-bolts, lag bolts, wood screws, and other connectors.
- B. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and

levels.

- C. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.
- D. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
- E. Field Welding: Comply with the following requirements:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.
 - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.

3.02 INSTALLING MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Install framing and supports to comply with requirements of items being supported, including manufacturers' written instructions and requirements indicated on Shop Drawings, if any.

3.03 ADJUSTING AND CLEANING

- A. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780.
- B. Touch Up: Field touch up paint after installation using manufacturer supplied color matched paint.

END OF SECTION

SECTION 05700 – ORNAMENTAL METAL CASTINGS**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and Division 1 Specification sections apply to the work of this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Sand cast bronze grilles.

1.03 PROJECT CONDITIONS

- A. Field Measurements: Where metal fabrications are indicated to fit walls and other construction, verify dimensions by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.04 COORDINATION

- A. Coordinate installation of anchorages for metal fabrications. Furnish setting drawings, templates, and directions for installing anchorages, including clips, sleeves, anchor bolts, and items with integral anchors that need to be coordinated with work of other Sections.

1.05 RELATED SECTIONS

- A. Section 06100 – Rough Carpentry

1.06 REFERENCES

- A. American Association for Testing and Materials (ASTM)
- B. Finishes: National Association of Architectural Metal Manufacturer's (NAAMM) "Metal Finish Manual".

1.07 SUBMITTALS

- A. See Section 01330 - Submittals, for submittal procedures.
- B. Shop Drawings: Show fabrication details and connections to adjacent Work. Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories.
- C. Samples:
 - 1. Metal Finish Samples: 6 inches long; use metal of same alloy and configuration to be used for the work.
 - 2. Fittings, brackets, flanges, screws, anchors and other accessories: Full size each type required.

1.08 DELIVERY

- A. Coordinate delivery of items to be built into other work to avoid delay. Furnish templates as required for accurate location of work.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Historical Arts and Castings, Inc., 5580 West Bagley Park Road, West Jordan, UT 84088, 800-225-1414, www.historicalarts.com.

2.02 METALS - GENERAL

- A. Metal Surfaces, General: For metal fabrications exposed to view in the completed Work, provide materials with smooth, flat surfaces without blemishes. Do not use materials with exposed pitting, seam marks, roller marks, rolled trade names, or roughness.

2.03 BRONZE MATERIALS

- A. Materials: Standard Copper Development Association alloys specified, with temper and hardness as required.
1. Copper Alloy Sand Castings: ASTM B 584.
 2. Plate, Sheet, Strip, and Bars: ASTM B 36.
 3. Extruded Shapes: ASTM B 455.
- A. Finish:
1. Natural Medium Satin Finish: M32-M34.

2.03 MISCELLANEOUS MATERIALS

- A. Welding Electrodes and Filler Metal: Type and alloy to match metal to be welded for color, strength, and compatibility.

2.04 FASTENERS

- A. General: Metal, alloy, and finish to match metal to be fastened, unless otherwise indicated.
- B. Use countersunk Phillips flat heads for exposed fasteners, unless otherwise indicated.
- C. Lacquer: Clear methacrylate, or as recommended by metal producer for protection of finish.

2.05 FABRICATION, GENERAL

- A. Fabricate items of material, size and dimensions indicated. Preassemble items in shop to greatest extent possible to minimize field assembly. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
- B. Form metal work to required shapes and sizes, with true lines, angles and curves. Provide necessary rebates, lugs, brackets, flanges, fasteners, and anchors for assembly and installation. Use concealed fasteners where possible. Use exposed fasteners of type indicated or, if not indicated, slotted flat-head (countersunk) screws.
- C. Provide welds behind finished surfaces without distortion or discoloration on exposed side. Clean and dress welds on exposed and contact surfaces.
- D. Mill joints to tight, hairline fit. Cope or meter corners. Form joints exposed to weather to exclude water penetration.
- E. Where cutting, welding, and grinding are required for proper shop fitting and jointing, restore finishes to eliminate evidence of such corrective work.
- F. Furnish sound castings, free of warp and defects which impair strength or appearance. Mill joints to close fit. Finish exposed surfaces smooth with sharp, well-defined lines and arises.

- G. Provide for anchorage of type indicated; coordinate with supporting structure. Fabricate and space anchoring devices to secure metal fabrications rigidly in place and to support indicated loads.
- H. Cut, reinforce, drill, and tap metal fabrications as indicated to receive finish hardware, screws, and similar items.
- I. Allow for thermal movement resulting from maximum change in ambient and surface temperatures so as to prevent buckling, opening up of joints, overstressing of components, failure of connections, and other detrimental effects.
 - 1. Base thermal movement calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

2.06 MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Provide framing and supports indicated and as necessary to complete the Work.

2.07 SHOP FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect exposed finishes by covering with adhesive paper or other suitable covering prior to shipment.
- C. Accessories: Finish exposed fittings, brackets, flanges, etc. to match metal work unless otherwise indicated or approved.

2.08 FABRICATION TOLERANCES

- A. Squareness: 1/8-inch maximum difference in diagonal measurements.
- B. Maximum Offset Between Faces: 1/16 inch.
- C. Maximum Misalignment of Adjacent Members: 1/16 inch.
- D. Maximum Bow: 1/8 inch in 48 inches.
- E. Maximum Deviation From Plane: 1/16 inch in 48 inches.

PART 3 EXECUTION

3.01 INSTALLATION, GENERAL

- A. Install the work of this Section in accordance with manufacturer's printed instructions, except as shown or specified otherwise.
- B. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing metal fabrications to in-place construction.
- C. Install framing and supports to comply with requirements of items being supported, including manufacturer's written instructions and requirements indicated on Shop Drawings, if any.
- C. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.
- D. Do not cut or abrade finishes which cannot be completely restored in the field. Return such items to the shop for required alterations and complete refinishing.

3.02 ADJUSTING AND CLEANING

- A. Remove protective coverings and clean exposed surfaces..

END OF SECTION

SECTION 06100 - ROUGH CARPENTRY**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Framing with dimension lumber.
 - 2. Wood blocking and nailers.
 - 3. Subflooring.

1.03 RELATED SECTIONS

- A. Section 05700 - Ornamental Metal Castings.
- B. Section 06400 - Architectural Woodwork.
- C. Section 06913 - Architectural Woodwork Restoration.

1.04 REFERENCES

- A. SFI Standard for 2005-2009 (SFIS), the Sustainable Forestry Initiative Program, Sustainable Forestry Board, Arlington, Virginia, 703-797-2506.
- B. U. S. Department of Commerce American Softwood Lumber Standard PS 20 (DOC PS 20).

1.05 DEFINITIONS

- A. Lumber grading agencies and the abbreviations used to reference them include the following:
 - 1. ALSC- American Lumber Standard Committee, Incorporated.
 - 2. NELMA - Northeastern Lumber Manufacturers Association.
 - 3. NLGA - National Lumber Grades Authority.
 - 4. WCLIB - West Coast Lumber Inspection Bureau.
 - 5. WWPA - Western Wood Products Association.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Stack lumber and panels. Place spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.
- B. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

- A. Labelled by the Sustainable Forestry Board for primary and all secondary producers.
 - 1. Use of lumber fabricated from old growth timber will not be allowed in this project.
 - 2. The use of salvaged spruce lumber meeting structural and appearance grading standards is encouraged.

2.02 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of lumber grading agencies certified by the ALSC Board of Review.

1. New limber: Factory mark each piece of lumber with grade stamp of grading agency.
2. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
3. Provide dressed lumber, S4S, unless otherwise indicated.
4. Provide dry lumber with 15 percent maximum moisture content at time of dressing for 2-inch nominal thickness or less, unless otherwise indicated.

2.03 FIRE-RETARDANT-TREATED MATERIALS

- A. General: Where fire-retardant-treated materials are indicated, provide materials that comply with performance requirements in AWWA C20 (lumber) and AWWA C27 (plywood). Identify fire-retardant-treated wood with appropriate classification marking of UL, U.S. Testing, Timber Products Inspection, or another testing and inspecting agency acceptable to authorities having jurisdiction.
 1. Use treatment for which chemical manufacturer publishes physical properties of treated wood after exposure to elevated temperatures, when tested by a qualified independent testing agency according to ASTM D 5664 for lumber and ASTM D 5516, for plywood.
 2. Use treatment that does not promote corrosion of metal fasteners.
 3. Use Exterior type for exterior locations and where indicated.
 4. Use Interior Type A High Temperature (HT), unless otherwise indicated.

2.04 DIMENSION LUMBER

- A. General: Provide dimension lumber of grades indicated according to the ALSC National Grading Rule provisions of the grading agency indicated.
- B. Framing: Construction, Stud, or No. 2 grade and any of the following species:
 1. Spruce.
- C. Structural timbers and .
 1. Spruce: NELMA, NLGA, WCLIB, or WWPA.

2.05 MISCELLANEOUS LUMBER

- A. General: Provide lumber for support or attachment of other construction, including the following:
 1. Blocking.
 2. Nailers.
 3. Furring.

2.06 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture.
- B. Nails, Wire, Brads, and Staples: FS FF-N-105.
- C. Power-Driven Fasteners: CABO NER-272.
- D. Wood Screws: ASME B18.6.1.
- E. Lag Bolts: ASME B18.2.1. (ASME B18.2.3.8M).
- F. Bolts: Steel bolts complying with ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6); with ASTM A 563 (ASTM A 563M) hex nuts and, where indicated, flat washers.
- G. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with

capability to sustain, without failure, a load equal to 6 times the load imposed when installed in unit masonry assemblies and equal to 4 times the load imposed when installed in concrete as determined by testing per ASTM E 488 conducted by a qualified independent testing and inspecting agency.

1. Material: Carbon-steel components, zinc plated to comply with ASTM B 633, Class Fe/Zn 5.

2.07 METAL FRAMING ANCHORS

- A. General: Provide galvanized steel framing anchors of structural capacity, type, and size indicated and acceptable to authorities having jurisdiction.
- B. Galvanized Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 (Z180) coating designation.

PART 3 EXECUTION

3.01 INSTALLATION, GENERAL

- A. Discard units of material with defects that impair quality of carpentry and that are too small to use to minimize number of joints or for optimum joint arrangement.
- B. Set carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit carpentry to other construction; scribe and cope as needed for accurate fit. Locate furring, nailers, blocking, grounds, and similar supports to comply with requirements for attaching other construction.
- C. Securely attach carpentry work as indicated and according to applicable codes and recognized standards.
- D. Sink fastener heads on exposed carpentry work flush with wood surface.
- E. Use fasteners of appropriate type and length. Pre-drill members when necessary to avoid splitting wood.

3.02 WOOD GROUND, SLEEPER, BLOCKING, AND NAILER INSTALLATION

- A. Install where indicated and where required for screeding or attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach items to substrates to support applied loading. Recess bolts and nuts flush with surfaces, unless otherwise indicated.

3.03 METAL FRAMING ANCHORS

- A. General: Provide galvanized steel framing anchors of structural capacity, type, and size indicated and acceptable to authorities having jurisdiction.
- B. Galvanized Steel Sheet:
 1. Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 (Z180) coating designation.

END OF SECTION

SECTION 06400 - ARCHITECTURAL WOODWORK**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings, Schedules, and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specifications sections, apply to this Section.

1.02 SUMMARY

- A. The work of this Section includes, but is not necessarily limited to:
 - 1. New cabinetry and vitrines in Gift Shop and Gural Center.
 - 2. New millwork in Gift Shop and Gural Center.
 - 3. New salvage mantle at existing firebox in Gural Center.

1.03 REFERENCES

- A. AWI (QSI) - Architectural Woodwork Quality Standards Illustrated; 1997, Seventh Edition.
- B. SFI Standard for 2005-2009 (SFIS), the Sustainable Forestry Initiative Program, Sustainable Forestry Board, Arlington, VA 703-797-2506.

1.04 RELATED WORK DESCRIBED ELSEWHERE

- A. Section 06100 - Rough Carpentry.
- B. Section 06913 - Architectural Woodwork Restoration.
- C. Section 08210 - Wood Doors and Frames.
- D. Section 09900 - Painting.

1.05 SUBMITTALS

- A. See Section 01330 - Submittals, for submittal procedures.
- B. Shop Drawings: Show materials, layout, dimensions, profiles, fasteners and anchors, and interface with adjacent construction.
- C. Samples:
 - 1. Wood, General: Minimum 36 square-inches of each species.
 - 2. Wood, Moldings: Minimum 12 inch run of each profile.
 - 3. Fasteners, each type proposed for use.
 - 4. Hardware.

1.06 QUALITY ASSURANCE

- A. Installer Qualifications: Contractor shall assign for the work of this Section only skilled workers who are thoroughly trained in construction of interior architectural woodwork and can demonstrate successful experience in installing architectural woodwork items similar in type and quality to those required for this project.
- B. AWI Quality Standard: Comply with applicable requirements of "Architectural Woodwork Quality Standards", except as otherwise indicated.
- C. All wood labeled by the Sustainable Forestry Board for primary and all secondary producers.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Protect woodwork from any damage.

- B. If woodwork must be stored in other than installation areas, store only in areas whose environmental conditions meet requirements specified in "Project Conditions".

1.08 PROJECT CONDITIONS

- A. Environmental Conditions: Obtain and comply with Woodwork Manufacturer's advice for optimum temperature and humidity conditions for woodwork during its storage and installation. Do not install woodwork until these conditions have been attained and stabilized so that woodwork is within 1 percent of optimum moisture content from date of installation through remainder of construction period.

PART 2 PRODUCTS

2.01 GENERAL

- A. Provide materials that comply with requirements of the AWI woodworking standard for each type of woodwork and quality grade indicated and, where the following products are part of woodwork, with requirements of the referenced product standards that apply to product characteristics indicated.
- B. Labeled by the Sustainable Forestry Board for primary and all secondary producers.

2.02 MATERIALS

- A. Architectural Woodwork - General: AWI Premium Grade; items as indicated on the drawings.
- B. Species
 1. Gift Shop: Willow. Solid moldings, edges and doors; veneer panels and shelves.
 2. Gural Center: Tiger Oak. Solid moldings, edges and doors; veneer panels and shelves.

2.03 FASTENERS

- A. Screws: Select material, type, size, and finish required for each use. Comply with FS FF-S-111 for applicable requirements. Where exposed metal elements are part of wood assembly, match metal. Use oval-head screws where exposed, except at butt hinges.
- B. Nails: Select material, type, size, and finish required for each use. Comply with FS FF-N-105 for applicable requirements.
- C. Hardware: Reference Specification Section 08700.

PART 3 EXECUTION

3.01 PREPARATION

- A. Condition woodwork to average prevailing humidity conditions in installation areas before installing.
- B. Clean surfaces thoroughly prior to installation.
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- D. Before installing architectural woodwork, examine shop-fabricated work for completion and complete work as required.

3.02 FABRICATION

- A. Cabinetry: In accordance with approved Shop Drawings.
- B. Millwork: In accordance with approved Shop Drawings.

3.03 INSTALLATION

- A. Quality Standard: Install woodwork to comply with AWI Section 1700 for grades specified in Part 2 of this Section for type of woodwork involved.
- B. Install woodwork plumb, level, true, and straight with no distortions. Shim as required with concealed shims. Install to a tolerance of 1/8 inch in 8'-0" for plumb and level and with no variations in flushness of adjoining surfaces.
- C. Scribe and cut woodwork to fit adjoining work and refinish cut surfaces and repair damaged finish at cuts.
- D. Anchor woodwork to blocking built in or directly attached to substrates. Secure to grounds, stripping, and blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation. Use fine finishing nails for exposed nailing. Countersunk and filled flush with woodwork.
- E. Seal exterior woodwork to adjacent construction; seal exposed joints in woodwork units.

3.04 ADJUSTMENT AND CLEANING

- A. Repair damaged and defective woodwork, where possible, to eliminate functional and visual defects. Where not possible to repair, replace woodwork. Adjust joinery for uniform appearance.
- B. Clean woodwork on exposed and semi-exposed surfaces.

3.05 PROTECTION

- A. Provide final protection and maintain conditions that ensure woodwork is without damage or deterioration at time of Substantial Completion.
 - 1. Protect exterior woodwork from weather until stained or painted.
 - 2. Protect installed products until completion of project.
 - 3. Touch-up, repair, or replace damaged products before Substantial Completion.

END OF SECTION

SECTION 06913 - ARCHITECTURAL WOODWORK RESTORATION**PART 1 GENERAL**

1.01 RELATED SECTIONS

- A. Drawings, schedules, and general provisions of the Contract, including General and Supplementary Conditions, and Division 1 Specification sections, apply to this Section.

1.02 DESCRIPTION OF WORK

- A. "Architectural Woodwork" and "Architectural Woodwork Restoration" shall be defined as specified herein to distinguish forms of wood construction that conform to high standards of quality for material and workmanship.

1.03 SCOPE OF WORK

- A. The work of this Section is as indicated on the Drawings, as specified herein, and as required by authorities, standards, and conditions for satisfactory completion of the work.
- B. The work of this Section includes, but it not limited to, the following:
 - 1. Selectively restore existing doors, millwork, flooring, and finish carpentry.
 - 2. Restore center and side exterior wood doors – West Facade
 - 3. Woodwork restoration incidental to restoring clear finish of Bimah, Ark, prayer bench, shelves, book rests and corner closets in the Main Sanctuary.
 - 4. Woodwork restoration incidental to restoring faux finish to interior lobby doors including doors between lobby and main sanctuary, doors to elevator and doors to historic stair.

1.04 RELATED WORK DESCRIBED ELSEWHERE

- A. Section 06100 - Rough Carpentry.
- B. Section 06400 - Architectural Woodwork.
- C. Section 08210 - Wood Doors.
- D. Section 08590 - Wood Window Restoration.
- E. Section 09900 - Painting.
- F. Section 09910 – Stains & Coatings

1.05 SUBMITTALS

- A. In accordance with Section 01330 - Submittals, submit the following:
 - 1. Product Data: Manufacturer's technical information, including MSDS, where applicable, for each type of product and process specified in this Section and incorporated into items of architectural woodwork during fabrication, finishing, and installation.
- B. Shop Drawings:
 - 1. Submit for all new components to be fabricated, including full-size details of all dutchman repairs, joints between new and existing members.
- C. Samples:
 - 1. 11" sample wood for each new profile, species, and grade used,
 - 2. Fasteners, each type proposed for use, and
 - 3. Hardware, each type and model proposed for use.

1.06 QUALITY ASSURANCE

- A. Installer Qualifications
 - 1. Contractor shall assign for the work of this Section only skilled workers who are thoroughly trained in restoring interior architectural woodwork and can demonstrate five (5) years successful experience in installing architectural woodwork items similar in type and quality to those required for this project.
- B. Referenced Standard
 - 1. Applicable requirements of "Architectural Woodwork Quality Standards", latest edition, published by the Architectural Woodwork Institute (AWI), except as otherwise indicated.

1.07 DELIVERY, STORAGE, AND PROTECTION

- A. Protect woodwork during transit, delivery, storage, and handling to prevent damage or deterioration.
- B. If woodwork must be stored in other than installation areas, store only in areas where environmental conditions meet requirements specified in "Project Conditions".

1.08 PROJECT CONDITIONS

- A. Environmental Conditions
 - 1. Obtain and comply with Woodwork Manufacturer's and Installer's coordinated advice for optimum temperature and humidity conditions for woodwork during its storage and installation. Do not install woodwork until these conditions have been attained and stabilized so that woodwork is within plus or minus 1 percent of optimum moisture content from date of installation through remainder of construction period.
- B. Field Measurements
 - 1. Check actual dimensions of existing construction before commencing work.
 - 2. Mark items removed for restoration on a surface that will not be visible in finished work to identify their original locations.

PART 2 PRODUCTS

2.01 GENERAL

- A. Wood elements to be replaced are those described in the window and door schedules, on the Drawings, as herein specified and as required for the successful completion of the work. Provide materials that comply with requirements of the AWI woodworking standard for each type of woodwork and quality grade indicated, and, where the following products are part of woodwork, with requirements of the referenced product standards, that apply to product characteristics indicated:

2.02 EXTERIOR WOOD

- A. General: New wood to match existing in species and cut.
- B. Door/Window Frames:
 - 1. To match existing.

2.03 INTERIOR WOOD

- A. General: New wood to match existing in species and cut.
- B. Where new wood is required, it shall be of grades specified below (as defined by AWI), kiln-dried to a moisture content of 6% to 12% at the time of fabrication, and shall be clear, free from shakes, knots, and all other imperfections that might impair its strength, durability, or appearance.

- C. Fabrication Grade: Custom, suitable for stained finish, except as otherwise noted.
- D. Species, Cut - To match existing unless otherwise noted:
 - 1. Tiger Oak: quarter sawn
 - a. Exterior wood doors.
 - 2. Spruce/fir/pine: plain sawn
 - a. Wainscot, interior door frames, plinths, corner blocks, baseboard
 - 3. Interior wood to be painted: plain-sawn poplar.

2.04 ADHESIVE

- A. For repair: Two-part, gap-filling resorcinol resin, such as CP G 1260 A, as manufactured by Custom-Pak Adhesives, Inc. of Newark, Ohio, or approved equal.
- B. For construction: Two-part resorcinol resin, such as CP 1260 A, as manufactured by Custom-Pak Adhesives, Inc. of Newark, Ohio, or approved equal.

2.05 WOOD FILLER

- A. Two-part compound for filling voids and cracks, and for minor wood restorations of 27 cubic inches or less: WoodEpox, as manufactured by Abatron, Inc. of Kenosha, Wisconsin.
- B. Primer for wood filler must be compatible, of the same system, and produced by the same manufacturer: LiquidWood consolidant, as described above.

2.06 FASTENERS

- A. Screws: Countersunk. Select material, type, size, and finish required for each use. Comply with FS-FF-S-111 for applicable requirements.
- B. Nails: Countersunk and filled. Select material, type, size, and finish required for each use. Comply with FS-FF-N-105 for applicable requirements.
- C. Anchors: Type required for secure anchorage.

2.07 FINISH

- A. General
 - 1. Refer to Section 09900 – Painting and Section 09910 Stains & Coatings, for final finishing of installed architectural woodwork and for material and application requirements of prime coats for woodwork not specified in this Section to receive final finish.

PART 3 EXECUTION

3.01 PREPARATION

- A. Condition woodwork to average prevailing humidity conditions in installation areas before installing.
- B. Before installing architectural woodwork, examine shop-fabricated work for completion and complete work as required.

3.02 FABRICATION

- A. Fabricate woodwork to dimensions, profiles, and details indicated.
- B. Joints shall be properly fitted. Adjoining surfaces in the same plane shall be flush. Mitered external and coped internal joints shall be used for all molded members. Miter all running joints.

- C. Use continuous members whenever possible. Splices or joints in run of member only with Architect's approval. Splices shall be scarphed or angle-cut. Butt joints in the run of a member are prohibited.
- D. Fasteners shall be concealed. Where surface fastening is required and approved by the Architect, it shall be by means of countersunk screws with screw head concealed with wood plugs; or finishing nails, well set below the surface and puttied.
- E. All nailing shall be in accordance with Commercial Standards CS190-59 and CS204-09.
- F. Glued surfaces shall be in close contact throughout.
- G. Missing sections shall be replaced with new wood dutchman, precisely scarphed into place and held with epoxy. Finish surfaces of dutchman repairs shall exactly match existing adjacent surfaces.
- H. Deteriorated elements shall be restored by means of epoxy consolidation applied to unfinished wood, followed by epoxy filler, both installed in accordance with the manufacturer's printed instructions.

3.03 INSTALLATION

- A. Construction and replacement
 - 1. Quality Standard:
 - a. Install all woodwork to comply with AWI Section 1700 for same grade specified in Part 2 of this Section for type of woodwork involved.
 - 2. Install woodwork plumb, level, true, and straight with no distortions. Shim as required with concealed shims. Install to a tolerance of 1/8 inch in 8'-0" for plumb and level and with no variations in flushness of adjoining surfaces.
 - 3. Scribe and cut woodwork to fit adjoining work. Refinish cut surfaces and repair damaged finish at cuts.
 - 4. Anchor woodwork to blocking built in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation. Use finishing nails for exposed nailing, countersunk and filled flush with woodwork.
 - 5. Preparations for finishing:
 - a. Wood elements in good condition shall be cleaned of dirt, scraped of loose or deteriorated paint, filled, sanded, and prepared to receive primer or stain. Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces, and similar preparations for finishing of architectural woodwork, as applicable to each unit of work. Elements shall be made ready for painting or staining.

3.04 ADJUSTMENT AND CLEANING

- A. Repair woodwork damaged or made defective during progress of Project, where possible to eliminate defects functionally and visually. Where not possible to repair, replace woodwork. Obtain Architect's approval for proposed replacement. Adjust joinery for uniform appearance.
- B. Clean woodwork on exposed and semi-exposed surfaces.
- C. Provide final protection and maintain conditions that ensure woodwork is without damage or deterioration at time of Substantial Completion.

END OF SECTION

SECTION 07900 - JOINT SEALERS**PART 1 GENERAL**

1.01 SECTION INCLUDES

- A. Sealants and joint backing.

1.02 SUBMITTALS

- A. See Section 01300 - Submittals, for submittal procedures.

1.03 MOCK-UP

- A. Construct mock-up with specified sealant and with other components noted.
- B. Location to be determined by Contractor and Architect.
- C. Mock-up may remain as part of the Work.

1.04 ENVIRONMENTAL REQUIREMENTS

- A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

PART 2 PRODUCTS

2.01 SEALANTS

- A. Sealants and Primers - General: Provide only products having lower volatile organic compound (VOC) content than required by the more stringent of the South Coast Air Quality Management District Rule No.1168 and the Bay Area Air Quality Management District Regulation 8, Rule 51.
- B. General:
 - 1. One-part formulation silicone sealant complying with ASTM C920, Type S, Grade NS, Class 25. Sealant shall accommodate joint movement of 100% in extension and 50% in compression and, where applicable, be fully compatible with installation of backer rod and bond-breaker tape.
- C. PRODUCTS
 - 1. "790 Silicone Building Sealant" as manufactured by Dow Corning Corporation, Midland, Missouri. Color by submittal from manufacturer's standard color chart.
 - 2. By submittal, with Architect's approval.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that substrate surfaces are ready to receive work.
- B. Verify that joint backing and release tapes are compatible with sealant.

3.02 PREPARATION

- A. Remove loose materials and foreign matter that might impair adhesion of sealant.
- B. Clean and prime joints in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C 1193.
- D. Protect elements surrounding the work of this section from damage or disfigurement.

3.03 INSTALLATION

- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Perform installation in accordance with ASTM C 1193.
- C. Install bond breaker where joint backing is not used.
- D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- E. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

3.04 CLEANING

- A. Clean surfaces or excess sealant and other soiling caused by the work of this section.

3.05 PROTECTION OF FINISHED WORK

- A. Protect sealants until cured.

END OF SECTION

SECTION 08210 - WOOD DOORS AND FRAMES**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification sections apply to the work of this Section.

1.02 SUMMARY

- A. Section Includes: Fabrication and installation of new pocket doors at the Gift Shop.

1.03 RELATED SECTIONS

- A. Section 06400 - Architectural Woodwork
- B. Section 06913 - Architectural Woodwork Restoration
- C. Section 08700 – Hardware & Accessories
- D. Section 09900 - Painting

1.04 REFERENCES

- A. General: Standards listed by reference, including revisions by issuing authority, form a part of this specification section to extent indicated. Standards listed are identified by issuing authority, authority abbreviation, designation number, title or other designation established by issuing authority.
- B. Underwriters Laboratories, Inc. (UL) and Underwriters' Laboratories of Canada (ULC):
 - 1. UL 10B Fire Tests of Door Assemblies.
 - 2. UL 10C-1998 Positive Pressure Fire Test of Door Assemblies.
 - 3. Directory of Certification Listings for Fire Doors.
- C. ASTM International:
 - 1. ASTM E 152 Standard Methods of Fire Tests of Door Assemblies.
 - 2. ASTM E 2074 Standard Test Method for Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies.
- D. Window and Door Manufacturers Association (formerly National Wood Window and Door Association):
 - 1. ANSI/WDMA (formerly NWWDA) IS-6-A-2001 Quality Standards of the Window and Door Manufacturers Association.
- E. National Fire Protection Association (NFPA):
 - 1. NFPA 80 Fire Doors and Windows.
 - 2. NFPA 252 Standard Method of Fire Tests for Door Assemblies.
- F. Warnock-Hersey International (WHI):
 - 1. Directory of Certification Listings for Fire Doors.
- G. SFI Standard for 2005-2009 (SFIS), the Sustainable Forestry Initiative Program, Sustainable Forestry Board, Arlington, Virginia, 703-797-2506.
- H. Scientific Certification Systems (SCS) Standards for certifying recycled and recovered content of manufactured products.

1.05 SYSTEM DESCRIPTION

A. N/A.

1.06 SUBMITTALS

- A. See Section 01330 - Submittals, for submittal procedures.
- B. Product Data: Submit product data for specified products.
 - 1. Product Data: Include performance and physical data for specified products.
- C. Shop Drawings: For each type submit shop drawings showing layout, profiles and product components including anchorage, accessories, finish colors and textures.
 - 1. Illustrate door joinery, installation criteria, elevations, sizes, types, undercuts required, special beveling, and special cutouts for hardware.
- D. Samples: Submit selection and verification samples for finishes, colors and textures.
 - 1. Wood: Minimum 36 square-inches.
 - 2. Cross-sectional sample of joinery, each type.
- E. Quality Assurance Submittals: Submit the following:
 - 1. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.
 - 2. Certificates: Product certificates signed by manufacturer certifying materials comply with specified performance characteristics and physical requirements.
 - a. Submit manufacturer's certification stating that doors supplied for project meet or exceed specified standards.
 - 3. Manufacturer's Instructions: Manufacturer's installation instructions.
 - a. Submit manufacturer's Material Safety Data Sheets for specified products.
 - b. Submit manufacturer's installation instructions indicating special installation instructions.
 - c. Submit manufacturer's maintenance instructions for sealing door edges.
- F. Closeout Submittals: Submit the following:
 - 1. Warranty: Warranty documents specified herein.

1.07 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Installer Qualifications: Installer experienced in performing work of this section who has specialized in the installation of work similar to that required for this project.
 - a. Company specializing in commercial applications with minimum 3 years experience on projects of similar scope.
 - 2. Product Manufacturer: Company specializing in manufacturing quality, true stile and rail, raised or flat panel wood doors, non-rated and fire-rated, with minimum 5 years experience.
- B. Industry Standards:
 - 1. SFIS labels for primary and all secondary producers.
 - 2. Perform work in accordance with ANSI/WDMA (formerly NWWDA) IS-6-A-2001, Premium Grade.
 - 3. Factory mark each door with ANSI/WDMA (formerly NWWDA) IS-6-A-2001 grade.
 - a. Field finish doors in accordance with ANSI/WDMA (formerly NWWDA) IS-6-A-2001. Grades are identified in Section 09900.
- D. Coordination: Coordinate work with door opening construction and door hardware installation.
- E. Mock-Ups: For each type, install a job mock-up at project site using acceptable products and

manufacturer-approved installation methods. Obtain Owner and Architect's acceptance of finish color, texture and pattern, and workmanship standard.

1. Maintenance: Maintain mock-up during construction for workmanship comparison; remove and legally dispose of mock-up when no longer required.
2. Incorporation: Mock-up may be incorporated into final construction upon Owner's approval.

- F. Preinstallation Meetings: Conduct preinstallation meeting to verify project requirements, substrate conditions, manufacturer's installation instructions, and manufacturer's warranty requirements.

1.08 COORDINATION

- A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other Sections to ensure that frames can be supported and installed as indicated.
- B. Hardware Coordination: Distribute copies of approved hardware schedule to fabricator of frames. Coordinate Shop Drawings and fabrication with hardware requirements.

1.09 DELIVERY, STORAGE, AND PROTECTION

- A. General: Comply with Division 1 Product Requirements Sections.
- B. Ordering: Comply with manufacturer's ordering instructions and lead-time requirements to avoid construction delays.
- C. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
1. Package, deliver and store doors in accordance with WDMA (formerly NWWDA) IS-6-A-1999. Protect doors with resilient packaging.
- D. Storage and Protection: Store materials protected from exposure to harmful weather conditions and at temperature and relative humidity conditions recommended by manufacturer and referenced quality standard.
1. Store doors flat on a level surface, in a clean, dry, and well-ventilated area protected from sunlight. Do not subject doors to extreme heat, dryness, or moisture.
 2. If present, break plastic protective packaging on-site to permit ventilation.
 3. Seal door edges immediately upon delivery, prior to storage.
 4. Do not drag doors across one another.

1.10 PROJECT CONDITIONS

- A. Temperature and Relative Humidity Requirements: Maintain temperature and relative humidity in spaces where products will be installed for time period before, during, and after installation as recommended by manufacturer.
- B. Field Measurements: Verify actual measurements and openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.

1.11 WARRANTY

- A. See Section 01770 - Closeout Procedures, for additional warranty requirements.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to,

and not a limitation of, other rights Owner may have under the Contract Documents.

1. Include coverage for delamination of veneer, warping beyond specified installation tolerances, defective material, and telegraphing core construction. Warranty includes replacement only, not including finishing, installation, or freight.
2. Warranty Period: 5 years commencing on the Date of Substantial Completion

PART 2 PRODUCTS

2.01 CUSTOM WOOD DOORS

- A. Mahogany, solid wood stiles, rails and mullions.
- B. Glazing. Art glass, laminated.

2.02 MANUFACTURED DOOR UNITS

- A. N/A

2.03 FABRICATION

- A. Tolerances:
 1. Squareness: Difference in length of over-all diagonals not to exceed 1/16 inch.

2.04 FINISHES

- A. Site Finishing in accordance with Section 09900 - Painting.

2.05 SOURCE QUALITY

- A. N/A

PART 3 EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

- A. Compliance: Comply with manufacturer's product data including product technical bulletins, product catalog installation instructions, and product carton instructions for installation.

3.02 EXAMINATION

- A. Site Verification of Conditions: Verify substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.
 1. Verify frame opening conditions under provisions of Section 01310 - Project Management and Coordination.
 2. Verify that opening sizes and tolerances are acceptable.
 3. Do not install doors in frame openings that are not plumb or are out-of-tolerance for size or alignment.

3.03 PREPARATION

- A. Surface Preparation:
 1. Acclimate doors to site conditions for a minimum of 72 hours before installation.

3.04 INSTALLATION

- A. Door Installation:
 1. Install doors in accordance with manufacturer's instructions and ANSI/WDMA (formerly NWWDA) IS-6-A-2001 Quality Standards requirements.
 2. Trim door height by cutting bottom edge maximum 3/4 inch.

3. Pilot drill screw and bolt holes.
4. Machine cut for hardware. Bore for handsets and cylinders unless factory machining has occurred.

B. Installation Tolerances:

1. Conform to ANSI/WDMA (formerly NWWDA) IS-6-A-2001 requirements for fit, joint, and clearance tolerances.
2. Maximum Diagonal Distortion (Warp): 1/4 inch measured with straight edge or tight string, corner to corner, over an imaginary 36 inch × 84 inch surface area.
3. Maximum Vertical Distortion (Bow): 1/4 inch measured with straight edge or tight string, top to bottom, over an imaginary 36 inch × 84 inch surface area.
4. Maximum Width Distortion (Cup): 1/8 inch measured with straight edge or tight string, edge to edge, over an imaginary 36 inch surface area.
5. Maximum Height Distortion (Cup): 1/4 inch measured with straight edge or tight string, top to bottom, over an imaginary 84 inch surface area.

C. Related Products Installation Requirements:

1. Coordinate installation of doors with installation of frames. Utilize at least 2 hinges on doors up to 72 inches in height and 1 additional hinge for each 30 inches or fraction thereof of height thereafter.

3.05 ADJUSTING

- A. Adjust door for smooth and balanced door movement.

3.06 CLEANING

- A. Cleaning: Remove temporary coverings and protection of adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance. Remove construction debris from project site and legally dispose of debris.

3.07 PROTECTION

- A. Protection: Protect installed product's finish surfaces from damage during construction.

3.08 SCHEDULES

- A. Schedules: Refer to Door Schedule indicated in Drawings.

END OF SECTION

SECTION 08590 - WOOD WINDOW RESTORATION**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and Division 1 Specification sections apply to the work of this Section..

1.02 RELATED SECTIONS

- A. Section 06400 - Architectural Woodwork.
- B. Section 06913 - Architectural Woodwork Restoration.
- C. Section 07900 - Sealants.
- D. Section 08800 - Glazing.
- E. Section 09900 - Painting, for finishing of restored wood windows.

1.03 REFERENCES

- A. "Architectural Woodwork Quality Standards" as published by the Architectural Woodwork Institute, latest edition.

1.04 DESCRIPTION OF WORK

- A. This section describes the methods for restoring the existing wood windows that consist fixed sashes, including interior and exterior frames and trim.
- B. The restoration of windows consists of providing all labor, materials, equipment, and services necessary to complete all work related to the fabrication (of missing sash, frames, and components), repair, and painting of all windows.
- C. Preserve the inherent quality and detailing of the window units and elements, including individual components.
- D. Enhance the self-preserving quality of each window unit in order to ensure continued smooth operation and to enable subsequent maintenance on a scheduled basis.

1.05 SCOPE OF WORK

- A. Extent of wood restoration work is as indicated on the Drawings, as specified herein, and as required by authorities and conditions for satisfactory completion of the work.
- B. The work of this Section includes, but is not necessarily limited to:
 - 1. Hand prepare (sand, scrape) surfaces of existing wood windows, including sill, sash, frame, mullions, and stops.
 - 2. Reglaze windows with laminated glass.
 - 3. Replace missing wood elements, dutchmen repairs and consolidate wood components if necessary and as described on Drawings and here in specified.
 - 5. Remove non-historical window components.
 - 6. Provide new window sash to match existing.

1.06 SUBMITTALS

- A. See Section 01330 - Submittals, for submittal procedures.
- B. Product Data: Provide manufacturer's technical information, including Material Safety Data Sheets (MSDS), where applicable, for the following materials:

1. Weatherstripping
 2. Resin Glue
 3. Epoxy Consolidants
 4. Hardware
- C. Shop Drawings: Submit for all new components to be fabricated, including full-size details of all dutchman repairs and of joints between new and existing members.
- D. Samples:
1. 12" samples of profiles of all replacement wood members.
 2. Dowels for pinned sash connections
 3. All repair and consolidation material.
 4. Replacement hardware, submit for each type required.
- E. Miscellaneous:
1. Submit written or graphic proposal verifying the specific locations where dutchman and epoxy consolidation will be employed.

1.07 QUALITY ASSURANCE

- A. The Contractor for the work of this Section shall possess specific knowledge and experience in the field of wood window repair and restoration, and shall have been engaged in the practice of wood restoration on historic structured for a minimum of five (5) years.
- B. General: Comply with applicable requirements of the ANSI/NWMA "I.S.1 Series," and with AWI requirements for "Premium" grade materials and workmanship.

1.08 ENVIRONMENTAL REQUIREMENTS

- A. Temporary Protection: Contractor shall provide adequate temporary protection from the weather for the interior of the building during window restoration work. Contractor shall protect all interior materials and surfaces from the weather. All window openings on the first level shall be equipped with adequate temporary protecting from intrusion during the period that window sashes in those locations are being restored
- B. FIELD MEASUREMENTS: Contractor is responsible for field measuring ALL dimensions.

1.09 WARRANTY

- A. See Section 01780 - Closeout Submittals, for additional warranty requirements.
- B. Upon completion of the work of this Section, and as a condition of its acceptance, provide Owner with a written guarantee cosigned by the installer guaranteeing that the repairs and adjustments will remain functional and fully performing - under normal wear - for a period of at least five (5) years from the Date of Substantial Completion, and that all replacements or repairs required will be made promptly, in accordance with these Specifications and at no additional cost to Owner.

PART 2 PRODUCTS

2.01 GENERAL

- A. Wood members to be replaced are described on drawings.
- B. Where new wood is required, it shall be grade as specified below (as defined by AWI), kiln-dried to a moisture content of 6 to 12 percent at the time of fabrication, and shall be free from shakes, large or loose knots, and other imperfections that might impair its strength, durability, or appearance. Slight defects such as small, sound knots that do not materially affect its strength

will be permitted, but only for application where wood is not exposed to view.

2.02 MATERIALS

- A. Replacement Wood:
 - 1. Species: Match existing original components at each location.
 - 2. Plywood for temporary Protection: A-C plywood with exterior glue.
- B. Fasteners
 - 1. Fasteners shall comply with the National Woodwork Manufacturer's Association, Inc. requirements for fabrication, with manufacturer's recommendations and with standard industry practice.
 - a. Only hot-dip galvanized or nonferrous nails and screws shall be used for fabrication and installation of wood window components.
 - b. Brass screws shall be used for hardware and accessory installation.
- C. Wood Consolidants
 - 1. General: Epoxy resins for consolidation of decayed wood shall be used without thickeners of fillers (unless otherwise in the manufacturer's written instructions), to allow for thorough saturation into wood.
 - a. Epoxy consolidant and filler must be compatible, of the same system, and produced by the same manufacturer.
 - 2. Acceptable Systems:
 - a. 105 Resin and 206 Slow Hardener (West System), as manufactured by Gougeon Brothers, Inc., Bay City, Michigan.
 - b. Liquid Wood and Wood Epoxy, as manufactured by Abatron, Inc., Gilberts, Illinois.
- D. Glue for Dutchman Repairs
 - 1. Epoxy Resin Glue: Use a less viscous version of the epoxy resin that is being used for the consolidation of decayed wood (described in 2.02.H.2 of this Section).

PART 3 EXECUTION

3.01 INSPECTION

- A. Examine areas and conditions under which the work of this Section is to be completed. Notify Architect immediately of conditions detrimental to proper and timely completion of the work of this Section.

3.02 DISASSEMBLY, HAND PREPARATION, & REINSTALLATION

- A. Carefully remove existing wood stops, moldings, and sash. Remove all sash weights, pivots, locks, pulleys, and all other hardware.
- B. Remove existing glass and glazing compound or glazing bars from sashes.
- C. Clean wood elements in good condition of dirt, scrape loose or deteriorated paint, fill, sand, and prime. Clean and remove all paint from hardware. Restore pulleys to function.
- D. Deteriorated elements shall be restored by means of epoxy consolidation applied to unpainted wood, followed by epoxy filler, both installed in strict accordance with the manufacturer's printed instructions.

3.03 FABRICATION OF NEW REPLACEMENT ELEMENTS

- A. All elements scheduled to be new shall be fabricated and installed by skilled workers in accordance with best trade practices.

1. Joints shall be properly fitted. Adjoining surfaces in the same plane shall be flush.
 2. Use mitered or coped joints for molded members.
 3. All nailing shall be in accordance with commercial standards CS190-59 and CS204-09.
 4. Glued surfaces shall be in close contact throughout.
- B. Fasteners, unless originally exposed, shall be concealed. Where surface fastening is required and approved by Architect, it shall be by means of countersunk screws or bolts with screw head concealed with wood plugs. Finishing nails, where required, shall be well set and puttied.

3.04 PAINT & STAIN

- A. General: Comply with requirements of Section 09900 - Painting.
1. Back prime all window elements scheduled to be painted
 2. Paint and stain all windows, as scheduled.

3.05 HARDWARE

- A. Carefully remove all hardware and restore to fully operable condition.
- B. Painted hardware shall be carefully stripped of paint, using non-abrasive means; use of approved chemical paint strippers is allowable.
1. Polish non-ferrous hardware. Avoid harsh wheel buffing that could wear away intricate decoration. Protect polished non-ferrous hardware with two coats of clear, high gloss lacquer, applied by spraying.
- C. Reinstall hardware using original fasteners. Where new fasteners are required, match original.
- D. GLASS AND GLAZING
1. Laminated glass. Refer to Section 08800 - Glazing.
- E. DELIVERY
1. Deliver new fabricated elements to site without damage. Replace any elements that are incorrectly sized for proper reinstallation.
- F. INSTALLATION
1. Install all repaired windows and related elements plumb, level, and true, to fit existing work without warp or rack.

3.06 ADJUSTMENTS AND CLEANING

- A. Adjust all to provide weathertight installation.
- B. Remove and replace glass that is broken, chipped, cracked, abraded, or damaged during construction period, including natural causes, accidents, and vandalism.
- C. Wash glass on both faces not more than four (4) days prior to scheduled Inspection for Substantial Completion. Comply with glass manufacturer's recommendations for final cleaning.

3.07 SECURITY & PROTECTION

- A. Install temporary plywood panels over openings where sash has been removed to provide security and protection from the elements.

END OF SECTION

SECTION 08700 - HARDWARE AND ACCESSORIES**PART 1 GENERAL**

1.01 SECTION INCLUDES

- A. Hardware for wood doors.
- B. Hardware for custom cabinetry.
- C. Hardware and accessories for glass shelves.

1.02 RELATED SECTIONS

- A. Section 06400 – Architectural Woodwork.
- B. Section 08210 – Wood Doors and Frames.
- C. Section 08800 – Glass & Glazing.

1.03 REFERENCES

- A. ANSI/ICC A117.1 - American National Standard for Accessible and Usable Buildings and Facilities; International Code Council; 1998.
- B. BHMA A156.1 - American National Standard for Butts and Hinges; Builders Hardware Manufacturers Association, Inc.; 2000 (ANSI/BHMA A156.1).
- C. BHMA A156.2 - American National Standard for Bored and Preassembled Locks & Latches; Builders Hardware Manufacturers Association; 2003 (ANSI/BHMA A156.2).
- D. BHMA A156.3 - American National Standard for Exit Devices; Builders Hardware Manufacturers Association; 2001 (ANSI/BHMA A156.3).
- E. BHMA A156.5 - American National Standard for Auxiliary Locks & Associated Products; Builders Hardware Manufacturers Association; 2001 (ANSI/BHMA A156.5).
- F. NFPA 80 - Standard for Fire Doors and Fire Windows; National Fire Protection Association; 1999.
- G. NFPA 101 - Code for Safety to Life from Fire in Buildings and Structures; National Fire Protection Association; 2003.
- H. UL (BMD) - Building Materials Directory; Underwriters Laboratories Inc.; current edition.

1.04 SUBMITTALS

- A. See Section 01330 - Submittals for submittal procedures.
- B. Samples:
 - 1. Submit 1 sample of each type hinge, latchset, lockset, hanger and track, closer, and threshold, including screws and fasteners, illustrating style, color, and finish.
 - 2. Samples will be returned to supplier.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

1.06 PRE-INSTALLATION MEETING

- A. Convene with Architect one week prior to commencing work of this section.

1.07 DELIVERY, STORAGE, AND PROTECTION

- A. Package hardware items individually; label and identify each package with door opening code to match hardware schedule.

1.08 COORDINATION

- A. Coordinate the work with other directly affected sections involving manufacture or fabrication of internal reinforcement for door hardware.

PART 2 PRODUCTS

2.01 GENERAL

- A. In accordance with Drawings and Door and Window Hardware Schedules therein. Note: names in parentheses following manufacturers' names below reflect wording on hardware schedules.

2.02 MANUFACTURERS

- A. Crown City Hardware Company (Crown City), Pasadena, California, phone 818-794-1188.
- B. P. E. Guerin, Inc. (P. E. Guerin), 23 Jane St. New York, N.Y. 10014, phone 212-243-5270, www.peguerin.com.
- C. Richards-Wilcox, Inc. (Richards-Wilcox), Aurora, Illinois, phone 800-253-5668, www.richardswilcox.com.
- D. Schlage Lock (Schlage), Colorado Springs, Colorado, phone 800-847-1864, www.schlage.com.
- E. Von Duprin, Indianapolis, Indiana, 317-613-8944, e-mail vonduprin,intro@irco.com, www.vonduprin.com.
- F. Restoration Hardware, 877-733-6200, www.restorationhardware.com.
- G. House of Antique Hardware, 802 NE Davis Street, Portland, OR, 97232, 888-223-2545, houseofantiquehardware.com.
- H. L.E. Johnson Products, Inc., 2100 Sterling Avenue, Elkhart, IN, 46516, 800-348-7616, www.johnsonhardware.com.
- I. Nova Display, Inc., 1626 Piner Road, Unit A-B, Santa Rose, CA, 95403, 800-753-9688, www.novadisplay.com.

2.03 POCKET DOOR LOCKS

- A. Locking Set: Item No. R-06VM-82191X, as distributed by House of Antique Hardware (houseofantiquehardware.com). Satin nickel finish.
- B. Non-locking Set: Matching dummy set to above.

2.04 TRACK & CARRIAGE

- A. 200PD Heavy Duty Pocket Door Hardware, as manufactured by L.E. Johnson Products, Inc.

2.05 CABINET PULLS & HINGES

- A. Gural Center Cabinet Pulls: Solid Brass Cabinet & Drawer Handle, R-08BM-1309X, as distributed by House of Antique Hardware. Oil rubbed bronze.
- B. Gural Center Cabinet Hinges: Solid Brass Ball-tipped Cabinet Hinges, R-08BM-1811X, as distributed by House of Antique Hardware. Oil rubbed bronze.

- C. Gift Shop Cabinet Pulls: 8" Solid Brass Mason Pull, as distributed by Restoration Hardware. Satin nickel finish.
- D. Gift Shop Cabinet Hinges: Solid Brass Ball-tipped Cabinet Hinges, R-08BM-1811X, as distributed by House of Antique Hardware. Satin nickel finish.

2.06 GLASS DISPLAY SHELVES

- A. Tension Cable Display System, 1.5 mm galvanized cable, C2WW cable fittings, CG13 multi-position shelf supports, ACL wall mounted channels, MSB wall brackets, AT toggles and P01 decorative support plates, as distributed by Nova Display, Inc. Satin nickel and satin chrome.

2.07 GENERAL REQUIREMENTS FOR DOOR HARDWARE PRODUCTS

- A. Provide products that comply with the following:
 - 1. Applicable provisions of Federal, State, and local codes.
 - 2. ANSI/ICC A117.1, American National Standard for Accessible and Usable Buildings and Facilities.
 - 3. Applicable provisions of NFPA 101 Life Safety Code.
 - 4. Fire-Rated Doors: NFPA 80.
 - 5. All hardware on fire-rated doors: Listed and classified by UL as suitable for the purpose specified and indicated.
 - 6. Products requiring electrical connection: Listed and classified by UL as suitable for the purpose specified and indicated.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that doors, frames and cabinets are ready to receive work and dimensions are as indicated on shop drawings.

3.02 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and applicable codes.
- B. Use templates provided by hardware item manufacturer.
- D. Mounting heights for hardware from finished floor to center line of hardware item: As listed in Schedule, unless otherwise noted:

3.03 ADJUSTING

- A. Adjust work under provisions of Section 01700.
- B. Adjust hardware for smooth operation.

3.04 PROTECTION OF FINISHED WORK

- A. Do not permit adjacent work to damage hardware or finish through Final Acceptance.
- B. Repair or replace hardware damaged as directed by Architect through Final Acceptance.

END OF SECTION

SECTION 08800 – GLASS & GLAZING**PART 1 GENERAL**

1.01 SECTION INCLUDES

- A. Laminated Vision Glass for window restoration.
- B. Laminated Art Glass
 - 1. Pocket doors and transoms.
 - 2. Shelves in Gift Shop
 - 3. Cabinet doors in Gural Center

1.02 RELATED SECTIONS

- A. Section 08212 - Stile and Rail Wood Doors, for glazed doors.
- B. Section 08360 - Overhead Doors.
- C. Section 08590 - Wood Window Restoration, for glazed windows.
- D. Section 08830 - Mirror, for bathroom closet door.

1.03 REFERENCES

- A. 16 CFR 1201 - Safety Standard for Architectural Glazing Materials; current edition.
- B. ANSI Z97.1 - American National Standard for Safety Glazing Materials Used in Buildings, Safety Performance Specifications and Methods of Test; 1984 (R1994).
- C. ASTM C 1036 - Standard Specification for Flat Glass; 2001.
- D. ASTM C 1172 - Standard Specification for Laminated Architectural Flat Glass; 2003.
- E. ASTM E 1300 - Standard Practice for Determining Load Resistance of Glass in Buildings; 2003.
- F. GANA (GM) - GANA Glazing Manual; Glass Association of North America; 2004.
- G. GANA (LGDG) - Laminated Glass Reference Manual; Glass Association of North America; 2003.

1.04 PERFORMANCE REQUIREMENTS

- A. Select type of exterior glass to withstand dead loads and wind loads acting normal to plane of glass at design pressures calculated in accordance with ASCE 7.

1.05 SUBMITTALS

- A. See Section 01330 - Submittals, for submittal procedures.
- B. Product Data on Glass Types: Provide structural, physical, and environmental characteristics, size limitations, and special handling or installation requirements.
- C. Product Data on Glazing Compounds: Provide chemical, functional, and environmental characteristics, limitations, and special application requirements. Identify available colors.
- D. Samples: Submit two 6 x 6-inch samples of each type of glass.
- E. Certificates: Certify that products meet or exceed specified requirements.
- F. Manufacturer's Certificate: Certify that laminated glass meets or exceeds specified requirements.

1.06 QUALITY ASSURANCE

- A. Perform Work in accordance with GANA Glazing Manual and FGMA Sealant Manual for glazing installation methods.

1.07 PRE-INSTALLATION MEETING

- A. Convene one week before starting work of this section.

1.08 ENVIRONMENTAL REQUIREMENTS

- A. New Doors and Windows:
 - 1. Install door and window glass in controlled shop environment.
- B. Existing Doors and Windows:
 - 1. Install door and window glass in shop-like environment wherever practicable.

1.09 WARRANTY

- A. See Section 01780 - Closeout Submittals, for additional warranty requirements.
- B. Provide a five (5) year warranty to include coverage for delamination of laminated glass and replacement of same.

1.10 MAINTENANCE PRODUCTS

- A. Provide Owner with the equivalent of 20% of the total area of each type of glass used.

PART 2 PRODUCTS

2.01 FLAT GLASS

- A. Annealed, clear.
- B. Manufacturers: PPG Industries, Inc., or approved equal.

2.02 LAMINATED VISION GLASS

- A. For wood window restoration.
 - 1. Two sheets clear, annealed glass laminated with a 0.060-inch-thick polyvinyl butyl interlayer. Comply with ASTM C 1172.
 - 2. Fabricator: Dundy Glass, 170-30 Douglas Ave, Jamaica, New York 11433, phone 718-523-5800.

2.03 COLORED ART GLASS

- A. Pattern and other design features to be selected by Architect.
- B. Fabricator: The Rudy Art Glass Studio, York, Pennsylvania, phone 717-843-3345.

2.04 LAMINATED ART GLASS (DOORS & TRANSOMS)

- A. Pattern and other design features to be selected by Architect.
- B. Manufacturer: The Rudy Art Glass Studio, York, Pennsylvania, phone 717-843-3345.

2.05 LAMINATED ART GLASS (SHELVING)

- A. Pattern and other design features to be selected by Architect.
- B. Manufacturer: F.J. Gray & Co., Queens Village, NY, phone 800-523-3320.

PART 3 EXECUTION

3.01 GENERAL

- A. Glaze new wood doors and windows in controlled shop conditions. Glaze existing wood windows and doors in controlled shop conditions insofar as practicable.
 - 1. See Section 08500 - Wood Window Restoration.
 - 2. See Section 08210 - Wood Doors and Frames.
- B. Prepare and install glazing in existing doors and windows under shop-like conditions wherever feasible.

3.02 EXAMINATION

- A. Verify that openings for glazing are correctly sized and within tolerance.
- B. Verify that surfaces of glazing channels or recesses are clean, free of irregularities that may create stress in installed glass, and ready to receive glazing.

3.03 INSTALLATION

- A. Exterior Windows to be Restored
 - 1. Apply heel bead of butyl sealant along intersection of permanent stop with frame ensuring full perimeter seal between glass and frame; maintain continuous air, water & noise seal.
 - 2. Place setting blocks at 1/4 points with edge blocks no more than 6 inches from corners.
 - 3. Rest glazing on setting blocks and push against and heel bead of sealant with sufficient pressure to attain full contact at perimeter of pane or glass unit.
 - 4. Secure glazing with glazing points.
 - 5. Where indicated by conditions, install wood glazing stop with hot-dipped finishing nails or non-ferrous staples, set and filled.
 - a. Fill perimeter between edge of glazing and frame flush to face of glazing.
 - 6. Where indicated by conditions, install glazing compound on the exterior face of the windows, tooling bead so that its exposed face extends from the edge of the sash to a line on the glass about 1/16" below the line of the inner stop. Slick bead with water after it has set up but before it has hardened.
- B. Glazing in Interior Applications:
 - 1. Apply heel bead of butyl sealant along intersection of permanent stop with frame ensuring full perimeter seal between glass and frame; maintain continuous air, water & noise seal.
 - 2. Secure glazing with glazing points.
 - 3. Where indicated by conditions, install wood glazing stop with hot-dipped finishing nails or non-ferrous staples, set and filled.

3.04 CLEANING

- A. Clean glass and adjacent surfaces just prior to Substantial Completion.

END OF SECTION

SECTION 09215 - GYPSUM VENEER PLASTER**PART 1 GENERAL**

1.01 SECTION INCLUDES

- A. Gypsum veneer plaster on gypsum veneer base and other substrates.

1.02 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry: Framing for walls and partitions to receive plaster.
- B. Section 09260 - Gypsum Board Assemblies

1.03 REFERENCES

- A. ASTM C 843 - Standard Specification for Application of Gypsum Veneer Plaster; 1999.
- B. ASTM C 1047 - Standard Specification for Accessories For Gypsum Wallboard and Gypsum Veneer Base; 1999.
- C. ASTM C 1396/C 1396M - Standard Specification for Gypsum Board; 2003a.
- D. GA-216 - Application and Finishing of Gypsum Board; Gypsum Association; 2004.
- E. GA-600 - Fire Resistance Design Manual; Gypsum Association; 2003.

1.04 SUBMITTALS

- A. See Section 01330 - Submittals, for submittals procedures.

1.05 QUALITY ASSURANCE

- A. Perform work in accordance with ASTM C 843, ASTM C 844.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply veneer plaster when substrate or ambient air temperature is less than 50 degrees F nor more than 80 degrees F for 24 hours prior to, during, and after operations, until building heating system can maintain the above minimum temperature.

PART 2 PRODUCTS

2.01 MATERIALS

- A. For Walls, including wallboard scheduled to receive tiles:
 - 1. Gypsum Veneer Base: ASTM C1396/C 1396M; sizes to minimize joints in place; ends square cut.
 - a. Thickness: 1/2 inch.
 - b. USG Imperial Brand Gypsum Base (blueboard).
 - 2. Liquid primer for blueboard, cementboard, and gypsum wall board.
 - a. American Clay Primer
 - 3. Recycled Content Gypsum Veneer Plaster, integrally colored.
- B. Gypsum Board Accessories: Complying with ASTM C1047.
- C. Reinforcing Tape, Joint Compound, Adhesive, Water, Fasteners: Complying with GA-216.

2.02 MIX DESIGN

- A. In accordance with ASTM C587 and manufacturer's instructions.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that substrates are ready to receive work.
- B. Verify gypsum plaster base is flat, smooth, and surface is ready to receive work. Verify joint and surface perimeter accessories are in place.

3.02 INSTALLATION - GYPSUM PLASTER BASE

- A. Install gypsum base in accordance with ASTM C844 and GA-216.
- B. Use drywall screws to fasten gypsum base to framing substrate.
- C. Install accessories.
- D. Gypsum Wall Board: Tape, fill, and sand filled joints, edges, corners, openings, and trim to produce surface ready to receive veneer finish.
 - 1. Blueboard and cementboard DO NOT require taping and floating before finishing with clay plaster.
- E. Feather coats onto adjoining surfaces so that joint camber is maximum 1/32 inch.

3.03 INSTALLATION - VENEER PLASTER

- A. Prime substrate. Install gypsum veneer plaster in accordance with ASTM C843 and manufacturer's instructions.
- B. Provide 1/16"-thick smooth finish coat. Finish surface to flat, smooth, hard, trowel finish.

3.04 ERECTION TOLERANCES

- A. Maximum Variation From Specified Thickness: Plus or minus 1/32 inch.

END OF SECTION

SECTION 09260 - GYPSUM BOARD ASSEMBLIES**PART 1 GENERAL**

1.01 SECTION INCLUDES

- A. Gypsum wallboards.
- B. Joint treatment and accessories.
- C. Finish systems.

1.02 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry for wall and partition framing and blocking.
- B. Section 09215 - Gypsum Veneer Plaster.
- C. Section 09300 - Tile.
- D. Section 09305 - Tile-Setting Materials and Methods.
- E. Section 09900 - Painting.

1.03 REFERENCES

- A. ASTM C 475 - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 2002.
- B. ASTM C 840 - Standard Specification for Application and Finishing of Gypsum Board; 2004.
- C. ASTM C 954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs From 0.033 inch to 0.112 inch in Thickness; 2000.
- D. ASTM C 1002 - Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs; 2001.
- E. ASTM C 1047 - Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base; 1999.
- F. ASTM C 1396 - Standard Specification for Gypsum Board; 2003a.
- G. GA-253 - Recommended Specifications for the Application of Gypsum Sheathing; Gypsum Association; 1999.
- H. GA-600 - Fire Resistance Design Manual; Gypsum Association; 2003.

1.04 SUBMITTALS

- A. See Section 01330 - Submittals, for submittal procedures.

1.05 QUALITY ASSURANCE

- A. Scientific Certification Systems (SCS) or comparable third-party certification of minimum 99% by weight recycled gypsum content for standard board, and minimum 95% for other formulations (such as green board).
- B. Perform in accordance with ASTM C 840. Comply with requirements of GA-600 for fire-rated assemblies.

PART 2 PRODUCTS

2.01 GYPSUM BOARD MATERIALS

- A. Manufacturers:
 - 1. USG: www.usg.com.
 - 2. Temple-Inland. 800-231-6060. www.temple.com.
 - 3. Substitutions: See Section 01600 - Product Requirements.
- B. Gypsum Wallboard: ASTM C 1396. Sizes to minimize joints in place; ends square cut.
 - 1. General: Recycled content in accordance with 1.05 Quality Assurance paragraph A, above.
 - 2. Regular Type:
 - a. Temple-Inland regular gypsum wallboard.
 - b. Application: Use for vertical surfaces, unless otherwise indicated.
 - c. Thickness: 1/2 inch (13 mm).
 - d. Edges: Tapered.
 - 3. Type X: Fire resistant, UL or WH rated.
 - a. Application: Where required for fire-rated assemblies, unless otherwise indicated.
 - b. Edges: Tapered.
 - 4. Ceiling Board: Special sag-resistant type.
 - a. Application: Ceilings, unless otherwise indicated.
 - b. Thickness: 1/2 inch (13 mm).
 - c. Edges: Tapered.

2.02 ACCESSORIES

- A. Joint Materials: ASTM C 475 and as recommended by gypsum board manufacturer for project conditions.
 - 1. Tape: 2 inch (50 mm) wide, creased paper tape for joints and corners, except as otherwise indicated.
 - 2. Ready-mixed vinyl-based joint compound.
- B. Screws: ASTM C 954; steel drill screws for application of gypsum board to loadbearing steel studs.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that project conditions are appropriate for work of this section to commence.

3.02 GYPSUM BOARD INSTALLATION

- A. Comply with ASTM C 840 and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
- B. Single-Layer Non-Rated: Install gypsum board perpendicular to framing, with ends and edges occurring over firm bearing.
- C. Fire-Rated Construction: Install gypsum board in strict compliance with requirements of listing authority.

3.03 JOINT TREATMENT

- A. Tape, float, and texture surfaces to receive earth clay veneer, wallpaper, and paint.
- B. Paper Faced Gypsum Board: Use paper joint tape, bedded with ready-mixed vinyl-based joint compound and finished with ready-mixed vinyl-based joint compound.
- C. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to

receive paint.

1. Feather coats of joint compound so that camber is maximum 1/32 inch (0.8 mm).

3.04 TEXTURE FINISH

- A. Smooth texture, similar to that of plaster finish elsewhere in this Project.

END OF SECTION

SECTION 09300 - TILE**PART 1 GENERAL**

1.01 SECTION INCLUDES

- A. Tile for fireplace surround.

1.02 RELATED SECTIONS

- A. Section 09305 - Tile-Setting Materials and Methods.

1.03 SUBMITTALS

- A. See Section 01330 - Submittals, for submittal procedures.
- B. Product Data: Provide manufacturers' data sheets on tile, mortar, grout, and accessories. Include instructions for using grouts and adhesives.
- C. Samples: Mount tile and apply grout on two plywood panels, minimum 18 x 18 inches in size illustrating pattern, color variations, and grout joint size variations.
- D. Maintenance Data: Include recommended cleaning methods, cleaning materials, stain removal methods, and polishes and waxes.

PART 2 PRODUCTS

2.01 TILE

- A. Manufacturers: All products by the same manufacturer.
 - 1. Ann Sacks Tile & Stone, Short Hills Marble & Tile, 658 Morris Turnpike, Short Hills, NJ 07078. Ph: 973-376-1330.
 - a. Pattern & Color: Erin Adams Zen Weave Mottled Orange 40.
- B. By submittal and Architect's approval.

2.02 TILE-SETTING MATERIALS

- A. See Section 09305 - Tile-setting Materials and Methods for bonding adhesive and grout.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that sub-floor surfaces are smooth and flat within tolerances specified and are ready to receive tile.

3.02 PREPARATION

- A. Protect surrounding work from damage.
- B. Vacuum clean surfaces and damp clean.
- C. Seal substrate surface cracks with filler.

3.03 INSTALLATION - GENERAL

- A. Install tile and grout in accordance with applicable requirements of ANSI A108.1 through A108.13, manufacturer's instructions, and TCA Handbook recommendations.
- B. Lay tile to pattern indicated.
- C. Place tile with joints that are uniform in width, subject to variance in tolerance allowed in tile

size. Make joints watertight, without voids, cracks, excess mortar, or excess grout.

- D. Allow tile to set for a minimum of 48 hours prior to grouting.
- E. Grout tile joints.

3.04 INSTALLATION - THIN-SET METHODS

- A. Using the flat side of a 3/16" x 1/4" V-notch trowel to initiate the bond coat, firmly apply the setting material onto the substrate.
- B. With additional setting material, using a 3/16 x 1/4" V-notch trowel, comb the notches full to establish the proper depth of the setting bed. Using the flat side of a trowel, flatten the notches to achieve a smooth, consistent setting bed approximately 1/8" thick.
- C. Apply glass tile sheets (paper side facing you) into the setting bed, using light even pressure to establish contact.
- D. To achieve a uniform, flat surface tap lightly on the surface, using a wooden beating block and a hammer. Do NOT use rubber floats or steel trowels for this step.
- E. Apply each subsequent sheet so that grout joints line up and a consistent field is maintained.
- F. To unify tile surface from one sheet to the next use wooden beating block and hammer, again lightly tapping from one sheet to the next. Prior to setting each additional sheet check setting bed for skinning (light surface drying of setting material); if skinning occurs scrape off setting bed and repeat steps A, B and C. Spread only as much setting material as to covered in 10 minutes.
- G. After 15-20 minutes wet paper several times over a 5-minute period. When the paper turns dark it is ready to remove. To increase water absorption use warm water.
- H. The paper should be removed as the setting progresses. After water has absorbed into paper, the glue will release from the mosaics. Peel paper starting at the corner of the sheets. Removing paper while the setting material is still in a fresh state allows for necessary adjustments, as well as assuring shade variations.
- I. Straighten individual tiles prior to final set with the goal of creating a consistent, overall field of mosaics. Pay particular attention to the joints between sheets to eliminate the sheet pattern.
- J. Cure a minimum of 24 hours prior to cleaning. Using a nylon brush and water, scrub residual paper and glue from the face of the tile, followed by wiping clean with a damp sponge. Allow installation to dry prior to grouting.
- K. Use only standard grade sanded grout mixed to manufacturer's instructions. Apply grout with a rubber float, forcing grout into joints until full.
- L. Grout joints shall be full and uniformly finished. Due to the impervious quality of glass, the grout will take longer to set than with more porous materials. For initial cleaning use a clean, dry cheesecloth. This will wick additional moisture from the grout and avoid washing out the grout joints.
- M. Allow grout to set up and smooth finish with a damp sponge.
- N. For final polishing of grout haze use a clean dry cheesecloth.

END OF SECTION

SECTION 09305 - TILE-SETTING MATERIALS AND METHODS**PART 1 GENERAL**

1.01 SECTION INCLUDES

- A. Setting mortars and adhesives.
- B. Grouts.

1.02 RELATED SECTIONS

- A. Section 09300 - Tile

1.03 SUBMITTALS

- A. See Section 01330 - Submittals, for submittal procedures.
- B. Product Data: Manufacturer's technical information for each product specified.
- C. Samples: Color charts for selection of grout.
- D. Installation Instructions: Manufacturer's printed instructions for each product.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Prevent damage or contamination to materials by water, freezing, foreign matter, or other causes.
- B. Do not use materials that have frozen unless specifically allowed by manufacturer.
- C. Deliver and store materials on site at least 24 hours before start of work.
- D. Provide dry and climate-controlled storage facilities on site.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturer: Custom Building Products, 13001 Seal Beach Blvd., Seal Beach, California 90740-2753 Phone 562-598-8808, www.custombuildingproducts.com
- B. Acceptable Manufacturer: Bostik Findley, Inc., 211 Boston Street, Middleton, Massachusetts, 01949 ph: 800-227-0332, www.bostikfindley-us.com.
- C. Approved Equal.

2.02 BONDING MATERIAL

- A. General: Bonding material shall be white.
- B. Master Blend or Premium Plus Thin-Set Mortar mixed with Custom-Flex Ultra-Strength Thin-Set Adhesive as manufactured by Custom Building Products, 13001 Seal Beach Blvd., Seal Beach, California 90740-2753 Phone 562-598-8808, www.custombuildingproducts.com, or
- C. Universal Tile Setting Adhesive mixed with Acrylic Mortar Admix as manufactured by Custom Building Products, 13001 Seal Beach Blvd., Seal Beach, California 90740-2753 Phone 562-598-8808, www.custombuildingproducts.com, or
- D. Tile-Mate Thin-Set mortar mixed with Hydroment Flex-A-Lastic 447 Mortar Admixture as manufactured by Bostik Findley, Inc., 211 Boston Street, Middleton, Massachusetts 01949 Phone 800-227-0332, www.bostikfindley-us.com.

2.03 GROUT MATERIALS

- A. Polyblend Sanded Tile Grout as manufactured by Custom Building Products, 13001 Seal Beach Blvd., Seal Beach, California 90740-2753 Phone 562-598-8808, www.custombuildingproducts.com, or
- B. Sanded Ceramic Tile Grout as manufactured by Bostik Findley, Inc., 211 Boston Street, Middleton, Massachusetts 01949 ph: 800-227-0332, www.bostikfindley-us.com

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine surfaces to receive tile work and conditions under which tile will be installed.
- B. Do not proceed with tile work until surfaces and conditions comply with requirements indicated in reference tile installation standard and manufacturer's printed instructions.

3.02 INSTALLATION

- A. Install tile in accordance with manufacturer's printed instructions and the applicable requirements of ANSI A108 Series for the materials being used.
- B. Due to the translucent nature of glass a white bonding material **MUST** be used. Adhere to manufacturer's recommended cure times for all setting materials.
- C. Installing glass tile requires thin-set mortar mixed with a liquid latex admixture. Do not substitute as latex can vary considerably between manufactures. Follow manufacturer's directions explicitly.
- D. Do **NOT** dilute the admixture with water.

3.03 GROUTING

- A. Grout joints in accordance with manufacturer's instructions and ANSI A108.10.
 - 1. Clean sand, water, dust, and foreign substances from joints to be grouted.
 - 2. Clean and dry tile surfaces.
 - 3. After grouting, remove all grout residue promptly using a dry cheese-cloth in order to avoid washing out the grout joints. For polishing of excess grout haze use a clean soft cloth.
 - 4. When installing glass tile, due to the impervious quality of glass the grout will take longer to begin setting up than it does with more porous materials like ceramic tile.

END OF SECTION

SECTION 09650 - RESILIENT FLOORING**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this section.

1.02 SECTION INCLUDES

- A. Resilient flooring.
- B. Resilient base.
- C. Resilient stair accessories.
- D. Installation accessories.

1.03 RELATED SECTIONS

- A. Section 03300 - Cast in Place Concrete.

1.04 REFERENCES

- A. ASTM F 710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring; 2003.
- B. ASTM F 1303 - Standard Specification for Sheet Vinyl Floor Covering with Backing; 2002.
- C. FS RR-T-650 - Treads, Metallic and Nonmetallic, Skid Resistant; Federal Specifications and Standards; Revision E, 1994.

1.05 SUBMITTALS

- A. See Section 01330 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
- C. Shop Drawings: Indicate seaming plan.
- D. Selection Samples: Submit two 15" x 15" samples of each product specified in color selected for use.
- E. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.

1.06 DELIVERY, STORAGE, AND PROTECTION

- A. Deliver materials to project site in unopened manufacturer's packaging, with labels intact, and free of damage.
- B. Store materials in a protected area. Storage area shall be kept secure and dry. Temperature of storage area shall be no less than 40° F and no more than 100° F up on pallets meeting manufacturer's minimum standards.
- C. Protect roll materials from damage by storing on end.

1.07 JOB CONDITIONS

- A. Comply with manufacturer's written instructions;

- B. Coordinate the work of this Section with interfacing and adjoining work to ensure proper sequencing of each installation;
- C. Area of installation shall be secured from weather and temperatures shall be maintained at no less than 70° F without the aid of temporary heating units for a minimum of 48 hours.
- D. Flooring, setting materials and related accessories shall be brought in and distributed through the installation site and allowed to reach a temperature of no less than 70° F (this may take several days).

1.08 EXTRA MATERIALS

- A. Provide 5 percent of installed flooring (or not less than 50 square feet) and 5 percent of stair materials for each color and pattern.

PART 2 PRODUCTS

2.01 Rubber Floorcovering

- A. Noraplan mega, NP Mega 2675 “Caramel” flooring as available from Freudenberg Building Systems, Inc. 94 Glenn Street, Lawrence MA 01843; Telephone: 1-800-332-NORA, www.norarubber.com.
 - 1. Adhesive as manufactured and as recommended by manufacturer for job conditions.
 - 2. Color to match existing.

2.02 Rubber Wall Base

- A. Nora 4" Cove Base S 1028 B as available from Freudenberg Building Systems, Inc., 94 Glenn Street, Lawrence MA 01843; Telephone: 1-800-332-NORA, www.norarubber.com
 - 1. Adhesive as manufactured and as recommended by manufacturer for job conditions.
 - 2. Color to match existing.

2.03 Rubber Stair Treads/Risers

- A. Norament Stair Treads 2074 “Moca” as available from Freudenberg Building Systems, Inc., 94 Glenn Street, Lawrence MA 01843; Telephone: 1-800-332-NORA, www.morarubber.com
 - 1. Adhesive as manufactured and as recommended by manufacturer for job conditions.
 - 2. Color to match existing.

2.05 ACCESSORIES

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that sub-floor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive resilient flooring.
- B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive resilient base.
- C. Verify that sub-floor surfaces are dust-free and free of substances which would impair bonding of adhesive materials to sub-floor surfaces.

3.02 INSTALLATION – RUBBER FLOORING

- A. Install in accordance with manufacturer's instructions.
- B. Layout resilient flooring to provide equal size at perimeter. Adjust layout as necessary to eliminate resilient flooring which is cut to less than half full width.

- C. Install resilient flooring without cracks or voids at seams. Lay seams together without stress.
- D. Spread only enough adhesive to permit installation of materials before initial set.
- E. Set flooring in place, press with heavy roller to attain full adhesion.
- F. Remove Excess adhesive immediately.
- G. Where floor finishes are different on opposite sides of door, terminate flooring under centerline of door.
- H. Scribe resilient flooring neatly at perimeter and obstructions.
- I. Install feature strips and floor markings where indicated. Fit joints tightly.
- J. Do not install defective or damaged resilient flooring.

3.03 INSTALLATION - BASE

- A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches (45 mm) between joints.
- B. Install base on solid backing. Bond tightly to wall and floor surfaces.
- C. Scribe and fit to door frames and other interruptions.

3.04 INSTALLATION - STAIR COVERINGS

- A. Install stair coverings in one piece for full width and depth of tread.
- B. Adhere over entire surface. Fit accurately and securely.

3.05 CLEANING

- A. Remove excess adhesive from floor, base, and wall surfaces without damage.
- B. Clean and apply acrylic emulsion in accordance with manufacturer's instructions.
- C. Clean only after adhesive has fully cured, no sooner than 72 hours after installation.
- D. Protect completed work from damage and construction operations and inspect immediately before final acceptance of project.

END OF SECTION

SECTION 09680 - CARPET & RUNNERS**PART 1: GENERAL**

1.01 SECTION INCLUDES:

- A. Carpet at Main Sanctuary ark and bimah.
- B. Runners for aisles at Main Sanctuary.
- C. Carpet in Gural Center.

1.02 RELATED SECTIONS

- A. Section 09690 – Architectural Woodwork Restoration, for preparation of substrate.

1.03 REFERENCES

- A. American Association of Textile Chemists and Colorists (AATCC):
 - 1. AATCC 16, Test Method of Colorfastness to Light.
 - 2. AATCC 107, Test Method for Colorfastness to Water.
 - 3. AATCC 134, Test Method for Electrostatic Propensity of Carpets.
 - 4. AATCC 165-(93), Test Method for Colorfastness to Crocking: Carpets – AATCC Crock meter Method.
 - 5. AATCC 175-(98), Test Method for Stain Resistance: Pile Floor Coverings
 - 6. AATCC 164, Test Method for Colorfastness to Oxides of Nitrogen in the atmosphere under High Humidities.
- B. American Society for Testing and Materials (ASTM):
 - 1. ASTM D 418 - Methods for Testing Pile Yarn Floor Covering Construction: Finished pile thickness only.
 - 2. ASTM D 5848 - Standard Test Method for Mass per Unity of Pile Yarn for Floor Covering.
 - 3. ASTM D 5793 - Standard Test Method for Binding Sites per Unity Length or Width of Pile Yarn Floor Coverings.
 - 4. ASTM D 1335 – Standard Test Method for Tuft Bind of Pile Yarn Floor Covering.
 - 5. ASTM E 662 – Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
 - 6. ASTM D 3936 - Standard Test Method for Resistance to Delamination of the Secondary Backing of Pile Yarn Floor Covering.

1.04 PERFORMANCE REQUIREMENTS

- A. Comply with the following performance requirements:
 - 1. Smoke Density: ASTM E 662: 450 Flaming Mode - Maximum
 - 2. Static Generation: AATCC 134: 3.5 KV - Maximum
 - 3. Lightfastness: AATCC 16E: Min 4.0 at 40 hrs.
 - 4. Crocking: AATCC 165: 4.0 – Wet/Dry
 - 5. Cold Water Bleed: AATCC 107: 3.0 - Minimum.
 - 6. Ozone Fade: AATCC 129: 3.0 - Minimum.
 - 7. Soil Protection: AATCC 189: 500 ppm Min.
 - 8. CRI Green Label Air Quality Certification: Pass.
- B. Comply with the following construction performance requirements:
 - 1. Delamination: Pass 50,000 cycles roll stool test.
 - 2. Cushion Density: 24 lb/cu. ft.
 - 3. Compression Resistance: 7.5 lb./sq. in. min.

4. Compression Set: 10% max.
 5. Tensile Strength: 50 lb./sq in. min.
 6. Moisture Barrier: Must pass British Spill and 10,000 Impact Test.
 7. Must be impervious to moisture.
 8. Backing system cannot contain plasticizers.
- C. Warranty Performance Requirements:
1. Warranties must be for Lifetime on all items.
 2. Lifetime warranties must cover face components and backing components.
 3. Warranties must be non-pro-rated.

1.05 SUBMITTALS

- A. Manufacturer's Data
1. Submit two (2) copies of manufacturer's specifications and installation instructions for broadloom carpet and related specified items.
- B. Fiber Requirements
1. Submit certification from the fiber producer verifying the following:
 - a. 100% wool.
- C. Recycled Content:
1. If recycled content product is part of an assembly, indicate percentage of recycled content product in the assembly by weight.
 2. Salvaged/Refurbished: Indicate percentage of salvaged/refurbished content per unit of product.
- D. VOC Data:
1. Adhesives: Submit manufacturer's product data for adhesives. Indicate VOC limits of the product. Submit MSDS highlighting VOC limits.
 2. Submit verification that product is Approved Adhesive Product under the Carpet and Rug Institute's Green Label Program.
- E. Warranties
1. Submit warranties as described in Paragraph 1.14.
- F. Maintenance
1. Maintenance Manual – submit manual of carpet manufacturer's recommendations for the general care, cleaning and maintenance of carpet products.
- G. Certificate of Compliance
1. Submit certified test reports that carpet meets all the performance requirements stated above in paragraph 1.04 Performance requirements. Submit certified test reports from a NVLAP Certified Lab that carpet meets all performance criteria.
- H. Shop Drawings
1. For areas of carpet to be installed, submit shop drawings showing areas to be installed, by which means, pattern direction, necessary installation accessories, and provisions for work of other trades. Show location of different patterns or styles of carpet.
 - a. The contractor shall supply reproducible prints on request, to facilitate shop drawing preparation.
- I. Samples
1. Submit standard-size carpet or thread samples, as applicable, of each carpet for each specified pattern, color, and construction.

2. Any alternates to specified products must be submitted to the Architect at least ten (1) working days prior to bid or proposal for approval.
 - a. Custom Color only
 - 1) Architect shall sign high quality color samples certifying that the samples are the approved color, pattern, and texture.
 - (a) Samples submitted are assumed to be the manufacturer's best obtainable match to the color described under Materials Section.

1.06 CLOSEOUT SUBMITTALS

- A. Maintenance Data
 1. Include maintenance procedures, recommended cleaning and stain removal materials, and recommended cleaning schedule. Include product data and Material Safety data Sheets (MSDS) for cleaning and stain-removal materials.
- B. Installation Instructions
 1. Include detailed installation procedures. Include carpet installation procedures.
- C. Warranties and Performance Certifications
 1. Submit written warranties for all products as well as Performance testing results on all items included in Warranty section

1.07 QUALITY ASSURANCE

- A. Single Source Responsibility: Provide products from a single manufacturer.
 1. Warranties must be standard and not job specific.
 2. Product must use single-source fiber extrusion and yarn manufacturing.

1.08 QUALIFICATIONS

- A. Conservator
 1. Company specializing in restoration of carpet with minimum five (5) years documented experience.
- B. Installer
 1. Carpet contractor must provide all the necessary licenses and insurance certificates required to comply with all local, State, and Federal laws, ordinances, and codes prior to the start of the installation.
 2. Carpet Contractor shall be a firm established not less than five (5) years and, if requested, shall submit evidence of having installed restored carpet projects of similar size and scope for at least five (5) years.
 3. Carpet Contractor shall be responsible for the proper product installation, including approval of floor preparation.
 4. Carpet Contractor shall provide Owner a written warranty that guarantees the completed installation be free from defects in workmanship for a period of two (2) years after job completion.

1.09 PRE-INSTALLATION MEETING

- A. Convene one (1) week prior to commencing work of this section.
- B. Attendance: Contractor, Owner, Architect, and other parties directly affecting the work of this Section.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver carpet in sealed protective rolls and accessories in sealed containers. Identify products

according to style, color, pattern, dye lot, and run number.

- B. Store products in an enclosed and dry area protected from damage and soiling.

1.11 ENVIRONMENTAL REQUIREMENTS

- A. Do not install carpet until areas have been fully enclosed and environmental conditions have reached the levels that will obtain during occupancy.
- B. Maintain ambient temperature and humidity conditions during and after installation of carpet at levels that will obtain during occupancy.
- C. Allow carpet to reach room temperature or minimum temperature recommended by manufacturer before beginning installation.
- D. Protect adhesives from freezing. Follow manufacturer's recommendations for minimum temperatures to which adhesives may be exposed.
- E. IAQ Requirements, Green Label: All products must be CRI Green Label Certified.
- F. All products must be 100% recyclable.

1.12 FIELD MEASUREMENTS

- A. Verify that measurements in field.

1.13 SEQUENCING

- A. Sequence installation to minimize possibility of damage and soiling of carpet.
- B. Do not commence installation until painting and finishing work are complete, and ceiling and overhead work have been completed and approved.

1.14 WARRANTY

- A. Provide manufacturers' warranty against defects in materials.
- B. Fiber must have lifetime static warranty.
- C. Warranty – include coverage for:
 - 1. Carpet installer's warranty against defects in installation.
 - 2. Full spectrum of Manufacturer's Lifetime warranties as outlined below:
 - a. Wear
 - b. Tuft Bind
 - c. Static Protection
 - d. Edge ravel
 - e. Zippering
 - f. Delamination
 - g. Dimensional Stability
 - h. Impervious to Liquids
 - i. All warranty items are to be non-prorated for the entire warranty period.
 - j. Supplemental Warranty items:
 - 1) Must keep warranties intact through flooding.
 - (a) Cushion Resiliency
 - (b) Liquid Management (passes British Spill and 10,000 Impact Test).

PART 2: PRODUCTS

2.01 MANUFACTURERS

- A. By submittal and Architect's approval.

2.02 CARPET CONSTRUCTION

- A. All yarn and other carpet materials shall be manufacturer's first quality.

2.03 CARPET SYSTEM

- A. Toxicity: Carpet systems must meet or exceed the Carpet and Rug Institute Indoor Air Quality Test Program. System components include carpet, cushion, and adhesive.

2.04 CARPET FACE FIBER

- A. Natural Carpet Face Fiber: 100% wool, custom pattern and color.

2.05 CARPET BACKING

- A. Biobased content: minimum 7% natural latex, jute, boibased polyurethane, or cotton.
- B. Recycled Content: Minimum 5% post-consumer recycled content or minimum 20% pre-consumer recycled content at contractor's option.

2.06 CARPET ACCESSORIES

- A. Adhesive: Toxicity: Comply with applicable regulations regarding toxic and hazardous materials, GS-36 for Commercial Adhesives, and as specified.
- B. Cushion: By Submittal
 1. Jute: minimum 40% post-consumer recycled content.
 2. Synthetic Fiber: minimum 100% recycled content from carpet scraps.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine substrates for conditions under which carpeting is to be installed.
- B. Beginning installation implies Installer accepts existing substrate conditions.

3.02 REMOVAL & WASTE MANAGMENT

- A. Coordinate with manufacturer for take-back program.
- B. Remove existing carpet in large pieces for reclamation. Roll tightly and pack neatly in a container in accordance with instructions from reclamation program. Remove nailers, tacs, and staples.
- C. Salvage 2'-0" x 2'-0" section of carpet for Owner.

3.03 PREPARATION

- A. Vacuum floor immediately before installation.
- B. Preheat areas to receive carpet to a minimum temperature of 68 degrees F for 72 hours prior to installation, with a relative humidity of not more than 65-percent. Carpet must be stored at a minimum temperature of 68-degrees F, for 72 hours prior to installation.

3.04 INSTALLATION

- A. Install carpet under open-bottom obstructions and under removable flanges and furnishings, and into alcoves in each space.

- B. Provide cutouts where required. Conceal cut edges with protective edge guards or flanges.
- C. Install carpet under open-bottom items and install tight against walls and cabinets so that the entire intended floor area is covered with carpet.
- D. Install edging guards at openings and doors wherever carpet terminates unless indicated otherwise.
- E. Perform cutting using tools designed for carpet being installed. Verify carpet match before cutting to insure minimal variation between dye lots.
- F. Restore carpet using yarn from same dye lot and run within each continuous carpet area.
- G. Seal seams with manufacturer recommended seam sealer.
- H. Install carpet with pile-lay in same direction except when indicated otherwise on drawings.
- I. Trim new carpet elements neatly at walls and around interruptions

3.05 FIELD QUALITY CONTROL

- A. Inspect completed carpet installation on each floor to verify installation is complete and work is properly done and acceptable.
- B. Inform Architect when installation is ready for inspection.
- C. Remove and replace, at no additional cost to Owner, any work determined by Architect to be unacceptable.

3.07 CLEANING

- A. On completion of installation in each area, remove dirt and scraps from surface of finished carpet. Clean soiling with cleaning materials recommended by carpet conservator.
- B. At completion of work, vacuum carpet using commercial vacuuming equipment as recommended by manufacturer. Remove any protruding yarns with shears or sharp scissors.

3.08 PROTECTION

- A. Do not permit traffic over unprotected carpet surface through Final Acceptance.
 - 1. Protect carpet against damage during the work of this project. Cover with 6-mil thick polyethylene whenever protection is required so that carpet will be without soiling, deterioration, wear, or damage at time of completion.

END OF SECTION

SECTION 09900 - PAINTING**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and Division 1 Specification sections apply to the work of this Section.

1.02 SUMMARY

- A. This Section includes surface preparation and field painting of exposed interior items and surfaces.
 - 1. Surface preparation, priming, and finish coats specified in this Section are in addition to shop priming and surface treatment specified in other Sections.
- B. Paint exposed surfaces, except where Specifications or Drawings indicate that the surface or material is not to be painted or is to remain natural. If an item or a surface is not specifically mentioned, paint the item or surface the same as similar adjacent materials or surfaces. If the color of a finish is not indicated, Architect will select from available standard colors and finishes.
 - 1. Provide specialty finishes where and as indicated in the Drawings
- C. Do not paint prefinished items, concealed surfaces except for back-priming, finished metal surfaces, operating parts, or labels.

1.03 DEFINITIONS

- A. "Paint" as used herein means all coating systems materials, including primers, emulsions, enamels, stains, sealers, fillers, and other applied materials whether used as prime, intermediate, or finish coats.

1.04 SUBMITTALS

- A. See Section 01330 - Submittals, for submittal procedures.
- B. Product Data: For each paint system indicated, including block fillers and primers.
 - 1. Material List: An inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
 - 2. Manufacturer's Information: Manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project site in manufacturer's original, unopened packages and containers bearing manufacturer's name, label, and the following information:
 - 1. Product name or title of material.
 - 2. Product description (generic classification or binder type).
 - 3. Manufacturer's stock number and date of manufacture.
 - 4. Contents by volume for pigment and vehicle constituents.
 - 5. Thinning instructions.
 - 6. Application instructions.
 - 7. Color name and number.
 - 8. VOC content.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum

ambient temperature of 45° Fahrenheit. Maintain storage containers in a clean condition, free of foreign materials and residue.

- C. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily.

1.06 PROJECT CONDITIONS

- A. Apply waterborne paints only when temperatures of surfaces to be painted and surrounding air are between 50° and 90° Fahrenheit.
- B. Apply chemically-curing coatings only within temperature range recommended by manufacturer.
- C. Do not apply paint in snow, rain, fog, or mist when relative humidity exceeds 85 percent, at temperatures less than 5° Fahrenheit above the dew point; or to damp or wet surfaces.
1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within humidity and temperature limits specified by manufacturer during application and drying periods.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Painting systems:
1. Benjamin Moore, Montvale, New Jersey.
- B. Varmish systems:
1. Historic Woodwork: As specified in Section 09910.
 2. New Woodwork & Cabinetry: Waterlox Marine Finish, as manufactured by Waterlox Coatings Corporation of Cleveland, Ohio.
- C. Stain:
1. Organic stain approved by sealer/coating manufacturer.
- D. High-performance Coatings:
1. Tnemec company, Inc (Tnemec)
 2. Steel Bar Window Guards: As specified in Section 05500.

2.02 PAINT MATERIALS, GENERAL

- A. Material Compatibility: Provide block fillers, 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.
- B. Material Quality: 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.

2.03 PAINTS AND COATINGS - GENERAL

- A. Paints and Coatings: Ready mixed, except field-catalyzed coatings.
1. Prepare pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating for good flow and brushing properties.
 2. Prepare to achieve drying or curing free of streaks or sags.
- B. Volatile Organic Compound (VOC) Content:
1. Provide coatings that comply with the most stringent requirements specified in the

following:

- a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
 2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.
- C. Chemical Content: The following compounds are prohibited:
1. Aromatic Compounds: In excess of 1.0 percent by weight of total aromatic compounds (hydrocarbon compounds containing one or more benzene rings).
 2. Acrolein, acrylonitrile, antimony, benzene, butyl benzyl phthalate, cadmium, di- (2-ethylhexyl) phthalate, di-n-butyl phthalate, di-n-octyl phthalate, 1,2-dichlorobenzene, diethyl phthalate., dimethyl phthalate, ethylbenzene, formaldehyde, hexavalent chromium, isophorone, lead, mercury, methyl ethyl ketone, methyl isobutyl ketone, methylene chloride, naphthalene, toluene (methylbenzene), 1,1,1-trichloroethane, vinyl chloride.

2.04 INTERIOR PRIMERS

- A. Interior Gypsum Board/Veneer Plaster Primer: Factory-formulated latex-based primer for interior application.
1. Benjamin Moore; Moorcraft Super Spec Latex Primer applied at a dry film thickness of not less than 1.2 mils.
 2. By submittal.

2.05 INTERIOR FINISH COATS

- A. Interior Acrylic Enamel: Factory-formulated acrylic-latex enamel.
1. Painted Woodwork: Benjamin Moore; Moorcraft Super Spec Latex Pearl – Satin Finish applied at a dry film thickness of not less than 1.2 mils (0.031 mm).
 2. Gypsum Board Walls & Ceilings (Cellar & Stairs): Benjamin Moore; Moorcraft Super Spec Latex Pearl – Satin Finish applied at a dry film thickness of not less than 1.2 mils (0.031 mm)
 3. Plaster/Veneer Plaster Walls (Street Level): Benjamin Moore; Moorcraft Super Spec – Flat Finish.
 4. ADA Lobby Walls & Ceiling: Benjamin Moore; Moorcraft Super Spec – Flat Finish
 5. By submittal.
- B. Interior Stain.
1. Interior Oil Wood Stain.
 2. By submittal.

2.06 EXTERIOR PRIMERS

- A. Painted Wood: Benjamin Moore: 1 coat (2 coats for bare wood) Moorcraft Super Spec Alkyd Exterior Primer 176

2.07 EXTERIOR FINISH COATS

- A. Painted Wood: Benjamin Moore: Moorcraft Super Spec 100% Acrylic Exterior Satin 184

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, with Applicator present, for compliance with requirements for paint application. Comply with procedures specified in PDCA P4.
1. Proceed with paint application only after unsatisfactory conditions have been corrected and

- surfaces receiving paint are thoroughly dry.
2. Start of painting will be construed as Applicator's acceptance of surfaces and conditions within a particular area.
- B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
1. Notify Architect about anticipated problems when using the materials specified over substrates primed by others.
- C. Verify that surfaces are ready to receive Work as instructed by the product manufacturer.
- D. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- E. Test shop-applied primer for compatibility with subsequent cover materials.

3.02 PREPARATION

- A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of size or weight of the item, provide surface-applied protection before surface preparation and painting.
1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
- B. Windows
1. In accordance with Section 08590 - Wood Window Restoration.
- C. Doors and Architectural Woodwork
1. Existing doors: In accordance with Section 06913 - Architectural Woodwork Restoration.
 2. New doors: In accordance with Section 08210 - Wood Doors and Frames
- D. Cleaning: Before applying paint or other surface treatments, clean substrates of substances that could impair bond of the various coatings. Remove oil and grease before cleaning.
1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
- E. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.
1. Provide barrier coats over incompatible primers or remove and reprime.
- F. Material Preparation: Mix and prepare paint materials according to manufacturer's written instructions.
1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
 2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
 3. Use only thinners approved by paint manufacturer and only within recommended limits.

3.03 APPLICATION

- A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
1. Metal Primer: Apply at dry film thickness of not less than 2.0 mils.
 2. Interior Latex Primer: Apply at a dry film thickness of not less than 1.2 mils.

3. Interior Paint- Intermediate and finish coats: Apply at a dry film thickness of not less than 1.2 mils.
 4. Paint colors, surface treatments, and finishes are indicated in the paint schedules.
 5. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
 6. Provide finish coats that are compatible with primers used.
 7. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, grilles, convector covers, covers for finned-tube radiation, and similar components are in place. Extend coatings in these areas, as required, to maintain system integrity and provide desired protection.
 8. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
 9. Paint interior surfaces of ducts with a flat, nonspecular black paint where visible through registers or grilles.
 10. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.
 11. Finish doors on tops, bottoms, and side edges the same as external faces.
 12. Sand lightly between each succeeding enamel or varnish coat.
- B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
1. For a scheduled surface, the number of coats and film thickness required are the same regardless of application method. Do not apply succeeding coats until previous coat has cured or dried as recommended by manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
 2. Omit primer over metal surfaces that have been shop primed.
 3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish///, color, and appearance. Give special attention to ensure that edges, corners, crevices, welds, and exposed fasteners to be painted receive a dry film thickness equivalent to that of flat surfaces.
 4. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, and does not deform or feel sticky under moderate thumb pressure, and until application of another coat of paint will not cause undercoat to lift or lose adhesion.
- C. Application Procedures: Apply paints and coatings by brush, roller, spray, rag, or other applicators according to manufacturer's written instructions.
1. Brushes: Use brushes best suited for type of material applied. Use brush of appropriate size for surface or item being painted.
 2. Rollers: Use rollers of carpet, velvet-back, or high-pile sheep's wool as recommended by manufacturer for material and texture required.
 3. Spray Equipment: Use of airless spray equipment will not be permitted on site. Spray equipment may be used off-site only.
- D. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate to achieve dry film thickness indicated. Provide total dry film thickness of the entire system as recommended by manufacturer.
- E. Mechanical items to be painted include, but are not limited to, the following:

1. Visible portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets: flat black.
 2. Mechanical equipment that is indicated to have a factory-primed finish for field painting.
- F. Electrical items to be painted include, but are not limited to, the following:
1. Electrical equipment that is indicated to have a factory-primed finish for field painting.
- G. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.
- H. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- I. Stain: Provide a smooth surface of uniform finish, color, appearance, and coverage, and that matches approved samples. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- J. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.
- K. See Section 09640 - Wood Flooring for description of materials, finishing, and protection of wood flooring.

3.04 CLEANING

- A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from Project site.

3.05 PROTECTION

- A. Protect work of other trades, whether being painted or not, against damage from painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect.
- B. Provide "Wet Paint" signs to protect newly painted finishes. After completing painting operations, remove temporary protective wrappings provided by others to protect their work.
1. After work of other trades is complete, touch up and restore damaged or defaced painted surfaces.

END OF SECTION

SECTION 09910 - STAINS AND CLEAR COATINGS**PART 1 GENERAL****1.01 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Specific Requirements and other Division 1 Specification sections, apply to the work of this Section.

1.02 DESCRIPTION OF WORK

- A. "Clear coating" "shellac" and "varnish" as used herein means all coating system materials including primers, emulsions, enamels, stains, sealers, and fillers, and other applied materials whether used as prime, intermediate, or finish coats.

1.03 SCOPE OF WORK

- A. Extent of cleaning, shellacing and varnishing work is as specified herein and as required for proper completion of the work.
- B. The work of this Section includes, but is not necessarily limited to:
 - 1. Cleaning and reamalgamation of historic wood finishes.
 - 2. Patching to repair large scratches and gouges and where there is a surface blemish in an otherwise undamaged finish.
 - 3. Over coating where original finish is worn thin with not enough left to restore with reamalgamation.
 - 4. Of greatest importance is retaining authentic finishes.
- C. If pigmentation is required to restore finish of bare wood stains shall not be used. Use only pigmented varnish or shellac. Colors shall be as selected by the Architect from submitted samples and will not necessarily be from the manufacturer's standard color charts.

1.04 RELATED SECTIONS

- A. Architectural woodwork restoration is described in Section 06913.

1.05 REFERENCE STANDARDS

- A. Shellac and varnish content and formulation shall conform to VOC regulations, and all current codes, requirements and standards of the DEP, DEC, EPA, OSHA, ANSI and all other local, State, and Federal authorities having jurisdiction.

1.06 SUBMITTALS

- A. In accordance with Section 01330 - Submittals, submit the following:
- B. Product Data: Provide Manufacturer's technical information, including Material Safety Data Sheets (MSDS), paint label analysis and application instructions for each material proposed for use.
- C. Samples:
 - 1. Provide a mock-up for each type, wood and finish with representative samples of each stage of the work including but not limited to cleaning, reamalgamation, and over coating.
 - 2. Final acceptance of procedure, color and appearance will be from mock-up and shall serve as standard for the remaining work.

1.07 QUALITY ASSURANCE

- A. In so far as possible, obtain all products of coating systems from a single source.
- B. Application shall be by a firm with not less than five (5) years of successful experience in application of material specified in this Section.

1.08 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to project site in original, new and unopened containers bearing the manufacturer's name and label, including the following information, as applicable:
 - 1. Name or title of material;
 - 2. Federal Specification number, if applicable;
 - 3. Manufacturer's stock number and date of manufacture;
 - 4. Manufacturer's name;
 - 5. Contents, by volume, of major pigment and vehicle constituents;
 - 6. Thinning instructions;
 - 7. Application instructions; and
 - 8. Color name and number.
- B. Store solvents, shellac, varnish and application materials only in space assigned for the purpose, and appropriate for the safe storage of combustible or flammable materials. Store materials not in actual use in tightly covered containers. Maintain containers used in storage, mixing, and application of varnish in a clean condition, free of foreign materials and residue. Comply with all applicable regulations of governmental authorities having jurisdiction.
- C. Store used materials, including brushes, rollers, rags, cloths, tarps, cans, and other waste in receptacles with tight covers, designed specifically for that use.
- D. Remove used materials from the site daily, and dispose of in accordance with all applicable environmental safety regulations.

1.09 PROJECT CONDITIONS

- A. Apply shellacs and varnishes only when temperature of surfaces to be coated and the ambient air temperatures are between 50° Fahrenheit (10° Celsius) and 90° Fahrenheit (32° Celsius), unless otherwise specifically permitted by manufacturer's printed instructions.
- B. DO NOT apply:
 - 1. in snow, rain, fog or mist;
 - 2. when relative humidity exceeds 85%; or
 - 3. to damp or wet surfaces - unless otherwise specifically permitted by manufacturer's written instructions.
- C. Varnishing may be continued during inclement weather only if areas and surfaces to be varnished are enclosed and heated within temperature and humidity limits as specified by the varnish manufacturer, throughout both the application and drying periods.
- D. Provide "Wet Paint" signs as required to protect newly varnished surfaces, site occupants, and visitors.

PART 2 PRODUCTS

2.01 GENERAL

- A. Cleaners:
 - 1. Mineral spirits
 - 2. Vulpex, Conservation Resources International LLC, Springfield VA 22151, 800-634-6932, www.conservationresources.com; 8% in water

3. Clean soft cloth.
- B. Amalgamators:
1. Shellac: Denatured alcohol
 2. Varnish (test reconditioners in inconspicuous area of woodwork):
 - a. 3 parts boiled linseed oil/1 part turpentine
 - b. Lacquer thinner or commercial stripper
 - c. Clean soft cloth
 - d. Grade 000 steel wool
- C. Patching system:
1. Shellac Stick Patching
 - a. Shellac sticks in color of wood
 - b. Alcohol lamp
 - c. Artists spatula
 - d. 400 grit waterproof abrasive paper
 - e. paraffin rubbing oil
 2. Wax Stick Patching
 - a. Wax sticks
 - b. Spatula
- D. Varnish or Shellac system:
1. Clear coating for over coating shall match original coating system.
 2. Whenever possible, provide a total coating system as specified, using the products of one manufacturer from prime through final finish coats, that are compatible with one another and with the substrate.
- E. Thinners:
1. Use only thinners approved by coating manufacturer, and use only within recommended limits.
- F. Material Quality:
1. Provide best-quality grade of various types of coatings manufactured by acceptable shellac or varnish manufacturers. Materials not displaying manufacturer's identification as a standard, best-grade product will not be acceptable.

2.02 CLEANING SYSTEMS

- A. Manufacturer:
1. Vulpex, Conservation Resources International LLC, Springfield VA 22151, 800-634-6932, www.conservationresources.com

2.03 VARNISH & SHELLAC SYSTEMS

- A. Manufacturer:
1. Submit manufacturer's literature and samples of each product to be used.

2.04 TOOLS, BRUSHES, AND ACCESSORIES

- A. Provide quality tools, brushes, and other accessory products that are comparable to the quality of the surfaces treated and material being applied, and in accordance with the manufacturer's written recommendations. Inferior grade or inappropriate tools, brushes, and accessory products will not be allowed for use in the completion of the work of this Section.

PART 3 EXECUTION

3.01 GENERAL

A. Inspection:

1. Contractor shall examine areas and conditions under which varnishing work is to be completed. Notify the Architect immediately of conditions detrimental to proper and timely completion of work. Do not proceed with the work of this Section until unsatisfactory conditions have been corrected.

3.02 CLEANING & PREPARATION

A. General

1. Perform all preparation procedures in strict accordance with each respective manufacturer's instructions, and as herein specified.
 2. Test all cleaners on inconspicuous areas of the woodwork before proceeding with the work. Adjust products and dilutions as required to "clean" the woodwork without removing authentic finishes and "patina" that has come with age.
- B. Clean woodwork with a solution of Vulpex 8% and water followed by a cleaning with pure water. Repeat cycle as necessary to clean woodwork.
- C. Use water wash sparingly.
- D. Finish cleaning process with mineral spirits, taking care not to entirely remove extant sheen from the wood.
- E. Apply boiled linseed oil on bare spots where necessary.
- F. Wipe dry and buff with a clean soft cloth.

3.03 REAMALGAMATION

A. General:

1. Perform all preparation procedures in strict accordance with each respective manufacturer's instructions, and as herein specified.
 2. Test all solvents on inconspicuous areas of the woodwork before proceeding with the work. Adjust methods as required to recondition without removing authentic finishes and "patina" that has come with age.
- B. If original finish is dull but not cracked, dip 000 steel wool into the appropriate solvent. Squeeze out excess and rub wood surface with light pressure. Use quick, smooth long strokes working with the grain, smoothing out the surface throughout the process.
- C. If original surface is cracked (alligatored), brush on solvent and rapidly work into the finish; as finish softens, smooth out with brush or cloth.
- D. Repeat until all defects disappear.
- E. Use toothbrush on carvings and grooves.
- F. Avoid joints to prevent glue from softening.
- G. When surface is dry, buff with 0000 steel wool to remove any rough spots.

3.04 PATCHING

A. General:

1. Perform all preparation procedures in strict accordance with each respective manufacturer's instructions, and as herein specified.
2. Test patching on inconspicuous areas of the woodwork before proceeding with the work. Adjust methods as required to remove surface blemish without removing authentic finishes and "patina" that has come with age.

B. Shellac Patching:

1. Heat spatula and tip of shellac stick. Apply melted shellac to damaged area and smear into place with spatula.
 2. If shellac cools too fast, reheat spatula and smooth shellac.
 3. When damage has been repaired and shellac has cooled, shave off excess with sharp razor blade.
 4. Sand with 400 grit paper lubricated with oil.
- C. Wax Stick:
1. Heat wax and drip into damaged area.
 2. Leave slight excess rounded on top.
 3. Use hot spatula blade to work into blemish and even with surrounding surface.
 4. If necessary, remove excess and smooth with razor blade.

3.03 OVER COATING PREPARATION

- A. Mix and prepare materials in accordance with manufacturer's directions.
- B. Stir materials before application to produce a mixture of uniform density, and stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.
- C. Use only thinner approved by the coatings manufacturer and only within recommended limits.

3.04 APPLICATION

- A. General:
 1. Apply in strict accordance with manufacturer's written instructions. All shellac and varnish shall be applied using brushes or soft cloth.
 2. Apply only as required to even out original finish and cover bare wood and in accordance with approved samples.
- B. Allow sufficient time between successive coats to permit proper drying. Do not apply subsequent coat until undercoat of varnish has dried to a point that it feels firm and does not deform or feel sticky under moderate thumb pressure. Application of the subsequent coat shall not cause lifting or loss of adhesion of the undercoat.
- C. Sand lightly between each succeeding coat.
- D. Ensure that unusual and special surface conditions, including edges, corners, and creases receive a dry film thickness equivalent of that of flat surfaces.
- E. Mask to avoid getting coating on adjacent surfaces.
- F. Completed Work:
 1. Provide a smooth surface of uniform finish, color, appearance, and coverage, and that matches approved samples. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.

3.05 CLEAN-UP

- A. Daily, throughout the progress of work, remove from the site all discarded varnish materials, rubbish, cans, rags, and related varnish materials.

- B. Upon completion of varnishing work, clean and touch-up all spattered or marred surfaces, using approved method. Do not damage finished surfaces during cleaning process.

END OF SECTION

SECTION 12400 - FURNISHINGS**PART 1 GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings, Schedules, and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specifications sections, apply to this Section.

1.02 SUMMARY

- A. The work of this Section includes, but is not necessarily limited to:
 - 1. Moveable upholstered chairs in the Gural Center.
 - 2. Moveable wood tables in the Gural Center.
 - 3. Moveable wood chairs in the Gural Center.

1.03 SUBMITTALS

- A. See Section 01330 - Submittals, for submittal procedures.
- B. Product Literature: Show each element, including detailed information including stock number, materials, conformance with applicable regulations for installation in commercial/institutional locations.
- C. Samples:
 - 1. Wood: Species and finish choices.
 - 2. Leather/fabric: Provide range available colors and patterns.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Protect furnishings from any damage through Project Closeout.
- B. If furnishings must be stored temporarily in areas other than the Gural Center, store only in areas whose environmental conditions meet requirements specified in "Project Conditions".

1.05 PROJECT CONDITIONS

- A. Environmental Conditions: Obtain and comply with manufacturers'/suppliers' advice for optimum temperature and humidity conditions for installation. Do not provide furnishings in their intended locations until these conditions have been attained and stabilized.

PART 2 PRODUCTS

2.01 MOVEABLE UPHOLSTERED CHAIRS

- A. Classic wingback vintage club chairs; circa late 1940s; Paris library style; 31" wide, 36" deep, 36" high, 22" seat depth.
- B. Equal to Stock No. WA13-27, as provided by William's Antiks, 991 Tyler Street, Benicia CA. Internet contact: info@williamsantiks.com.

2.02 MOVEABLE WOOD TABLES

- A. Square, minimum 42" x 42", removable tops, single pedestal with four integral splayed legs, four casters and integrated ganging device for coupling multiple tables together as one.
- B. Equal to "British Mission to the UN" as distributed by Paul Downs. Internet contact: pauldowns.com.

2.03 MOVEABLE WOOD CHAIRS

- A. Upholstered seats, solid wood construction.
- B. Equal to “Madison Chair” as distributed by Paul Downs. Internet contact: pauldowns.com.

PART 3 EXECUTION**3.01 PREPARATION**

- A. Ensure Gural Center environment conforms to average prevailing interior humidity conditions.
- B. Clean surfaces thoroughly upon final installation.

3.02 PROTECTION

- A. Provide final protection and maintain conditions that ensure furnishings are without damage or wear at time of Substantial Completion.
 - 1. Periodically vacuum and dust as required.
 - 2. Use only approved furniture polishes.
 - 3. Provide inert, breathable, non-abrasive covers.

END OF SECTION