

**The State of Connecticut**  
**Department of Housing (DOH)**  
**Community Development Block Grant Disaster Recovery Program**  
**(CDBG-DR)**

**Owner Occupied Rehabilitation and Rebuilding Program (OORR)**

BID PACKAGE

For

Rehabilitation/Reconstruction work to:

Andreas Residence

Roof Replacement and Lead Based Paint Abatement

365 Brooks Street

Bridgeport, CT

Prepared by:

Capital Studio Architects, LLC.

1379 Main Street, East Hartford, CT 06108

860.289.3262

Project #: 1886

CSA Project # 1347-31

September 3, 2014



**Project # 1886**

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## Section 1

*Section 1*

**ADVERTISEMENT FOR BIDS**

Project #2028

The State of Connecticut Department of Housing (DOH) is seeking proposals through a Request for Proposal (RFP) process for the rehabilitation, reconstruction and/or mitigation of residential structures damaged by Superstorm Sandy in compliance with all applicable local, federal, and state statutory requirements with special attention paid to requirements for Community Development Block Grants under the United States Department of Housing and Urban Development (“HUD”) Disaster Recovery grant program.

Separated sealed bids for **Project #1886, Andreus Residence Rehabilitation, 365 Brooks Street, Bridgeport, CT** will be received by Capital Studio Architects, LLC. located at 1379 Main Street, East Hartford, CT 06108 until **4:00 o'clock PM on Monday, September 29, 2014.**

**A Mandatory Walk Through** will be held at the Project Site located at **365 Brooks Street, Bridgeport, CT at 10:30 o'clock AM on Thursday, September 18, 2014.**

The Information to Bidders, Form of Bid, Form of Contract, Plans, Specifications, and Performance and Payment Bond and other contract documents may be examined on the Department of Housing Hurricane Sandy Recover website at [www.ct.gov/doh/](http://www.ct.gov/doh/) and click on the “Hurricane Sandy” link, and at the office Capital Studio Architects, LLC. located at 1379 Main Street, East Hartford, CT 06108.

Copies of plans may be downloaded directly from the Department of Housing website under bid notices or obtained, when requested in advance, at the office of Capital Studio Architects, LLC. located at 1379 Main Street, East Hartford, CT 06108 upon payment of \$25.00 for each set.

DOH reserves the right to waive any informalities or to reject any or all bids.

Each bidder must deposit with his bid, security in the amount, form and subject to the conditions provided in the Information to Bidders.

Attention to bidders is particularly called to the requirements as to conditions of employment to be observed and minimum wages rates to be paid under the contract (if applicable), Section 3, Segregated Facilities, Section 109 and E. O. 11246.

No bidder may withdraw his bid within 30 calendar days after the actual date of the bid opening thereof.

## INFORMATION FOR BIDDERS

### **Receipt and Opening of Bids:**

The State of Connecticut Department of Housing (herein called the "DOH"), invites bids on the form attached. Bids will be received by DOH at the office of David Holmes, Project Manager at Capital Studio Architects, LLC. located at 1379 Main Street, East Hartford, CT 06108, until **4:00 o'clock PM on Monday, September 29, 2014**

The envelopes containing the bids must be sealed, addressed to David Holmes, Project Manager at Capital Studio Architects, LLC. and designated as bid for **Project #1886, Andreus Residence Rehabilitation, 365 Brooks Street, Bridgeport, CT**

DOH may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement there considered. NO bidder may withdraw a bid within 30 days after the actual date of the opening thereof.

**Mandatory Walk Through:** All bidders must attend a mandatory walk through of the property designated above. The date and time of the walk through is set for **10:30 o'clock AM on Thursday, September 18, 2014.**

### **Preparation of Bids:**

Each bid must be submitted on the prescribed form and accompanied by Certification by Bidder Regarding Equal Employment Opportunity, Form HUD-950.1, and Certification of Bidder Regarding Section 3 and Segregated Facilities. All blank spaces for bid process must be filled in, in ink or typewritten, in both words and figures, and the foregoing Certifications must be fully completed and executed when submitted.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, his/her address, and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form.

**Subcontracts:** The bidder is specifically advised that any person, for, or other party to whom it is proposed to award a subcontract under this contract:

1. Must be acceptable to the DOH after verification by the State of the current eligibility status; and,
2. Must submit Form HUD-950.2, Certification by Proposed Subcontractor Regarding Equal Employment Opportunity and Certification of Proposed Subcontractor Regarding Section 3 and Segregated Facilities. Approval of the proposed subcontractor award cannot be given by the DOH unless and until the proposed subcontractor has submitted the Certifications and/or other evidence showing that it has fully complied with any reporting requirements to which it is or was subject. Although the bidder is not required to attach such Certifications by proposed subcontractors to his/her bid, the bidder is here advised of this requirement so that appropriate action can be taken to prevent subsequent delay in subcontract awards.

**Method of Bidding:** DOH invites the following bid(s):

Qualifications of Bidder: The DOH may make such investigations as he/she deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the DOH all such information and date for this purpose as the DOH may request. The DOH reserves the right to reject any bid if the evidence submitted by, or

investigation of, such bidder fails to satisfy the DOH that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional bids will not be accepted. The State's set Contractor Prequalifications are available at the Department of Housing's Hurricane Sandy Recovers website [www.ct.gov/doh/](http://www.ct.gov/doh/) and click on the "Hurricane Sandy" link.

**Conditions of Work:** Each bidder must inform him/herself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his/her obligation to furnish all material and labor necessary to carry out the provision of his/her contract. Insofar as possible the contractor, in carrying out the work, must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor.

**Addenda and Interpretations:** No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally.

Every request for such interpretation should be in writing addressed to: David Holmes, Project Manager at Capital Studio Architects, LLC. located at 1379 Main Street, East Hartford, CT 06108 and, to be given consideration, must be received at least three days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instruction will be in the form of written addenda to the specifications which, if issued, will be forwarded by electronic mail and posted on DOH's Hurricane Sandy website to all prospective bidders (at the respective email addresses furnished for such purposes), not later than two days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his/her bid as submitted. All addenda so issued shall become part of the contract documents.

**Performance and Payment Bonds:** A performance and payment bond will be required of the successful bidder (contractor) for 100 percent of the contract price on contracts over \$100,000.

**Notice of Special Conditions:** Attention is particularly called to those parts of the contract documents and specifications which deal with the following:

1. Inspection and testing of materials
2. Insurance requirements
3. Wage rates (if applicable)
4. State allowances

**Laws and Regulations:** The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

**Method of Award-Lowest Qualified Bidder:** If at the time this contract is to be awarded, the lowest base bid submitted by a responsible bidder does not exceed the amount of funds then estimated by the DOH as available to finance the contract; the contract will be awarded on the base bid only. If such bid exceeds such amount, the DOH may reject all bids or may award the contract on the base bid combined with such deductible alternatives applied in numerical order in which they are listed in the Form of Bids, as produces a net amount which is within the available funds.

If the homeowner wishes to select a prequalified bidding contractor other than the lowest and most responsible bidder, said owner is responsible for paying the difference between the lowest bidder and their chosen bidder from their own financing.

**Obligation of Bidder:** At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect of his/her bid.

Safety Standards and Accident Prevention: With respect to all work performed under this contract, the contractor shall:

1. Comply with the safety standards provision of applicable laws, building and construction codes and the “Manual of Accident Prevention in Construction” published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1518 as published in the “Federal Register,” Volume 36, No 75, Saturday, April 17, 1971.
2. Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) who may be injured on the job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor’s care.

**Contract Progress Schedule:** Each bid shall be accompanied by a Contract Progress Schedule. Such Schedule shall list the bidder’s timetable for completion of the contract.



**ALTERNATE PROPOSALS AND UNIT PRICES**

The undersigned bidder further proposes and agrees that should any or all of the following Alternates be accepted and included in the Contract, the amount of the Base Bid, as heretofore stated, shall be adjusted by the amount stated for each Alternate, or Unit Price. All materials and workmanship shall be in strict accordance with the Drawings and Specifications and shall be in-place prices.

Alternates

No. 1 \_\_\_\_\_ \$ Add / Deduct (circle one)

Unit Price

Unit Measure

No. 1 \_\_\_\_\_ \$/ f

No. 2 \_\_\_\_\_ \$/ f

No. 3 \_\_\_\_\_ \$/ f

No. 4 \_\_\_\_\_ \$/ f

No. 5 \_\_\_\_\_ \$/ f

The undersigned agrees to commence the work on a date to be specified in the contract and to complete such work within **60** consecutive calendar days.

The undersigned agrees that if within the period of thirty (30) days after the opening of bids, or when extended to the next work day immediately following said period, notice of the acceptance of this bid shall be mailed, or delivered to him/her at the business address given below, or at any time thereafter before this bid is withdrawn, will within fifteen (15) days thereafter deliver to the DOH, where directed, a contract properly executed in such number of counterparts as may be required by said DOH, on the forms annexed, with such changes therein as shall have been made by DOH, prior to the time named for delivery of this proposal, together with an executed Completion Assurance Agreement with a Letter of Credit in a form satisfactory to the DOH and a letter indicating those Small/Minority Business Enterprises that will perform work and/or provide materials, equipment or services as part of the contract.

In submitting this bid, it is understood that the right is reserved by the abovementioned DOH to reject any and all bids; and it is agreed that this bid may not be withdrawn for a period of thirty (30) days from the date of bid opening or until the next work day immediately following said period if such period ends on a weekend or a State holiday.

Attached hereto is an affidavit, in proof that the undersigned has not entered into any collusion with any person in respect to this proposal, or any other proposal, or the submitting of proposals for the above Project. Also attached is a statement of contractor's qualifications, Certification of Bidder Regarding Equal Employment Opportunity, and Segregated Facilities.

**Acknowledgement of Bidder**

I, THE UNDERSIGNED AS AN AUTHORIZED OFFICER OF:

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Telephone)

\_\_\_\_\_  
(City/State/Zip)

\_\_\_\_\_  
(Fax No.)

\_\_\_\_\_  
(FEIN)

I HEREBY SUBMIT THE FOLLOWING PRICES FOR THE PROJECT IDENTIFIED ABOVE: (Indicate in words and numerals)

BASE BID PRICE: Cost \_\_\_\_\_

AMOUNT IN WORDS: \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Title/Position)

(Email address) \_\_\_\_\_

**FORM OF NON-COLLUSIVE AFFIDAVIT**  
**AFFIDAVIT**

State of \_\_\_\_\_)

County of \_\_\_\_\_)

\_\_\_\_\_, being first duly sworn, deposes and says:

That he/she is, \_\_\_\_\_ the party making the foregoing proposal for bid, that such proposal or bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding, and has not, in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or of any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against DOH or any person interested in the proposed contract, and that all statements in said proposal for bid are true.

Project No. \_\_\_\_\_

Location \_\_\_\_\_

\_\_\_\_\_

Signature

\_\_\_\_\_

Name and Title

\_\_\_\_\_

Date

(Signature should be notarized.)

### BIDDER'S CERTIFICATION OF ELIGIBILITY

By the submission of this bid, the bidder certifies that to the best of its knowledge and belief, neither it, nor any person or firm which has an interest in the bidder's firm, nor any of the bidder's subcontractors, is ineligible to:

- (1) Be awarded contracts by any agency of the United States Government or HUD; or,
- (2) Participate in HUD programs pursuant to 24 CFR part 24.

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(Name of Bidder)

---

(Address)

BY: \_\_\_\_\_

Title: \_\_\_\_\_

**NOTE:** This certification is a material representation of fact upon which reliance is placed when making award. If it is later determined that the bidder knowingly rendered an erroneous certification, the contract may be terminated for default, and the bidder may be debarred or suspended from participation in HUD programs and other Federal programs.

**CERTIFICATION OF GENERAL BIDDERS ON CDBG-DR CONSTRUCTION PROJECTS**

**I. CERTIFICATION REGARDING HEALTH AND SAFETY**

The undersigned hereby certifies that he/she is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least ten hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee

**II. CERTIFICATION REGARDING NON-COLLUSION AND DEBARMENT**

The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies that neither he/she nor any firm, corporation, partnership or association in which he/she has a substantial interest is designated as an ineligible contractor by the Comptroller General of the United States pursuant to Section 5.6 (b) of the Regulations of the Secretary of Labor, Part 5 (29 CFR, Part 5), or pursuant to Section 3 (a) of the Davis-Bacon Act, as amended (40 USC 276a). The undersigned further certifies that said undersigned is not presently debarred from doing public construction work in the State of Connecticut.

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of General Bidder

By \_\_\_\_\_

Signature

\_\_\_\_\_  
Print name and title

\_\_\_\_\_  
Business Address

\_\_\_\_\_  
Street Address City and State

OSHA-10 OSHA-10

**CERTIFICATION OF SUB- BIDDERS (IF ANY) ON CDBG-DR CONSTRUCTION PROJECTS**

**I. CERTIFICATION REGARDING HEALTH AND SAFETY**

The undersigned hereby certifies that he/she is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least ten hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee

**II. CERTIFICATION REGARDING NON-COLLUSION AND DEBARMENT**

The undersigned further certifies under penalties of perjury that this subbid is in all responses bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the “person” shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies that neither he/she nor any firm, corporation, partnership or association in which he/she has a substantial interest is designated as an ineligible contractor by the Comptroller General of the United States pursuant to Section 5.6 (b) of the Regulations of the Secretary of Labor, Part 5 (29 CFR, Part 5), or pursuant to Section 3 (a) of the Davis-Bacon Act, as amended (40 USC 276a). The undersigned further certifies that said undersigned is not presently debarred from doing public construction work in the State of Connecticut.

Date \_\_\_\_\_

\_\_\_\_\_

Name of Sub-bidder

By \_\_\_\_\_

Signature

\_\_\_\_\_

Print Name and Title

\_\_\_\_\_

Business Name

\_\_\_\_\_

Street Address, City and State



**SUBCONTRACTOR IDENTIFICATION**

(Provide additional forms for more subcontractors, as needed.)

This form is a part of your bid package and must be submitted along with the itemized and formal bid forms at the time of the bid opening. Failure to submit a completed document could result in the disqualification of your bid.

Name of Subcontractor: \_\_\_\_\_

Address: \_\_\_\_\_

Trade: \_\_\_\_\_

Hourly Wage:   \$\_\_\_\_\_ Full Contract Price:   \$\_\_\_\_\_

Federal Tax# or SSN #: \_\_\_\_\_

Male Owned Business \_\_\_\_\_ Female Owned Business \_\_\_\_\_

Is he/she of Hispanic or Latino ethnicity? Yes \_\_\_\_\_ No \_\_\_\_\_

Race: (Please check one)

- White  American Indian/Alaskan Native  
 Black/African American  Hasidic Jew  
 Asian/Pacific American

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Name of Subcontractor: \_\_\_\_\_

Address: \_\_\_\_\_

Trade: \_\_\_\_\_

Hourly Wage:   \$\_\_\_\_\_ Full Contract Price:   \$\_\_\_\_\_

Federal Tax# or SSN #: \_\_\_\_\_

Male Owned Business \_\_\_\_\_ Female Owned Business \_\_\_\_\_

Is he/she of Hispanic or Latino ethnicity? Yes \_\_\_\_\_ No \_\_\_\_\_

Race: (Please check one)

- White  American Indian/Alaskan Native  
 Black/African American  Hasidic Jew  
 Asian/Pacific American

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Name of Subcontractor: \_\_\_\_\_

Address: \_\_\_\_\_

Trade: \_\_\_\_\_

Hourly Wage:   \$\_\_\_\_\_ Full Contract Price:   \$\_\_\_\_\_

Federal Tax# or SSN #: \_\_\_\_\_

Male Owned Business \_\_\_\_\_ Female Owned Business \_\_\_\_\_

Is he/she of Hispanic or Latino ethnicity? Yes \_\_\_\_\_ No \_\_\_\_\_

Race: (Please check one)

- White  American Indian/Alaskan Native  
 Black/African American  Hasidic Jew  
 Asian/Pacific American

---

Contractor's Signature

---

Date

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY

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*INSTRUCTIONS*

This certification is required pursuant to Executive Order 11246 (30 F R 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

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CERTIFICATION OF BIDDER

Name and address of Bidder (include zip code)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.  
 YES  NO
2. Compliance reports were required to be filed in connection with such contract or subcontract.  
 YES  NO
3. Bidder has filed all compliance reports due under applicable instructions, including SF.100.  
 YES  NO  NOT REQUIRED
4. Have you ever seen or are you being considered for sanction due to violation of Executive Order 11246, as amended?  
 YES  NO
5. No segregated facilities will be maintained.

NAME AND TITLE OF SIGNER (Please type.)

\_\_\_\_\_

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
DATE

## Green Building Standards Checklist

### HUD CPD Green Building Retrofit Checklist

The CPD Green Retrofit Checklist promotes energy efficiency and green building practices for residential retrofit projects. Grantees must follow the checklist in its entirety and apply all measures within the Checklist to the extent applicable to the particular building type being retrofitted. The phrase “when replacing” in the Checklist refers to the mandatory replacement with specified green improvements, products, and fixtures only when replacing those systems during the normal course of the retrofit.

#### WATER AND ENERGY CONSERVATION MEASURES

N/A

##### **Water-Conserving Fixtures**

Install or retrofit water conserving fixtures in any unit and common facility, use the following specifications: Toilets-- 1.28 gpf; Urinals-- 0.5 gpf; Showerheads-- 2.0 gpm; Kitchen faucets-- 2.0 gpm; and Bathroom faucets-- 1.5gpm. [gpf = gallons per flush; gpm = gallons per minute]

N/A

##### **ENERGY STAR Appliances**

Install ENERGY STAR-labeled clothes washers, dishwashers, and refrigerators, if these appliance categories are provided in units or common areas.

N/A

##### **Air Sealing: Building Envelope**

Seal all accessible gaps and penetrations in the building envelope. If applicable, use low VOC caulk or foam.

N/A

##### **Insulation: Attic** (if applicable to building type)

For attics with closed floor cavities directly above the conditioned space, blow in insulation per manufacturer's specifications to a minimum density of 3.5 Lbs. per cubic foot (CF). For attics with open floor cavities directly above the conditioned space, install insulation to meet or exceed IECC levels.

N/A

##### **Insulation: Flooring** (if applicable to building type)

Install  $\geq$  R-19 insulation in contact with the subfloor in buildings with floor systems over vented crawl spaces. Install a 6-mil vapor barrier in contact with 100% of the floor of the crawl space (the ground), overlapping seams and piers at least 6 inches.

N/A

##### **Duct Sealing** (if applicable to building type)

In buildings with ducted forced-air heating and cooling systems, seal all penetrations of the air distribution system to reduce leakage in order to meet or exceed ENERGY STAR for Homes' duct leakage standard.

N/A

##### **Air Barrier System**

Ensure continuous unbroken air barrier surrounding all conditioned space and dwelling units. Align insulation completely and continuously with the air barrier.

N/A

##### **Radiant Barriers: Roofing**

When replacing or making a substantial repair to the roof, use radiant barrier sheathing or other radiant barrier material; if economically feasible, also use cool roofing materials.

X	<p><b>Windows</b></p> <p>When replacing windows, install geographically appropriate ENERGY STAR rated windows.</p>
N/A	<p><b>Sizing of Heating and Cooling Equipment</b></p> <p>When replacing, size heating and cooling equipment in accordance with the Air Conditioning Contractors of America (ACCA) Manuals, Parts J and S, or 2012 ASHRAE Handbook--HVAC Systems and Equipment or most recent edition.</p>
N/A	<p><b>Domestic Hot Water Systems</b></p> <p>When replacing domestic water heating system(s), ensure the system(s) meet or exceed the efficiency requirements of ENERGY STAR for Homes' Reference Design. Insulate pipes by at least R-4.</p>
N/A	<p><b>Efficient Lighting: Interior Units</b></p> <p>Follow the guidance appropriate for the project type: install the ENERGY STAR Advanced Lighting Package (ALP); <b>OR</b> follow the ENERGY STAR MFHR program guidelines, which require that 80% of installed lighting fixtures within units must be ENERGY STAR-qualified or have ENERGY STAR-qualified lamps installed; <b>OR</b> when replacing, new fixtures and ceiling fans must meet or exceed ENERGY STAR efficiency levels.</p>
N/A	<p><b>Efficient Lighting: Common Areas and Emergency Lighting</b> (if applicable to building type)</p> <p>Follow the guidance appropriate for the project type: use ENERGY STAR-labeled fixtures or any equivalent high-performance lighting fixtures and bulbs in all common areas; <b>OR</b> when replacing, new common space and emergency lighting fixtures must meet or exceed ENERGY STAR efficiency levels. For emergency lighting, if installing new or replacing, all exist signs shall meet or exceed LED efficiency levels and conform to local building codes.</p>
N/A	<p><b>Efficient Lighting: Exterior</b></p> <p>Follow the guidance appropriate for the project type: install ENERGY STAR-qualified fixtures or LEDs with a minimum efficacy of 45 lumens/watt; <b>OR</b> follow the ENERGY STAR MFHR program guidelines, which require that 80% of outdoor lighting fixtures must be ENERGY STAR-qualified or have ENERGY STAR-qualified lamps installed; <b>OR</b> when replacing, install ENERGY STAR compact fluorescents or LEDs with a minimum efficacy of 45 lumens/watt.</p>

## INDOOR AIR QUALITY

N/A	<p><b>Air Ventilation: Single Family and Multifamily</b> (three stories or fewer)</p> <p>Install an in-unit ventilation system capable of providing adequate fresh air per ASHRAE 62.2 requirements.</p>
N/A	<p><b>Air Ventilation: Multifamily</b> (four stories or more)</p> <p>Install apartment ventilation systems that satisfy ASHRAE 62.2 for all dwelling units and common area ventilation systems that satisfy ASHRAE 62.1 requirements. If economically feasible, consider heat/energy recovery for 100% of corridor air supply.</p>
N/A	<p><b>Composite Wood Products that Emit Low/No Formaldehyde</b></p>

Composite wood products must be certified compliant with California 93120. If using a composite wood product that does not comply with California 93120, all exposed edges and sides must be sealed with low-VOC sealants.

N/A

#### **Environmentally Preferable Flooring**

When replacing flooring, use environmentally preferable flooring, including the FloorScore certification. Any carpet products used must meet the Carpet and Rug Institute's Green Label or Green Label Plus certification for carpet, pad, and carpet adhesives.

X

#### **Low/No VOC Paints and Primers**

All interior paints and primers must be less than or equal to the following VOC levels: Flats--50 g/L; Non-flats--50 g/L; Floor--100 g/L. [g/L = grams per liter; levels are based on a combination of the Master Painters Institute (MPI) and GreenSeal standards.]

X

#### **Low/No VOC Adhesives and Sealants**

All adhesives must comply with Rule 1168 of the South Coast Air Quality Management District. All caulks and sealants must comply with regulation 8, rule 51, of the Bay Area Air Quality Management District.

N/A

#### **Clothes Dryer Exhaust**

Vent clothes dryers directly to the outdoors using rigid-type duct work.

X

#### **Mold Inspection and Remediation**

Inspect the interior and exterior of the building for evidence of moisture problems. Document the extent and location of the problems, and implement the proposed repairs according to the Moisture section of the EPA Healthy Indoor Environment Protocols for Home Energy Upgrades.

N/A

#### **Combustion Equipment**

When installing new space and water-heating equipment, specify power-vented or direct vent combustion equipment.

N/A

#### **Mold Prevention: Water Heaters**

Provide adequate drainage for water heaters that includes drains or catch pans with drains piped to the exterior of the dwelling.

N/A

#### **Mold Prevention: Surfaces**

When replacing or repairing bathrooms, kitchens, and laundry rooms, use materials that have durable, cleanable surfaces.

N/A

#### **Mold Prevention: Tub and Shower Enclosures**

When replacing or repairing tub and/or shower enclosures, use non-paper-faced backing materials such as cement board, fiber cement board, or equivalent in bathrooms.

N/A

#### **Integrated Pest Management**

Seal all wall, floor, and joint penetrations with low-VOC caulking or other appropriate sealing methods to prevent pest entry. [If applicable, provide training to multifamily buildings staff.]

X

#### **Lead-Safe Work Practices**

For properties built before 1978, if the project will involve disturbing painted surfaces or cleaning up lead contaminated dust or soil, use certified renovation or lead abatement contractors and workers using lead-safe work practices and clearance examinations consistent with the more stringent of EPA's Renovation, Repair, and Painting Rule and HUD's Lead Safe Housing Rule.

X

**Radon Testing and Mitigation** (if applicable based on building location)

For buildings in EPA Radon Zone 1 or 2, test for radon using the current edition of American Association of Radon Scientists and Technologists (AARST)'s Protocols for Radon Measurement in Homes Standard for Single-Family Housing or Duplexes, or AARST's Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings. To install radon mitigation systems in buildings with radon level of 4 pCi/L or more, use ASTM E 2121 for single-family housing or duplexes, or AARST's Radon Mitigation Standards for Multifamily Buildings. For new construction, use AARST's Reducing Radon in New Construction of 1 & 2 Family Dwellings and Townhouses, or ASTM E 1465.

## Section 2

## Section 2

### General Conditions

1. The purpose of this HUD and DOH sponsored 0% interest loan Owner Occupied Rehabilitation and Rebuilding program is to make good faith efforts to assist qualified property owners in making repairs to their property damaged by Superstorm Sandy. Eligible repairs include code, health and safety compliance modifications, including but not limited to building envelope and energy efficiency upgrades (See Green Building Standards).
2. In the event that the homeowner is dissatisfied with the work performed although the work has been completed to industry standards, approved by the local municipality's code enforcement officials and approved by the DOH or its agent, the homeowner's approval will be overridden, full payment will be issued to the contractor and the project will be officially closed.
3. The owner is responsible for removal or relocation from the respective work areas the following, including but not necessarily limited to: personal belongings, window treatments, small furniture, fixtures, area carpets, interior and exterior plants. The contractor will be responsible for covering and protecting large furniture unable to be removed from the respective work areas.
4. The Contractor, unless otherwise specified, shall provide all labor, materials, tools, equipment, and related items required for the erection and completion of all work indicated in this project manual and as may be inferred, implied or otherwise necessary for the proper execution of the work.
5. The Contractor shall pay all necessary taxes, fees, and permits necessary to complete all of his work as detailed on the attached scope of work.
6. The premises herein shall be occupied during the course of the construction work.
7. All rehabilitation, alterations, repairs, or extensions shall be in compliance with all applicable codes of the Municipality, HUD requirements or compliance with the latest edition of the International Building Code, which ever applies and is the more strict. All electrical, heating, and plumbing work shall comply with the rules and regulations of the National, State and Local Codes. Before commencing work, contractors and/or subcontractors shall obtain all necessary permits.
8. The Contractor certifies that he has familiarized himself with the requirements of the specifications and plans and understands the extent and character of the work to be done, and inspected the premises and given his full attention to any and all areas with which he might become specifically involved. He must familiarize himself with all conditions relating to and affecting his work and bid.
9. The selected Contractor must, prior to contract signing, supply the DOH and the Owner with the original certificates of insurance in accordance with the following insurance requirements:
  - A. Contractor shall procure and maintain for the duration of the Agreement the following types of insurance, in amounts no less than the stated limits, against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder:
    - 1) Workers' Compensation Insurance: The Contractor shall maintain full and complete Workers' Compensation Insurance for all of its employees and those of its subcontractors engaged in work on the premises, in accordance with the local and state laws governing the same, in the minimum amounts of \$100,000 each accident, \$500,000 disease – Policy limit, \$100,000 disease – each employee.
    - 2) General Liability Insurance: The Contractor shall furnish evidence of a comprehensive general liability insurance coverage with a combined single limit for bodily injury, death, and property damage in the amount of \$1,000,000 per occurrence, naming the Owner and the State as additional insured. This shall cover the use of all equipment, hoists and vehicles on the Premises not covered by any automobile liability policy. If the Contractor has a "claims-made" policy, then the following additional requirements apply: (a) the policy must provide a retroactive date which must be on or before the execution date of this Agreement and (b) the extended reporting period may not be less than five (5) years following the Construction Completion Date.
    - 3) Automobile Liability: The Contractor shall furnish evidence of Automobile Liability insurance with minimum limits of \$1,000,000 per occurrence, combined single limit for bodily injury and property damage liability. This shall include owned vehicles, non-owned vehicles and employee non-ownership.
    - 4) Cargo Insurance: The Contractor shall furnish evidence of all-risk cargo insurance, with a minimum limit of \$\_\_\_\_\_ per occurrence when the project involves raising a structure above the Base Flood Elevation.
    - 5) Builders Risk: The Contractor shall maintain Builder's Risk (fire and extended coverage) insurance providing coverage for the entire work at the project site, including all work in place, all materials stored at the building site, foundations and building equipment. Coverage shall be on a completed value form basis in an amount equal to the projected value of the project. The Contractor agrees to endorse the State of Connecticut and the Owner as Loss Payees.

B. Additional Insurance Provisions

- 1) Each of the Owner and the State of Connecticut Department of Housing, and their successors and assigns, as their interests may appear, shall be named as an Additional Insured on the Commercial General Liability policy.
  - 2) Described insurance shall be primary coverage and Applicant and Applicant's insurer shall have no right of subrogation recovery or subrogation against the State of Connecticut.
  - 3) Applicant shall assume any and all deductibles in the described insurance policies.
  - 4) Without limiting Applicant's obligation to procure and maintain insurance for the duration identified in (A) above, each insurance policy shall not be suspended, voided, cancelled or reduced except after thirty (30) days prior written notice by certified mail has been given to the State of Connecticut, with the exception that a ten (10) day prior written notice by certified mail for non-payment of premium is acceptable.
  - 5) Each policy shall be issued by an Insurance Company licensed to do business by Connecticut Department of Insurance and having a minimum Best Rating of A- or equivalent or as otherwise approved by the State.
10. DOH and its agents must be notified prior to start of work of any subcontractor to be paid for work on the job who is different from the subcontractor identified in original bid proposal.
  11. Working times for the project shall be Monday through Friday 8 am to 5 pm (EST). Contractors must request permission from owner and be in compliance with local municipal ordinances prior to working longer hours or weekends.
  12. All materials shall be new and of acceptable quality. The Contractor shall submit proof of purchase of warrantee items at closeout. The property Owner shall select all colors, models, etc. as per scope of work. All materials and work must be applied in accordance with the applicable manufacturer's latest instructions and specifications, and in accordance with Federal prohibitions against the use of lead paint.
  13. All manufacturers' warranties are to be extended to the property Owner free and clear of all liens. Unless otherwise specified, all labor, material, and workmanship provided by the Contractor shall be guaranteed by the Contractor, including that of subcontractors, for a one (1) year period from the date of the Final Payment. This guarantee shall be in addition to and not in limitation of, in lieu of, or modify and other guarantee that is due the property Owner from any manufacturer.
  14. The Contractor shall repair or replace all work, materials and equipment which are found to be defective during construction and the guarantee period. Repair shall include all damage to surrounding work caused by the failure and/or necessary for the repair or replacement of the defect. All repairs and replacements shall be performed at no additional expense to the Owner and shall be completed promptly after the Contractor receives notice of the defect.
  15. The Contractor shall take all necessary measures and precautions to protect the surroundings from damage occurring due to performance of the work. All areas and surfaces of the existing building which are affected by the execution of the new work (removals, demolition, repairs etc.) shall be patched and restored to either match the existing adjacent conditions or to match the new work, whichever is applicable. If such damage occurs it will be repaired by the Contractor at no cost to the Owner. Contractor shall provide all temporary shoring, bracing and other construction (interior and exterior) required to perform the work of this contract.
  16. The Contractor shall dispose of all debris and remove all material resulting from his work in accordance with local and State law. The Contractor shall police and maintain a clean and safe job site daily. He shall reinstall accessories taken down and clean up all scrap around the project and remove fingerprints. All on-site maintenance relating to the performance of the work shall be the responsibility of the Contractor until the Certificate of Completion is issued. The project shall be maintained in a habitable and safe condition daily if the project is to remain occupied.
  17. Materials and products not otherwise specified in these documents shall be to match building standards and existing conditions, provided such items are in compliance with all applicable codes. Such codes set the minimum standards to be achieved.
  18. All work shall be neat and accurate and done in a manner in accordance with customary trade practices. **The Contractor, at a minimum, shall leave the premises broom clean and orderly after each working day and shall keep the premises free from accumulation of materials and rubbish by disposing of such debris in an onsite disposal container (provided by the contractor) or removed by vehicle in accordance with all applicable state and local regulations.** At the completion of the project the Contractor shall remove all excess materials from the site. Any surplus material agreed to be left for the owner shall be stored neatly by the contractor in a location directed by the owner free from weather, spoilage or pilferage.
  19. The Contractor shall coordinate any work which interfaces with other Contractors or with the operations of the Owner. The Contractor shall take all necessary precautions to prevent fire, bodily injury, damage to property and any other calamities that may arise which pose a threat to life, limb property.
  20. The Contractor shall not make any changes to the scope of work unless a change order is processed and fully executed by the DOH.

21. The Owner may cancel this contract within three days of signing and not be liable to the Contractor or DOH. Should the Owner opt to cancel they must sign and send a Notice of Cancellation to DOH, otherwise DOH shall issue a Notice to Proceed authorizing the contractor to commence with the proposed improvements.
22. The Contractor shall commence work under this contract within 15 work days of the date of the notice to proceed and complete work within **60** calendar days of the notice to proceed.
23. If the Contractor is delayed at any time in the progress of the work by any act or neglect of the Owner or by any employee of the Owner, or by any separate Contractor employed by the Owner, or by changes ordered in the work or by labor disputes, fire, unusual delay in delivery of materials, transportation, adverse weather conditions not reasonably anticipatable, unavoidable casualties, or any cause beyond the Contractor's control, or by delay authorized by the Owner pending arbitration, or by any other cause which justifies the delay, the contract time may be extended by Change Order for such reasonable time as may be agreed upon by all parties. It shall be the responsibility of the Contractor to request and document in writing such extensions within three (3) work days.
24. In the event that the Contractor does not commence or pursue the work as hereinafter stated, then DOH shall have the right to terminate this agreement and to hire a successor Contractor to perform the work. Any such termination shall be by certified mail to the address noted in this agreement, and shall be effective as of the date of mailing. Payments by the DOH/Owner in the event of termination shall be as follows:
25. The successor Contractor shall first be paid and then the terminated Contractor. Payments to the terminated Contractor shall be limited both as to those funds remaining after payment to the successor Contractor but shall not exceed the value of the work actually performed by the terminated Contractor. Further, should the total cost for work performed under this contract exceed the amount stated in this agreement due to the Contractor's termination, then the Owner shall have a cause of action against the terminated Contractor for any such additional cost.
26. If, through any cause, the Contractor shall fail to fulfill in a timely and proper manner his obligations under this Contract, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this Contract, DOH shall, thereupon, have the right to terminate this Contract by giving written notice to the Contractor of such termination and specifying the effective date of such termination. In such event, all unfinished work required by the Contractor under this Contract shall, at the option of the DOH, be completed or not.
27. Payments
  - 1) DOH/Homeowner shall pay the Contractor the price as provided in this contract.
  - 2) DOH shall make progress payments approximately every 30 days as the work proceeds, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer. DOH may, subject to written determination and approval of the Contracting Officer, make more frequent payments to contractors which are qualified small businesses.
  - 3) Before the first progress payment under this contract, the Contractor shall furnish, in such detail as requested by the Contracting Officer, a breakdown of the total contract price showing the amount included therein for each principal category of the work, which shall substantiate the payment amount requested in order to provide a basis for determining progress payments. The breakdown shall be approved by the Contracting Officer and must be acceptable to DOH. The values and quantities employed in making up this breakdown are for determining the amount of progress payments and shall not be construed as a basis for additions to or deductions from the contract price. The Contractor shall prorate its overhead and profit over the construction period of the contract.
  - 4) The Contractor shall submit, on AIA forms provided by DOH, periodic estimates showing the value of the work performed during each period based upon the approved breakdown of the contract price. Such estimates shall be submitted not later than 14 days in advance of the date set for payment and are subject to correction and revision as required. The estimates must be approved by the Contracting Officer with the concurrence of the Architect prior to payment. If the contract covers more than one project, the Contractor shall furnish a separate progress payment estimate for each.
  - 5) Along with each request for progress payments and the required estimates, the Contractor shall furnish lien waivers and labor releases as good and sufficient evidence that the premises are free from all liens, damages, and anything chargeable to said contractor.
  - 6) Except as otherwise provided in State law, DOH shall retain five (5) percent of the amount of progress payments until completion and acceptance of all work under the contract; except, that if upon completion of 50 percent of the work, the Contracting Officer, after consulting with the Architect, determines that the Contractor's performance and progress are satisfactory, DOH may make the remaining payments in full for the work subsequently completed. If the Contracting Officer subsequently determines that the Contractor's performance and progress are unsatisfactory, DOH shall reinstate the five (5) percent retainage until such time as the Contracting Officer determines that performance and progress are satisfactory. Retainage will be released 90 days after project completion.
  - 7) The Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration when computing progress payments. Material delivered to the Contractor at locations other than the site may also be taken into consideration if the Contractor furnishes satisfactory evidence that (1) it has acquired title to such material; (2) the material is properly stored in a bonded warehouse, storage yard, or similar suitable place as may be approved by the Contracting Officer; (3) the material is insured to cover its full value; and (4) the material will be used to perform this contract. Before any progress payment which includes delivered material is made, the Contractor shall furnish such documentation as the Contracting Officer may require to assure the protection of DOH's/Homeowner's interest in such materials. The Contractor shall remain responsible for such stored material notwithstanding the transfer of title to the Homeowner.
  - 8) All material and work covered by progress payments made shall, at the time of payment become the sole property of the Homeowner, but this shall not be construed as (1) relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or, (2) waiving the right of DOH/Homeowner to require the fulfillment of all of the terms of the contract. In the event the work of the Contractor has been damaged by other contractors or persons other than employees of DOH in the course of their employment, the Contractor shall restore such damaged work without cost to DOH/Homeowner and to seek redress for its damage only from those who directly caused it.

- 9) DOH shall make the final payment due the Contractor under this contract after (1) completion and final acceptance of all work; and (2) presentation of release of all claims against DOH/Homeowner arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. Each such exception shall embrace no more than one claim, the basis and scope of which shall be clearly defined. The amounts for such excepted claims shall not be included in the request for final payment. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned.
  - 10) Prior to making any payment, the Contracting Officer may require the Contractor to furnish receipts or other evidence of payment from all persons performing work and supplying material to the Contractor, if the Contracting Officer determines such evidence is necessary to substantiate claimed costs.
  - 11) DOH shall not; (1) determine or adjust any claims for payment or disputes arising there under between the Contractor and its subcontractors or material suppliers; or, (2) withhold any moneys for the protection of the subcontractors or material suppliers. The failure or refusal of DOH to withhold moneys from the Contractor shall in nowise impair the obligations of any surety or sureties under any bonds furnished under this contract.
28. Disputes
- 1) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract. A claim arising under the contract, unlike a claim relating to the contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim. The submission may be converted to a claim by complying with the requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
  - 2) Except for disputes arising under the clauses entitled Labor Standards - Davis Bacon and Related Acts, herein, all disputes arising under or relating to this contract, including any claims for damages for the alleged breach thereof which are not disposed of by agreement, shall be resolved under this clause.
  - 3) All claims by the Contractor shall be made in writing and submitted to the Contracting Officer for a written decision.
  - 4) A claim by the Homeowner against the Contractor shall be subject to a written decision by the Contracting Officer.
  - 5) The Contracting Officer shall, within calendar 60 (unless otherwise indicated) days after receipt of the request, decide the claim or notify the Contractor of the date by which the decision will be made.
  - 6) The Contracting Officer's decision shall be final unless the Contractor (1) appeals in writing to a higher level in DOH in accordance with DOH's policy and procedures, (2) refers the appeal to an independent mediator or arbitrator, or (3) files suit in a court of competent jurisdiction. Such appeal must be made within (30 unless otherwise indicated) calendar days after receipt of the Contracting Officer's decision.
  - 7) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.
29. The Contractor will not discriminate against any employee or applicant for employment because of race, color, creed, religion, sex, sexual preference, national origin, or mental or physical disability during the performance of this agreement. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, in all employment practices such as the following: employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship, without regard to their race, color, creed, religion, sex, sexual preference, national origin or mental or physical disability. This provision will be inserted in all subcontracts, if any, for work covered by this agreement.
30. Equal Employment Opportunity (EEO) Clause
- During the performance of this contract, the Contractor agrees as follows:
- 1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and the employees are treated during employment without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
  - 2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
  - 3) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
  - 4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
  - 5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
  - 6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by the rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- 7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event a Contractor becomes involved in, or is threatened with litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.
31. In the event of the Contractor's noncompliance with this equal opportunity clause or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further contracts in accordance with procedures authorized in Presidential Executive Order 11246, or by rule, regulations, or order of the Secretary of Labor or as provided by law.
32. The following applies to all contracts of \$10,000,000.00 or more: SECTION 402 VETERANS OF THE VIETNAM ERA. AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VEITNAM ERA. The Contractor will not discriminate against any employee or applicant for employment because he or she is a disabled veteran of the Vietnam era in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veteran status in all employment practices such as the following: employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship.
33. No officer, employee or member of the Governing Body of the Municipality shall have any financial interest, direct or indirect, in this contract or the proceeds of this loan.
34. DOH retains the right to reject any or all bids or any part of any bid in part or in whole if deemed to be in the best interest of the project.
35. Substitutions of materials from that specified are only allowed on an approved/equal basis. The Contractor must submit written documentation of the substitute item or material for approval by the Owner and Program prior to making such substitution. Any items or material substituted by the Contractor without prior written approval of the Owner and Program will at the Contractor's expense be replaced if it is determined not to be equal to the item or material specified. Any surrounding, adjoining, or dependent items affected by replacement of the unequal substituted material shall also be replaced, reworked, and reinstalled at no cost to the Owner.
36. Bids shall contain prices for general categories of work and/or items as specified on the provided bid sheets. In the case of a mathematical error by the Contractor, the correct sum of the individual line items in the cost summary shall be the Contractor's bid.
37. All bids shall remain in effect for thirty (30) calendar days.
38. The Owner will supply all necessary power required by the Contractor at no additional cost to complete his work. Power shall be limited to the use of existing outlets and shall not exceed the existing capacity of the system. Power required over the capacity of the existing electrical system shall be the responsibility of the Contractor. Heating during construction shall be supplied by the Owner.
39. If any unseen or unknown asbestos related conditions arise during the work the Contractor shall stop all work immediately and notify the DOH of such.
40. OTHER PROVISIONS – LEAD BASED PAINT

For properties built before 1978, if the project will involve disturbing painted surfaces or cleaning up lead contaminated dust or soil, use certified renovation or lead abatement contractors and workers using lead-safe work practices and clearance examinations consistent with the more stringent of EPA's Renovation, Repair, and Painting Rule and HUD's Lead Safe Housing Rule. The Contractor shall comply with the requirements concerning lead-based paint contained in the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846) as implemented by 24 CFR Part 35 and EPA's Repair Renovation, and Painting Rule at 40 CFR.80 Subpart E.

Any and all rehabilitation work under this Agreement will comply with the requirements of the Federal Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4831) which prohibits the use of lead-based paint in residential structures constructed or rehabilitated with Federal Assistance in any form.

The construction or rehabilitation of residential structures with assistance provided under this contract is subject to the final regulations "Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally owned Residential Property and Housing Receiving Federal Assistance." The regulation is at 24 CFR part 35. It implements sections 1012 and 1013 of the Residential Lead-Based Paint Hazard Reduction Act of 1992, Title X, of the Housing and Community Development Act of 1992. Sections 1012 and 1013 amend the Lead-Based Paint Poisoning Prevention Act of 1971.

Beginning April 22, 2010, the Contractor is required to have a certificate from a 6 hour EPA/HUD RRP lead remediation course.

41. The Contractor shall comply with the provisions of the immigration Reform and Control Act of 1986 effective and enforceable as of June 6, 1987 which Act makes unlawful the hiring for employment or subcontracting individuals failing to provide documentation of legal eligibility to work in the United States. The Contractor shall hold DOH, its agents and the Homeowner harmless for the failure to comply with the provisions of said Act.

## Section 3

SECTION 00900  
SPECIAL CONDITIONS

1. SPECIAL CONDITIONS DEFINITIONS

A. Where the Specifications refer to Owner, any interpretation shall be meant to reference the person which holds possession of the Property. Any reference to the DOH this shall be construed to mean the Connecticut Department of Housing, 505 Hudson Street, Hartford, CT 06106. Its designated agent shall be referred to as the "Contracting Officer" in these specifications.

2. BIDDING REQUIREMENTS

A. Contractor shall contact the DOH regarding site visit questions. Contact should be by the telephone to:

Ms. Lillian Ruiz, Grants and Contracts Specialist  
CDBG-Disaster Recovery Program  
Connecticut Department of Housing  
505 Hudson Street  
Hartford, CT 06106  
(860) 270-8027

B. Architectural questions on specifications and drawings are to be addressed to:

Mr. David Holmes  
Capital Studio Architects, LLC  
1379 Main Street  
East Hartford, CT 06108  
Tel: (860) 289-3262  
Fax: (860) 289-3163  
Email: dholmes@capitalstudio.net

3. SALES TAX

A. The DOH is **NOT** exempt from Connecticut Sales Tax. Other fees accessed by the State of Connecticut may be passed through to the contractor.

4. INSURANCE

A. No insurance shall be terminated by the Contractor without a ten (10) day notice to the DOH.

B. All insurance companies shall be licensed and registered in the State of Connecticut.

5. INTERPRETATIONS OF DRAWINGS

A. Any questions or disagreements arising as to the true intent of this specification or the drawings, or the kind and quality of work required thereby, shall be decided by the Architect, whose interpretations thereof shall be final, conclusive, and binding on all parties.

B. In the case of disagreement between drawings and specifications, or within either document itself, the better quality, greater quantity, or more costly work shall be included in the contract price, and the matter

referred to the Architect's attention for decision and/or adjustment.

C. If the disagreement between the drawings and specification cannot be resolved through either A. or B. above, the specifications shall take precedence over the drawings.

## 6. VISITING THE SITE

A. Before submitting his final proposal, the Contractor shall examine the site of the proposed work to determine the existing conditions that may affect his work, as he will be held responsible for any assumptions made by him in regard thereto.

## 7. CONTRACTOR'S PROPOSAL

A. The Contractor's proposal and bid must cover all items on the drawings and in the specifications exactly as drawn and specified.

B. Proposals and bids that do not conform to drawings and specifications will not be accepted.

## 8. SUBSTITUTIONS

A. Substitutions of equipment or materials other than those indicated on the drawings or in the specifications, shall be limited to those approved in advance, in writing, by the Architect.

## 9. SUB-CONTRACTORS

A. All sub-contractors shall be subject to approval of the DOH and listed on the Form of Bid.

B. When requested by the DOH, the prospective contractors should submit a list with names, addresses, and telephone numbers of similar type projects previously completed.

## 10. LAWS, ORDINANCES, PERMITS AND FEES

A. The Contractor shall give all necessary notices, obtain all permits and pay for governmental taxes, fees, and other costs in connection with his work; file all necessary plans, prepare all documents and obtain all necessary approvals of the Governmental departments having jurisdiction; obtain all required Certificates of Inspection for his work and deliver to the Architect before request for acceptance and final payment for the work. The DOH is NOT exempt from paying Building Permit Fees to the City of Derby. The Contractor shall include for any and all State of Connecticut Department of Environmental Protection Permits in addition to all Local Permits.

## 11. APPROVALS

A. The materials, workmanship, design and arrangement of all work installed under the contract shall be subject to the approval of the Architect. If material or equipment is installed before it is approved, the contractor shall be liable for the removal and replacement, at no extra charge to the owner, if, in the opinion of the Architect, the material or equipment does not meet the intent of the drawings and specifications.

B. The words "approved equal" shall be understood to apply only to those items of equipment and material approved in advance by the Architect.

C. Equipment and materials that do not conform to the specifications or the previous paragraph will not be

approved.

## 12. NON-SEGREGATED FACILITIES

A. By signing the bid, the bidder certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, or under his control, where segregated facilities are maintained. He certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The bidder agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this Contract. As used in this certification, the term "segregated facilities" mean any waiting room, work areas, restrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom or otherwise. He further agrees that (except where he has obtained identical certification from proposed sub-contractors for specific time periods) he will obtain identical certification from proposed sub-contractors prior to the award of sub-contracts exceeding \$10,000.00, which are not exempt from the provisions of the Equal Opportunity Clause; that he will retain such certifications in his files; that he will forward a notice to his proposed sub-contractors as provided in the Instruction to Bidders

## 13. JOB MEETINGS

A. The contractor and others concerned with the project whose presence is necessary as determined by the DOH and/or the Architect shall attend job meetings when requested for the purpose of discussing and expediting the prosecution of the work.

B. The schedule for meetings will be established by the DOH and/or the Architect.

C. The proceedings of these meetings will be recorded by the DOH and/or the Architect; the contractor will be furnished a copy for his use and distribution as required.

## 14. DRAWINGS

A. Drawings are generally schematic and may differ to some degree from field conditions. Specifically, certain drawings may be opposite hand from actual conditions and/or requirements. All dimensions are  $\pm$ . The contractor shall ascertain for himself the actual field conditions and shall be fully responsible for the indicated, specified and required work as designated and/or implied.

## 15. SCHEDULE OF THE WORK

A. The project area is tenant occupied. All work shall be carried out in such a manner so as to cause minimal interference with the use of the project by the tenant.

B. Other work in progress concurrently with work under this contract shall be affected by the performance of this contract. Conformance with this provision shall be the responsibility of this contractor.

C. The standard working hours shall be from 8:00 a.m., until 4:30 p.m., Monday through Friday.

The Contractor shall confirm working hours with the Owner prior to starting the work. Holidays shall include those observed by the DOH and the State of Connecticut.

D. The contractor shall at all times, maintain the fire integrity of the structures and shall maintain, free and clear all exitways.

E. The Contractor is required to submit to the Architect, for approval, prior to commencement of the work, a Project Schedule which identifies the time frame and sequence of construction. The Contractor is to provide an updated Project Schedule with each Application for Payment.

F. The Contractor must provide the DOH 48 hrs. notice prior to the start of work so the owner may provide notice to the tenants.

#### 16. MATERIALS AND EQUIPMENT

A. New materials and equipment installed into existing work shall be compatible with the existing work.

B. The contractor shall advise the Architect before ordering and/or installing any materials and equipment if he disputes those items and/or methods specified, otherwise he shall take full responsibility for their performance and suitability.

#### 17. STORAGE OF MATERIALS

A. Storage space for materials and equipment is limited, Property Owner must approve in advance the locations of stored materials and/or dumpster(s).

B. Equipment and materials stored on the project site is the full responsibility of the contractor.

#### 18. TEMPORARY FACILITIES

A. The contractor shall provide and maintain an adequate office at the project sites at his discretion. If provided, it shall be located as directed by the Owner. It shall be kept clean, have adequate light and ventilation.

B. The contractor shall provide and maintain telephone service for his own use. No telephone service is available at the sites.

#### 19. TEMPORARY SERVICE

A. The contractor may connect to water available at the project without payment to the Owner.

B. The contractor may connect to electrical available at the project without payment to the Owner.

C. Fixtures, or other modifications, shall be the responsibility of the contractor.

#### 20. SANITARY FACILITIES

A. Sanitary facilities are not available at the project site. The Contractor shall provide temporary facilities at the site for his workers, at his own expense. Coordinate final locations with the DOH project representative.

## 21. DEMOLITION

- A. This work includes the furnishing of all labor, materials, equipment and services necessary for, and reasonable incidental to, completion of all Demolition, as required for the installation of the work, whether or not listed below.
- B. The Contractor shall be confirm with Property Owner if a dumpster shall be permitted to remain on site for the purpose of disposal of demolished materials and debris. Final location of the dumpster to be coordinated with the Property Owner.

## 22. SALVABLE MATERIALS

- A. NO SALVABLE MATERIALS.

## 23. SHOP DRAWINGS AND SUBMITTALS

- A. Prior to delivery of materials and equipment to the project site, submit five (5) copies of Shop Drawings or Submittals of each item for approval by the Architect. Email transmittal of Shop Drawings will be permitted in lieu of hard copies.
- B. Submittals shall consist of manufacturer's scale drawings, cuts or catalogs, including descriptive literature and complete characteristics of equipment showing dimensions, capacity, code compliance, motor and drive and testing, all as required for this project.
- C. Architect may designate submittal of physical samples for approval on items where actual color, texture or other characteristics might not be adequately described by drawing or written material.

## 24. PROTECTION OF WORK AND PROPERTY

- A. The contractor shall be responsible for the maintenance and protection of all equipment, materials and tools, supplied by him and stored or installed on the job site, from loss or damage of all causes, until final acceptance by the DOH.
- B. The contractor shall be responsible for the protection of any finished work of other trades or existing buildings and tenant's property and damage or defacement by his operation and must remedy any such injury at his own expense.
- C. It shall be the Contractor's responsibility to protect all parts of the existing site, all trees, roads, streets, sidewalks, driveways, plantings, landscaping, lawns and curbs against damage caused by trucks, etc., driving over them. If they are damaged, the Contractor without cost to the Owner shall replace them.
- D. The building is owner occupied. The Contractor shall take the necessary precautions to protect work areas and debris from potential dangers. Clear paths of egress must be maintained from the building at all times.

## 25. ACCESSIBILITY

- A. The Contractor shall install all work so that all parts required and readily accessible for inspection, operation, maintenance and repair. Minor deviations from the drawings may be made to accomplish this, but changes of magnitude shall not be made without prior written approval from the Architect.

## 26. SCAFFOLDING, RIGGING, HOISTING

- A. The Contractor shall provide all scaffolding, rigging, hoisting and services necessary for erection and delivery into the premises for all equipment and materials furnished, and remove same from premises when no longer required.
- B. The Contractor shall coordinate in advance with the Owner the methods and locations for lifting of materials to the roof. The Contractor cannot assume that any existing site fixture can be temporarily removed or relocated during this construction process, this can only be discussed with the Owner after bids have been awarded.

## 27. GUARANTEE PERIOD

- A. Refer to specific Sections of this project manual for warranty and guarantee periods.

## 28. FINAL PAYMENT REQUIREMENTS

- A. Final Payment will not be approved until all items as outlined in Section 01700 have been completed.
- B. All guarantees and warranties for new materials shall commence at date of written Final Acceptance of the Work, by the DOH, or its designated agent.
- C. Upon completion of the project, the roofing manufacturer shall provide installation and material inspection warranties and certification of the roof system.

## 29. CLEAN UP

- A. Project shall be cleaned daily or as required to keep project area free from rubbish and debris. Burning of rubbish shall not be allowed. All debris shall be removed from the site and deposited legally off-site.
- B. Final clean up shall include all debris, stains, and other defacement caused by the work.

## 30. LIQUIDATED DAMAGES

- A. In case of failure on the part of the contractor to complete the work within the time fixed in the Contract, or any extension thereof, the Contractor shall pay to the DOH as fixed, agreed and liquidated damages the sum of \$250.00 for each calendar day of delay.

## 31. HAZARDOUS MATERIALS

- A. A hazardous material report has been completed by Eagle Environmental; this report is available within these Specifications, please refer to this report for handling, removal and disposal of all hazardous materials. It is the intention that this project's Scope of Work be completed in coordination with any hazardous materials encountered and be done within the quantities allowed, as specified by state and

local authorities regulating abatement of these materials. If the Contractor suspects that certain building materials may contain hazardous materials, he shall notify the Architect in writing and the Architect will have the suspect materials tested.

### 32. CHANGE ORDERS

- A. For all change orders, the general contractor shall be allowed 10% for overhead, above the direct costs and 5% for profit, above the direct costs to be calculated at 15% total above direct costs, for work performed by the general contractor.
- B. For all change orders, the sub-contractors shall be allowed 10% for overhead, above the direct costs and 5% for profit, above the direct costs to be calculated at 15% total above direct costs, for work performed by the sub-contractor.
- C. For all change orders, the general contractor shall be allowed 5% for overhead, above the direct costs and 2-1/2% for profit, above the direct costs to be calculated at 7-1/2% total above direct costs, for work performed by the sub-contractor.

### 33. BUILDER'S RISK INSURANCE

- A. Item 36B of HUD General Conditions, Form 5370-A refers to Builder's Risk Insurance. It has been determined that the Builder's Risk Insurance is not required on this project.

### 34. OSHA REGULATIONS

- A. The contractor shall comply with all applicable State and Federal OSHA regulations.
- B. The contractor shall submit to the owner, a copy of the OSHA ten (10) hour construction safety and health card for each employee.
- C. The contractor shall maintain any and all required OSHA materials, on site, at all times.

### 35. CONTRACT PERIOD

- A. The Contract period will be Sixty (60) consecutive calendar days from day of "Notice to Proceed" until day of "Substantial Completion".

### 36. GENERAL CONDITIONS

- A. In the event a conflict between the Special Conditions and the General Conditions located in Section 2 of these Specifications occurs, the General Conditions shall take precedence.

END OF SECTION 00900

SECTION 01200  
SUMMARY OF THE WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this section.

1.2 SUMMARY OF THE WORK

- A. The scope of this contract, Community Development Block Grant Disaster Recovery for the Owner Occupied Recovery and Rehabilitation Program for the Connecticut Department of Housing, **Project No. 1886 located at 365 Brooks Street, Bridgeport, CT**

- B. Verbal Summary of the Work: Without force and effect on the requirements of the Contract Documents, the Base Bid work includes, but is not limited to the following:

1. Selective demolition.
2. Removal of all layers of existing asphalt shingle roofing systems down to existing roof sheathing.
3. Replace existing vent pipe boots.
4. Installation of new fiberglass based asphalt roof shingle system including ice and water shield, underlayment, trim and accessories.
5. Replacement of rotting, damaged, or deteriorating roof framing and sheathing.
6. Replacement of existing flashing systems, as indicated on the drawings.
7. Removal and replacement of selective areas of damaged gypsum wallboard ceilings.
8. Priming and painting.
9. Asbestos Abatement, Lead Based Paint and Microbial Remediation.

- C. Refer to Section 02080, 02090 and 02092 for Scope of Work, quantities and products required to accommodate the remediation of Hazardous Materials.

1.3 EXISTING CONDITIONS

- A. This project includes work which is affected by existing conditions. Existing conditions which may affect the Work may be discovered during the progress of the Work. Make adjustments in the work as required accommodating existing conditions. Where products are to be installed in existing construction, perform cutting, removal of old products (if applicable), installation of new products, rebuilding of adjacent construction, and other operations as required.

1. The Architect will issue prompt instructions when unanticipated conditions are encountered.
2. If unanticipated conditions are such as to impose a hardship on the Contractor as interpreted by the Architect, such as faulty structure which must be rebuilt, the Architect shall issue the appropriate change orders for approval by the DOH.
3. Make adjustments in the Work, other than those described in two above, without additional compensation.

- B. The Drawings do not attempt to show every item of existing work to be demolished and every item of repair required to existing surfaces. Perform work required to remove existing materials which are not to be saved and to restore existing surfaces to like-new condition.
1. If possible, repairs shall be indistinguishable from adjacent sound surfaces. Where it is impossible to achieve repairs which are indistinguishable from adjacent sound surfaces, notify the Architect, and proceed according to the Architect's instructions.

#### 1.4 - USE OF PREMISES

- A. The following are in addition to requirements of the General and Special Conditions governing the Contractor's use of the premises.
1. Assume full responsibility for protection and storage of products stored on the premises.
  2. The Contractor shall have use of the premises between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. It is during these hours that all work must take place. Additional hours must be approved in advance by the Owner.
  3. The Contractor shall not have use of the premises on holidays which the DOH is closed.
  4. The Contractor will have access to specific project site in accordance with the approved project schedule.
  5. Work on the building will not be allowed without providing the tenant 48 hour prior notice.

#### 1.5 - REFERENCE STANDARDS

- A. Unless date is listed, reference to standard specifications shall mean latest edition of such specification legally adopted and published at the date the Contract is executed.
- B. Reference to technical society or organization is made in the project manual according to the following abbreviations:

A.A.M.A.	American Architectural Manufacturers Association
A.C.I.	American Concrete Institute
A.I.A.	American Institute of Architects
A.I.E.E.	American Institute of Electrical Engineers
A.I.S.C.	American Institute of Steel Construction A.I.T.C. American Institute of Timber Construction
A.F.P.A.	American Forest & Paper Association
A.N.S.I.	American National Standards Institute
A.P.A.	American Plywood Association
A.R.M.A.	Ashphalt Roofing Manufacturer's Association
A.S.H.R.A.E.	American Society of Heating, Refrigeration, and Air Conditioning Engineers
A.S.M.E.	American Society of Mechanical Engineers
A.S.T.M.	American Society of Testing Materials
A.W.I.	American Woodwork Institute
A.W.P.I.	American Wood Preservers Institute
A.W.S.	American Welding Society
A.W.W.A.	American Water Works Association

B.O.C.A.	Building Officials and Code Administrators International
C.H.F.A.	Connecticut Housing Finance Authority
C.P.S.C.	Consumer Products Safety Commission
C.S.I.	Construction Specification Institute
D.O.H.	Department of Housing
E.E.I.	Edison Electric Institute
Form 812	Connecticut State Department of Transportation Standard Specifications for Roads, Bridges, and Incidental Construction
F.M.	Factory Mutual
F.S.	Federal Specification
H.U.D.	U.S. Department of Housing and Urban Development
I.C.C.	International Code Council
I.E.S.	Illuminating Engineers Society
I.R.C.	International Residential Code
I.S.D.S.I.	Insulated Steel Door Systems Institute
N.A.A.M.M.	National Association of Architectural Metal Manufacturers
N.B.F.U.	National Board of Fire Underwriters
N.B.S.	National Bureau of Standards
N.E.C.	National Electric Code
N.E.M.A.	National Electrical Manufacturers Association
N.F.P.A.	National Fire Protection Association
O.S.H.A.	Occupational Safety and Health Administration
S.D.I.	Steel Deck Institute
S.I.G.M.A.	Sealed Insulating Glass Manufacturer's Association
S.J.I.	Steel Joist Institute
S.M.A.C.N.A.	Sheetmetal and Air Conditioning Contractors National Association, Inc.
S.S.P.C.	Steel Structures Painting Council
U.L.	Underwriters Laboratories, Inc.
W.W.P.A.	Western Wood Products Association

#### 1.6 - FINAL PAYMENT REQUIREMENTS

- A. Final Payment will not be approved until all items as outlined in Section 01700 have been completed.
- B. All guarantees and warranties for new materials shall commence at date of written Final Acceptance of the Work, by the DOH, or its designated agent.
- C. Upon completion of the project, the roofing manufacturer shall provide installation and material inspection warranties and certification of the roof system.

#### 1.7 - GENERAL INFORMATION

- A. The DOH is a governmental agency, but is responsible for paying sales tax. The Contractor shall assume that materials purchased for the use on this project shall be taxed.

#### 1.8 - SCHEDULE

- A. Refer to Form of Contract for completion date.

#### PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 01200

SECTION 01230  
ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.
  2. Unless otherwise noted, alternate prices will be adds to the base contract.

1.3 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Refer to Roof Plan Drawing A-1.0, for **Alternate No. 1.**

1. Provide new skylight, sized to match existing opening and function with 'Velux' model VS Manually Operated Deck Mounted. Include manufacturer's flashing system and warranty.

END OF SECTION 01230

## SECTION 01270

### UNIT PRICES

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for Unit Prices.
- B. Refer to other specification sections for specific requirements for this work.
- C. Enter Unit Price amounts on the enclosed Bid Form.

##### 1.2 DEFINITIONS

- A. Unit price is an amount proposed by bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased.

##### 1.3 PROCEDURES

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

#### PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION

- A. Refer to drawings for details and locations for Unit Price work.

### 3.1 LIST OF UNIT PRICES

#### **A. Unit Price No. 1 – Up to 3/4" Plywood Roof Sheathing (match existing)**

1. Condition – Existing roof sheathing is a combination of 3/4" plywood and plank boards. Contractor shall verify in field, the thickness of all deteriorated sheathing that shall be removed and replaced.
2. Description – Install new 3/4" CDX plywood sheathing for the following:
  - a. Rotted roof sheathing being replaced.
  - b. Infill plywood at existing ridge vent cut-outs where deteriorated.
  - c. Existing openings for roof mounted attic vents being removed.
3. Unit of measure – Per square foot.

#### **B. Unit Price No. 2 – Wood Fascia**

1. Condition – Areas where the existing wood fascia is deteriorated, provide new wood fascia to match existing and prime and paint, two finish coats.
2. Unit of measure – Per linear foot.

#### **C. Unit Price No. 3 – Wood Trim.**

1. Condition – Areas where the existing wood trim is deteriorated, provide new wood trim to match existing and prime and paint, two finish coats.
2. Unit of measure – Per linear foot.

#### **D. Unit Price No. 4 – Wood Soffit.**

1. Condition – Areas where the existing wood soffit is deteriorated, provide new wood soffit to match existing and prime and paint, two finish coats.
2. Unit of measure – Per linear foot.

#### **E. Unit Price No. 5 – Up to 2x10 Wood Roof Framing (match existing)**

1. Condition – Areas where the existing wood roof framing is deteriorated, provide new wood roof framing to match existing.
2. Unit of measure – Per linear foot.

#### **F. Unit Price No. 6 – Interior Painting (Gypsum Wall Board)**

1. Condition – Paint lead based paint wall surfaces encapsulated during the remediation process when desired color cannot be achieved through tinting process.
2. Unit of measure – Per square foot.

#### **G. Unit Price No. 7 – Interior Painting (Wood Trim)**

1. Condition – Paint lead based paint wood trims encapsulated during the remediation process when desired color cannot be achieved through tinting process.
2. Unit of measure – Per linear foot.

#### **H. Unit Price No. – Exterior Painting (Wood Trim)**

1. Condition – Paint lead based paint exterior wood trims encapsulated during the remediation process when desired color cannot be achieved through tinting process.
2. Unit of measure – Per linear foot.

END OF SECTION 01270

**SECTION 01300**  
**DEMOLITION**

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions and Division 1 Specification sections, apply to work specified in this section.

1.2 - GENERAL REQUIREMENTS

- A. "Demolition" denotes razing and removal of portions of existing structures, Installations and obstructions shown on Drawings or specified to be removed from the site, and includes taking possession of and removing from the site, all material, equipment and debris resulting from demolition work except as otherwise specified herein.
- B. Conform to all requirements of local authorities having jurisdiction including the following:
  - 1. Obtain and pay (if required) for all permits and licenses.
  - 2. Provide and maintain fire protection devices.
  - 3. Install and maintain barricades for protection of public and adjacent property (as required).
  - 4. Keep public and private ways free of dirt and debris at all times.
  - 5. All material shall be disposed of legally off the site.
- C. Upon completion remove all tools, equipment, temporary structures (if any) and installations and rubbish of every sort. Leave work areas in an orderly condition and the surrounding area in a broom-clean condition.
- D. It is the responsibility of the General Contractor to coordinate the demolition work with the general construction process and the work of other trades. The demolition work must be phased accordingly.
- E. Provide any temporary weather protection which may be required as a result of demolition work.

1.3 - EXISTING PUBLIC SPACES

- A. Before start of demolition, notify and arrange for appropriate utility companies to discontinue services and to remove meters and other regulating devices, not the property of the Owner, as required.
- B. Cap and/or plug disconnected service lines as required by utility company concerned.
- C. Protect existing services indicated to remain on the site. Replace and/or repair services damaged as a result of demolition work, at no expense to the Owner.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.1 - SCOPE

- A. Portions of structures, installations and obstructions to be demolished are as shown on the Contract Drawings and, in general but not necessarily limited to, those items as listed below:
  - 1. Removal of existing asphalt shingle roofing systems, including vent stack boots.
  - 2. Removal of existing deteriorated wood sheathing and framing members.
  - 3. Removal of existing flashing systems, as indicated on the drawings.
  - 4. Removal of existing deteriorated drywall.
- B. Demolition work shall not be limited to the above listing. The removal, relocation, or replacement of any item(s) by a trade as may be required (1) to complete the indicated scope of work or (2) to accomplish the intended result may require demolition work not specifically listed or shown on the Drawings. All such requirements shall be considered part of this work.

3.2 - PROTECTION

- A. Protect all walls, floors, ceilings and other existing items not to be removed. Portions damaged as a result of the work shall be replaced and repaired in compliance with the regulations of authorities having jurisdiction and without cost to the Owner.
- B. Do not close or obstruct means of egress in connection with the work. Materials and debris shall not be placed or stored in egress paths. Conduct operations so as to interfere as little as possible with normal activities.

END OF SECTION 01300

**SECTION 01400**  
**SUBMITTALS**

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions and Special Conditions and Division 1 Specification sections apply to work specified in this section.

1.2 - RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Substitutions and product options are indicated in Item 8 of Section 00900, Special Conditions.
- B. Materials and methods requiring submittals are listed, where applicable, within each Respective section of this specification.

1.3 - IDENTIFICATION

- A. Identify each submittal with the following information:
1. Date and revision date(s).
  2. Project title.
  3. The names of: Architect, Contractor, Subcontractor, supplier, manufacturer or separate detailer when pertinent.
  4. Identification of products, materials and finishes.
  5. Relation to adjacent structure or material.
  6. Field dimensions, clearly identified as such.
  7. The specification section number, and applicable standards, such as ASTM or FS number.
  8. Quantities.
  9. Blank spaces, 4" x 4 1/2" each, for the Architect's stamp, and Consultant's stamp where applicable.
  10. Identification of deviations from Contract Documents.
  11. Contractor's stamp, initials or signed, certifying to review of submittal, the verification of the field measurements and quantities, and compliance with Contract Documents.

- B. Accompany the submittals with a transmittal letter containing:
1. Date.
  2. Project Title and number.
  3. Contractor's name and address.
  4. The number and name of each item submitted.
  5. Notification of deviations from Contract Documents.

#### 1.4 - SHOP DRAWINGS

- A. Provide the following information, where applicable, on all shop drawings:
1. All necessary dimensions. Dimension work illustrated by shop drawings to fit actual field conditions.
  2. Sufficient detailing to show appearance, method of assembly or fabrication, and the method of installation or erection.
  3. Identification of details by reference to sheet and detail number shown on Contract Drawings.

#### 1.5 - PRODUCT DATA

- A. Manufacturer's standard schematic drawings which are:
1. Modified to delete any information which is not applicable to the Project.
  2. Supplemented to provide any additional information applicable to Project.
- B. Manufacturer's catalog sheets, brochures, diagrams schedules, performance charts, illustrations and other standard descriptive data.
1. Clearly mark each copy to identify the pertinent materials, products, or models.
  2. Show dimensions and clearances required.
  3. Show performance characteristics and capacities.
- C. Test reports performed by independent testing agencies for manufacturer. On test reports list:
1. System, material or work tested.
  2. Test results and witnesses.
  3. Description of correction of faults.

#### 1.6 - SAMPLES

- A. Samples shall be of sufficient size and quantity to clearly illustrate:
  - 1. Functional characteristics of product or material, with integrally related parts and attachment devices.
  - 2. Full range of color samples.
  - 3. After the review, approved samples may be used in construction of Project, where appropriate.

#### 1.7 - SUBMISSION REQUIREMENTS

- A. Submit to the Architect all shop drawings, product data and samples required by the specification sections.
- B. Schedule submissions at least 10 working days before dates reviewed submittals will be needed.
- C. Submit six black line prints of each shop drawing.
- D. Submit six copies each of all product data.
- E. Submit two each of required samples unless a greater number is specified or requested by the Architect.
- F. Submit samples with delivery charges prepaid. Samples delivered in damaged condition may not be acceptable, and may have to be resubmitted, to Architect's discretion.
- G. The Architect may, at his discretion, request submittals in addition to those specified.
- H. Facsimile copies are not acceptable for submission and will be returned un-reviewed.

#### 1.8 - RESUBMISSION REQUIREMENTS

- A. Shop Drawings:
  - 1. Revise the initial drawings as required and resubmit as specified for initial submission.
  - 2. Indicate on drawings any changes which have been made other than those requested by Architect.
- B. Product data and Samples: Submit new data and samples as required for initial submission.

1.9 - ARCHITECT'S DUTIES

- A. Architect's responsibilities for processing submittals are defined in other sections of these specifications.
- B. Architect is not responsible for verifying quantities, dimensions, field measurements, or coordination of work of different trades. Architect's review of submittals shall not be construed to include or imply any such verification.

1.10 - CONTRACTOR'S DUTIES

- A. In addition to requirements of other Division 1 Specification sections.
  - 1. Contractor shall be responsible for obtaining and distributing prints of shop drawings after, as well as before final approval, to all parties, including, but not limited to the Owner, subcontractors and suppliers.
  - 2. Prints of approved shop drawings shall be made from sepia transparencies which carry the Architect's and Consultant's stamp of approval.
  - 3. Begin no work which requires shop drawings and product data unless the approved and stamp shop drawings and product data are on file at the job site.

PART 2 - NOT USED

PART 3 - NOT USED

END OF SECTION 01400

**SECTION 01500**  
**CUTTING AND PATCHING**

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions and Special Conditions and Division 1 Specification sections apply to work specified in this section.

1.2 - DESCRIPTION

- A. Definition: "Cutting and Patching" is hereby defined to include, but not necessarily limited to the cutting and patching of nominally completed and previously existing work, in order to accommodate the coordination of work, or the installation of other work, or to uncover other work for access or inspection, or to obtain samples for testing, or for similar purposes; and is defined to exclude integral cutting and patching during manufacturing, fabricating, erecting and installing process for individual units of work.
- B. Demolition is recognized as an example of a related, but separate category of work, which may or may not also require cutting and patching as defined in this Section. Refer to Section 01300.

1.3 - QUALITY ASSURANCE

- A. Requirements for Structural Work:
  - 1. General: Do not cut and patch structural work in a manner resulting in a reduction of bearing capacity or load/deflection ratio.
  - 2. Call for a structural inspection, and/or obtain the Owner's approval prior to cutting and patching any of the following:
    - a. Bearing Walls.
    - b. Structural decking and floor systems.
    - c. Exterior wall construction - including storefronts.
    - d. Pressurized piping, vessels and equipment.
- B. Visual requirements: Do not cut and patch work which is exposed on the exterior or exposed in occupied spaces of the building in a manner resulting in a reduction of visual qualities or resulting in substantial evidence of cutting and patching work, both as judged solely by the Owner. Remove and replace work judged by the Owner as having been cut and patched in a visually unsatisfactory manner.

## 1.4 - SUBMITTALS

- A. Requests for Owner's Consent:
  - 1. Prior to cutting and patching of structural elements, submit written request to the Owner for permission to proceed with cutting.
  - 2. Should conditions of the Work, or schedule indicate a required change of materials or methods for cutting and patching, so notify the Owner and secure his written permission and the required Change Order prior to proceeding.
- B. Notices to the Owner:
  - 1. Prior to cutting and patching performed pursuant to the Owner's instructions, submit cost estimate to the Owner. Secure the Owner's approval of cost estimates and type of reimbursement before proceeding with cutting and patching.
  - 2. Submit written notice to the Owner designating the time the work will be uncovered, to provide for the Owner's observation.
- C. Approval by the Owner to proceed with proposed cutting and patching does not waive the right to later require complete removal and replacement of work found to be cut and patched in an unsatisfactory manner.

## PART 2 - PRODUCTS

### 2.1 - MATERIALS

- A. For replacement of items removed, use identical materials to those being removed, or materials complying with the various Sections of these Specifications or the drawings, as appropriate. The end result of the cutting and patching operation shall result in equal or better work than the work being cut and patched, in terms of performance characteristics and including visual effects where applicable.

### 2.2 - PAYMENT FOR COSTS

- A. Perform cutting and patching needed to comply with the Contract Documents at no additional cost to the Owner. The Owner will reimburse the Contractor for cutting and patching performed pursuant to written Change Orders, after claim for such reimbursement is submitted by the Contractor, and approved in advance by the Owner.

## PART 3 - EXECUTION

### 3.1 - INSPECTION

#### A. Inspection:

1. Inspect existing conditions, including elements subject to movement or damage during cutting and patching.
2. After uncovering the work, inspect conditions affecting installation of new work.

#### B. Discrepancies:

1. If uncovered conditions are not as anticipated, immediately notify the Owner and secure needed directions.
2. Do not proceed until unsatisfactory conditions are corrected.

### 3.2 - PREPARATION

- A. Provide adequate temporary support including, but not necessarily limited to shoring and bracing to maintain structural integrity of the Work. Do not endanger other work.
- B. Provide adequate protection of other work during cutting and patching, to prevent damage. Provide protection of the Work from adverse weather exposure.

### 3.3 - CUTTING AND PATCHING

- A. Perform cutting and patching as required under pertinent other Sections of these Specifications.
- B. Employ skilled tradesmen to perform all cutting and patching. Proceed with cutting and patching at the earliest feasible time, in each instance, and perform the work promptly.
- C. Patch with seams which are durable and as invisible as possible. Perform fitting and adjusting of products to provide finished installation complying with the specified tolerances and finishes.
- D. Select systems that adequately resist racking and provide acceptable deflection under live and dead loads. Reinforce to prevent cracking. Inspect and test patched areas to demonstrate integrity of work.
- E. In all cases of repair and renovation, restore exposed finishes of patched areas and where necessary, extend finished restoration onto retained work adjoining, in a manner which eliminates evidence of patching.
- F. Where re-painting areas due to cutting and patching as part of this work, paint the entire wall, to the nearest corner, in colors to match the existing, unless otherwise directed by the Owner.

- G. Where cutting and patching of ceilings is required, cut ceiling back as little as is required, and later infill to the point at which the existing ceiling is cut back. Refer to typical details on the drawings for additional information.
- H. Where floor finishes are to be cut back, cut back to nearest logical point, or as indicated on the drawings. Install new flooring, as indicated on the drawings, utilizing the necessary transitions, reducers, termination bars, etc..
- I. Consult with the architect as necessary to insure compliance with the intention of cutting and patching work relative to floors and ceilings.

**END OF SECTION 01500**

SECTION 01700  
PROJECT CLOSEOUT

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions and Special Conditions and Division 1 Specification sections apply to work specified in this section.

1.2 - GENERAL

- A. The following requirements supplement those of other sections of these Specifications.

1.3 - CLEANING

- A. Hazard Control:
  - 1. Store all volatile wastes in covered non-flammable containers.
  - 2. Prevent accumulation of wastes which create hazardous conditions.
  - 3. Provide adequate ventilation during use of volatile or noxious substances.
- B. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
  - 1. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in the storm or sanitary drains. Dispose of them legally off the site.
  - 2. Do not dispose of wastes in streams or waterways.
  - 3. Dispose of demolition and waste materials, debris and rubbish legally off the site.
- C. During construction, in addition to cleaning required other sections of these Specifications, perform the following:
  - 1. Keep building, grounds, and public properties free from accumulations of waste materials and rubbish.
  - 2. Provide on-site containers for the collection of all waste materials, all debris and rubbish. Dispose of waste materials, debris and rubbish at reasonable intervals, legally off the site.
  - 3. Clean interior building areas where construction occurred. after demolition work is complete and when ready to receive finish painting and continue cleaning on an as-needed basis until building is ready for substantial completion or occupancy.
  - 4. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.

- D. At substantial completion, in addition to leaving the work "broom clean", the following must be completed:
1. Remove dust, dirt, stains identifications stickers, fingerprints, paint droppings and other soil from finished surfaces.
  2. Clean and polish hardware, specialties, and equipment.
  3. Vacuum clean all sills until all debris is removed. Use a brush if necessary to free up stationary particles. Lubricate all tracks if necessary for smooth, easy opening and closing operations.
  4. Clean under and behind all concealed areas.
  5. If surfaces cannot be put in clean condition by cleaning, repaint them as required until they are at an acceptable level of quality.
  6. Clean site and clean up any debris of dirt off site, which resulted from work under this contract, and dispose of legally off the site.
  7. Maintain cleaning until Substantial Completion Certificate, approved by the Architect, is delivered to the Owner or the project is occupied by the Owner. Turn over the work fully clean and fit for occupancy.
  8. When workmen call back for "punchlist" or guarantee work, clean up afterwards.

#### 1.4 - SUBSTANTIAL COMPLETION

- A. Submit written certification to Architect that Project, or a designated portion of Project, is substantially complete. Submit list of major items to be completed or corrected.
- B. The Architect shall prepare and submit a list of the items to be completed or corrected as determined by the inspection.
- C. Should the Architect consider that the Work is substantially complete:
1. The Architect shall prepare and submit a list of items to be completed or corrected as determined by the inspection.
  2. Architect will prepare and issue a Certificate of Substantial Completion, complete with signatures of Owner and Contractor, accompanied by the list of items to be completed or corrected.
  3. Perform final cleaning as specified above.
  4. Complete work listed for completion or correction, within designated time.
  5. Obtain Certificate of Occupancy, if required.

- D. Should Architect consider that the Work is not substantially complete:
1. He/she shall immediately notify the Contractor, in writing, stating reasons.
  2. Contractor shall complete the Work, and send second written notice to the Architect, certifying that the Project, or a designated portion of the Project, is substantially complete.
  3. Architect will re-inspect the work.

#### 1.5 - FINAL INSPECTION

- A. Contractor shall submit written certification, as required above, that:
1. Contract documents have been reviewed.
  2. Project has been inspected for compliance with Contract Documents.
  3. Work has been completed in accordance with Contract Documents.
  4. Equipment and systems have been tested in presence of Owner's representative and are operational.
  5. Project is completed, and ready for final inspection.
- B. Architect will make final inspection within three days after receipt of certification.
- C. If Architect considers that Work is finally complete in accordance with requirements of the Contract Documents, he/she shall request Contractor to make Project Closeout Submittals.
- D. If Architect considers that Work is not finally complete:
1. He shall notify Contractor, in writing, stating reasons.
  2. Contractor shall take immediate steps to remedy the stated deficiencies, and submit a second written notice to Architect certifying the Work is complete.
  3. Architect will re-inspect work.
- E. Should Architect be required to perform second inspection because of failure of Work to comply with original certifications of Contractor, Owner will compensate Architect for additional services, and deduct amount paid from final payment to Contractor.

#### 1.6 - CLOSEOUT SUBMITTALS

- A. Upon completion of the Work, deliver the following to the Owner's Representative, as required by the General Conditions and Specifications.
1. Project Record Documents. (Submit one (1) clean, legible marked up set of prints and other items, if required, as indicated in 1.7 below.)
  2. Operation and Maintenance Data.

3. The guarantees, warranties and bonds.
4. Parts and Maintenance Materials.
5. Evidence of Compliance with requirements of governing authorities, including:
  - a. Certificate of Occupancy, if required.
- B. Accompany closeout submittals with transmittal letter, in duplicate, containing:
  1. Date
  2. Project title and number.
  3. Contractor's name and address.
  4. Certification that each Project Record Document, as submitted is complete and accurate.
  5. Signature of the Contractor, or his authorized representative.
- C. Instruct Owner's personnel in operation of all systems and other equipment.

#### 1.7 - PROJECT RECORD DOCUMENTS

- A. Drawings, shop drawings, product data, specifications and addenda, marked by Contractor to record all changes made during construction described below, shall be referred to as "Project Record Documents."
- B. In addition to changes, record on Project Record Drawings the following as-built conditions:
  1. Locations and sizes of conduit runs.
  2. Locations and sizes of access panels and doors.
  3. Location of all the mechanical and electrical control points.

#### PART 2 - PRODUCTS

NOT USED

#### PART 3 - EXECUTION

NOT USED

END OF SECTION 01700

SECTION 020900  
LEAD-BASED PAINT ABATEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and General Provisions of Contract, including General Supplementary Conditions and Division 1 Specifications Sections, of the Contract Documents apply to this Section.

1.2 PROJECT DESCRIPTION

- A. A lead-based paint abatement project is being undertaken at 365 Brooks Street in Bridgeport, Connecticut. The lead-based paint abatement work is being funded by a Community Development Block Grant (CDBG) under the Department of Housing Occupied Rehabilitation and Rebuilding Program (OORR).
- B. The site building consists of a two (2) dwelling unit residential building. Notification to the Connecticut Commission on Culture & Tourism has been made to determine if the building is eligible for listing on the National Register of Historic Places and the results indicate that the site is not eligible for listing.
- C. A lead-based paint risk assessment was performed on the interior of the dwelling units along with the common areas and exterior areas. Toxic levels of lead-based paint were identified on various components and surfaces. There are no known lead-based paint abatement orders on the inspected building.
- D. Under federal regulation 24 CFR 35, Subpart J, Rehabilitation, for a property receiving between greater than \$25,000.00 per unit, all identified interior lead hazards are required to be abated and all exterior lead-based paint hazards may be remediated utilizing interim control (non-permanent) measures. Lead-based paint abatement will be performed throughout the interior and common areas of the dwelling units and interim controls will be used on the exteriors. All lead-based paint abatement work specified in the Scope of Work must be performed by a State of Connecticut licensed Lead Abatement Contractor. Interim control work may be performed by a USEPA certified Renovation, Repair and Painting (RRP) contractor.
- E. All lead-based paint abatement and hazard control work shall be conducted in compliance with all Federal, State and local regulations. Specifically, work shall conform with The Department of Housing and Urban Development (HUD) Guidelines For the Control and Evaluation of Lead Based Paint in Housing, The United States Environmental Protection Agency (USEPA), The State of Connecticut Department of Public Health (DPH) Lead Poisoning Prevention and Control Regulations, The State of Connecticut Department of Environmental Protection (DEP) Hazardous Waste Disposal regulations and the Department of Labor Occupational Safety and Health Administration (OSHA) Lead in Construction Final Rule 29 CFR 1926.62.
- F. The property owner/tenant is responsible for moving all items to the center of the room within areas where work is to be performed. They are also responsible for putting them back at the completion.

### 1.3 SCOPE OF WORK

A. The general scope of work entails the following:

1. Liquid encapsulation of various interior components
2. Paint stabilization of various exterior components
3. Window replacement
4. Enclosure of various components
5. Replacement of various components
6. Paint removal of various components
7. Any surface that was not defective at the time of inspection or was not intended to be disturbed by renovations must be assumed to contain toxic levels of lead-based paint. If any surfaces are disturbed or uncovered during the renovation project, they must be treated as lead-based paint and either abated or left in intact condition at the completion of the job.

**SEE ATTACHED TABLE A FOR SCOPE OF WORK.**

REPAIRS PRIOR TO LEAD HAZARD REDUCTION					
Item #	Location	Component	Side	Quantity	Repair
NONE					

### 1.4 SITE EXAMINATION

- A. The Contractor shall visit the site and examine all structures located thereon. The specifications shall be compared with the existing field conditions. The Contractor will examine all parts of the existing structure to which new work will be connected, attached or applied, and notify Eagle Environmental of any conditions detrimental to the proper and timely completion of the work.
- B. The Contractor shall, as a part of their bid, notify Eagle Environmental of any discrepancies, errors, or omissions that might have been discovered in the specifications for the purpose of making such corrections or adjustments as may be necessary. Unless specifically noted otherwise in the bid, any additional work by other trades or by the contractor that is required in order for the Contractor to finish the job will be assumed to be included in the bid price. If it should appear that any work called for in the specifications is not in accordance with State, local or federal laws or ordinances, the Contractor shall immediately notify Eagle Environmental.

### 1.5 LEAD PLANNER/PROJECT DESIGNER INFORMATION

- A. Name of Planner/Project Designer: Kristen Liljehult  
 Certificate Number: 002153  
 Firm: Eagle Environmental, Inc.  
 Address: 8 South Main Street  
 City: Terryville State: Connecticut Zip: 06786  
 Telephone Number: (860) 589-8257

## 1.6 INSPECTION REPORT INFORMATION

- A. Inspector Name: Kristen Liljehult  
Title: Lead Inspector/Risk Assessor  
Certificate Number: 002206  
Firm Name: Eagle Environmental, Inc.  
Firm License Number: 001723  
Telephone Number: (860) 589-8257

## 1.7 OWNER INFORMATION

- A. Name: Roosevelt and Milta Andrus  
Address: 365 Brooks Street  
City: Terryville State: Connecticut Zip: 06786  
Home Telephone: 203-334-4989

## 1.8 CONTRACTOR INFORMATION

- A. Company Name: State of Connecticut licensed Lead Abatement Contractor  
Contractor License Number: Not applicable at this time  
Contact Person: Not applicable at this time  
Address: Not applicable at this time  
City: N/A State: N/A Zip: N/A  
Telephone Number: N/A

## 1.9 APPLICABLE CODES

- A. The Contractor shall be solely responsible for conducting this project and supervising all work in a manner which will be in conformance with all federal, state and local regulations and guidelines pertaining to lead paint abatement. Specifically, the Contractor shall comply with the requirements of the following:
1. Occupational Safety and Health Administration: OSHA
    - a. 29 CFR 1910 General Industry Standards
    - b. 29 CFR 1910.1025 Lead Standard for General Inventory
    - c. 29 CFR 1910.134 Respiratory Protection
    - d. 29 CFR 1910.1200 Hazard Communication
    - e. 29 CFR 1910.245 Specifications for Accident Prevention (Sign and Tags)
    - f. 29 CFR 1926.62 Construction Industry Standard
  2. State of Connecticut Department of Energy and Environmental Protection: DEEP
    - a. Connecticut DEEP Regulations (Section 22a-209-8(l) and Section 22a-220 of the Connecticut General Statutes)
  3. State of Connecticut Department of Public Health: DPH
    - a. 19a-111-1 thru 19a111-11 Lead Poisoning Prevention and Control Regulations.

4. USEPA

- a. 40 CFR 745.100 - .119 Final Rule
- b. 40 CFR Part 261 United States Environmental Protection Agency
- c. 40 CFR 745 Subpart E

5. Department of Housing and Urban Development: HUD

- a. Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, dated June 1995.
- b. 24 CFR Part 35 Lead-Based Paint Poisoning in Certain Residential Structures.

1.10 FEES, PERMITS AND LICENSES

- A. The Contractor shall comply with the provisions of all permits or applications required by the work specified, as well as make all submittals required under those auspices.

1.11 SEQUENCING AND SCHEDULING

- A. The Contractor shall extend full cooperation to Owner in all matters involving the use of Owner's facilities. At no time shall the Contractor cause or allow to be caused conditions which may cause risk or hazard to the general public or conditions that might impair safe use of the facility. The Contractor shall provide electricity, water and portable sanitary facilities for this project.
- B. The Contractor shall submit a time-line schedule, not date specific, to Owner and Consultant for integration into the overall project schedule. Coordinate the work of this section with the needs of the Owner. Phasing and scheduling of this project will be at the discretion of the Owner and shall not proceed in any area without the express consent of the Owner. The Contractor shall be available within 24 hours' notice for additional work or rework, if after acceptance of the work, it is found that full abatement was not achieved from the initial work effort as determined by the Owner.
- C. The proposed time line for the work in this Section, as noted above, shall show the time involved from start to finish of abatement operations, including preparation, removal, clean-up, and tear-down portions of the job.
- D. A final written schedule shall be prepared for approval by the Owner and the Consultant.
- E. The Contractor shall complete all work in a unit prior to proceeding to the next unit.

1.12 SUBMITTALS

- A. USEPA RRP Firm certification
- B. Lead Abatement Contractors License
- C. Original and most recent certificate for lead abatement workers/supervisor trainings
- D. Current license for lead abatement workers/supervisors
- E. Medicals for all lead abatement workers/supervisors on the job site

- F. Fit tests for all lead abatement workers/supervisors on the job site
- G. The last four (4) digits of each lead abatement worker/supervisor's social security number

#### 1.13 BUILDING OCCUPANCY

- A. The occupants shall be relocated during lead-based paint abatement work within their dwelling unit. The first floor dwelling unit was vacant at the time of inspection. The lead-based paint abatement work and clearances should be completed in this unit first so the residents of the second floor dwelling unit can relocate there while the work is completed in their dwelling unit. The Lead-Abatement Contractor shall ensure safe entrance and egress for the tenants remaining in their unit while work is being accomplished in other units.

#### 1.14 NOTIFICATION TO CONNECTICUT COMMISSION ON CULTURE & TOURISM

- A. Notification to the Connecticut Commission on Culture & Tourism has been made and it has been determined that the building is not eligible for listing on the National Register of Historic Places.

#### 1.15 NOTIFICATIONS

- A. For RRP work, notifications shall include the following:
  1. The Contractor shall provide written notification to the Architect's representative a minimum of five (5) days prior to work at the site.
  2. The Owner shall notify the tenants a minimum of five (5) days prior to any lead renovation work.
  3. The Contractor is required to comply with the following information distribution requirements. No more than 60 days before beginning renovation activities in any residential dwelling unit of target housing, the firm performing the renovation must:
    4. Provide the owner or adult occupant of each unit the pamphlet titled Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools and comply with one of the following:
    5. Obtain, from the owner, a written acknowledgement that the owner has received the pamphlet (Each Unit).
    6. Obtain a certificate of mailing at least 7 days prior to the renovation.
    7. If the Contractor is unsuccessful in obtaining written acknowledgement from an adult occupant, certify in writing that the pamphlet has been delivered to the dwelling. The certification must include the date and method of delivery of the pamphlet, names of the persons delivering the pamphlet, reason for lack of acknowledgement, signature of the representative of the Contractor performing the lead renovation work and the date of signature.
  8. The Contractor shall have an adult occupant sign the Pre-Renovation Disclosure Form. A signed copy of the disclosure form shall be submitted to Architect's representative with the notice of the start date.

B. For lead-based paint abatement work, notifications shall include the following:

1. The Owner shall notify the tenants a minimum of five (5) days prior to abatement work.
2. The Owner shall provide a notice to occupants no more than fifteen (15) calendar days after the hazard reduction activities have been completed. Notice of hazard reduction shall include, but not be limited to:
  - a. A summary of the nature, scope and results (including clearance results) of hazard reduction activities.
  - b. A contact name, address and telephone for more information.
  - c. Available information on the location of any remaining lead-based paint in the rooms, spaces or areas where hazard reduction activities were conducted on a surface by surface basis.

1.16 EPA RENOVATE, REPAIR AND REPAINTING RULE

- A. The Contractor must apply, pay the fee and become an EPA Certified RRP firm.
- B. The Contractor must ensure that that all renovators working in target housing and child occupied facilities, common areas or exteriors are EPA certified renovators or trained by a certified EPA renovator. Renovators can become certified by successfully attending an Eight (8) hour RRP EPA accredited training course.
- C. The Contractor must provide all tenants with a copy of EPA's Renovate Right: *Important Lead Hazard Information for Families*, Child Care Providers and Schools pamphlet no earlier than sixty (60) days prior to the date renovation activities are to be performed.
- D. The Contractor shall have an adult occupant sign the Pre-Renovation Disclosure Form. A signed copy of the disclosure form shall be submitted to the Architect's representative with written notice within five days of the commencement of the work.
- E. The Contractor shall review the testing results and become familiar with the locations of lead-based paint within the scope of the tested areas. The Contractor must assume that all untested painted surfaces are lead-based paint unless inspected by a licensed lead inspector/risk assessor or tested with an EPA approved lead testing kit and proven otherwise.
- F. The Contractor is required to ensure renovators minimize lead paint/dust exposure by performing activities in a lead safe manner See Sections 3.1 through 3.4 in this document for requirements, including posting of lead warning signs in plain view of the occupants.
- G. The Contractor shall ensure all sub-contractors performing renovation activities on assumed lead-based paint above the EPA de minimus level are EPA RRP certified firms and employees are EPA certified renovators or trained by a certified EPA RRP renovator. The Contractor shall document the firm's and renovator's certification numbers.
- H. The Contractor shall provide documentation to include:
  1. The Contractor's EPA RRP Firm Certification Number.
  2. The Contractor's EPA RRP Renovator's Certification Number.
  3. Documentation that all other non-certified employees have been trained on RRP practices by an EPA RRP Certified Renovator.

4. The Contractor is required to keep all documents for a minimum of three (3) years.

#### 1.17 INSURANCE

- A. The contractors shall carry per General Conditions the following insurances:
  1. Workman's Compensation
  2. Lead Abatement Liability Insurance
  3. Manufacturer's and Contractor's Liability Insurance

#### 1.18 CONTRACT ASSIGNMENT

- A. The contractor shall not assign this contract without written consent of the Program's representative. A request for written consent shall be approved by DOH. Eagle Environmental, Inc. must be informed prior to the assignment of this contract.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Deliver all materials in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name and product technical description.
- B. Damaged or deteriorating materials shall not be used and shall be removed from the premises.
- C. Polyethylene sheet in a roll size to minimize the frequency of joints shall be delivered to job site with factory label indicating 6 mil.
- D. Polyethylene disposable bags shall be six (6) mil. Tie wraps for bags shall be plastic, five (5) inches long (minimum), pointed and looped to secure filled plastic bags.
- E. Tape or adhesive spray will be capable of sealing joints in adjacent polyethylene sheets and for attachment of polyethylene sheet to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions.
- F. Impermeable containers are to be used to receive and retain any lead containing or contaminated materials until disposal at an acceptable disposal site. (The containers shall be labeled in accordance with EPA and DOT standards.)
- G. HEPA filtered exhaust systems shall be used during any dust generating deleading operations.
- H. For manual scraping activities, Contractor shall supply each worker with multiple newly sharpened scrapers on a daily basis.
- I. Sanders, grinders, wire brushes and needle gun removal equipment shall be equipped with a HEPA filtered vacuum dust pick-up system.
- J. Other materials such as lumber, nails and hardware necessary to construct and dismantle the decontamination enclosures and the barriers that isolate the work area shall be provided as appropriate for the work.

- K. Machine Sanding Equipment - Sanders shall be of the dual action, rotary action, orbital or straight line system type, fitted with a high efficiency particulate air (HEPA) dust collection system.
- L. Air compressors utilized to operate this equipment shall be designed to continuously provide 90 to 100 psi or as recommended by the manufacturer.
- M. Heat Blower Gun Equipment: Any electric operated heat-blower gun used shall be a flameless electrical-paint-softener type. Heat-blower shall have electronically controlled temperature settings to allow usage below a temperature of 700 degrees Fahrenheit.
- N. Liquid encapsulants used on this project shall be an approved encapsulant by the State of Connecticut Department of Public Health.
- O. Paints and primers shall contain less than 0.06% lead in wet film.

## 2.2 REPLACEMENT AND COVERING MATERIALS

- A. Unless stated otherwise, all replacement materials/products, shall meet the minimum code requirements for such applications.
- B. All materials shall have Energy Star ratings where applicable.
- C. Paints and primers must be less than or equal to the following VOC levels: Flats 50 g/L; non-flats 50 g/L; floor paint 100 g/L. Grams per Liter (g/L) levels are based on a combination of the Master Painters Institute (MPI) and Green Seal standards.
- D. All caulks, sealants and adhesives must comply with Rule 1168 of the South Coast Air Quality Management District. All caulks, sealants must comply with regulation 8, rule 51 of the Bay Area Quality Management District.
- E. Unless stated otherwise, replacement windows, doors and other materials and products shall be of equal or better quality of those specified in this Lead-Based Paint Hazard Control Plan.
- F. Exterior Entrance Doors
  - 1. Unless otherwise noted, new exterior doors must be 1 3/4" thick 24 gauge thermally broken galvanized and bonderized steel insulated core doors, with an adjustable sill, magnetic weather stripping, and 1 1/2 pair 3 1/2 x 3 1/2 loose pin butt hinges, use Thermo-Tru Steel Foam Core Insulated Exterior Doors or approved equal.
  - 2. Install single cylinder deadbolt plus passage set as manufactured by Schlage or equivalent. Provide owner with 2 keys for each lock.
  - 3. Door shall be accurately cut and fitted to frames and must operate freely without binding. Insulate between doorjamb and rough opening with spun fiberglass prior to trimming the interior of the door.
- G. Storm Doors
  - 1. Existing storm/screen doors are to be re-hung or replaced with similar units. If re-hung, they must be fully operational.

#### H. Interior Doors

1. Unless otherwise noted, install 1 3/8" hollow core luan door manufactured by Brosco or equivalent.
2. If a hollow core door doesn't meet building and/or CT Fire Safety Code, install a door to meet code.
3. Shim doors plumb, level and square. New doors shall be installed in pine jambs with 1 pair of 3" loose pin butt hinges. Fasten doors to rough framing through shims with 10-penny finish nails. Trim out both sides of new doors with finger jointed casings to match existing. Glue miters before fastening trim to jamb and wall. Fasten trim to walls with 6-penny finish nails and to jambs with 4-penny nails. Set heads of nails below surface of wood and fill with putty. Install passage set as manufactured by Schlage, Kwikset, Harlock or approved equal.

#### I. Wood Replacement Windows - Historic

1. Furnish and install new wooden sashes with full screens. Contractor must measure the bevel of the sill if it is different from 14 degrees. The bevel must be custom specified to manufacturer. Sashes shall have insulated double-glazing with non-corroding fiberglass screens in aluminum frames. Windows must have tilt in sashes, Low E glazing, and must comply with Emergency Escape requirement of the building code for all bedrooms. Grid pattern must match prior windows being replaced.
2. Windows shall be manufactured by Harvey, Weathershield, Marvin or equivalent. Submit for approval prior to ordering. Windows shall be installed in accordance with the manufacturer's recommendations.
3. Frames and sash shall be properly adjusted for tight closure and easy operation. Frames shall be thoroughly sealed at the interfaces with the walls prior to completion of finish work. Screw in and caulk edges to seal. Install jamb liners. Cut aluminum coil stock or vinyl to fit the window well.
4. Remove sashes from opening; disconnect weights and pullys from lower sash and salvage. Then scrape window glazing compound and remove glazing points and glass, use a mild paint removal product and conditioner for wood. Install glass panes and glazing with points as well as pully and weight system. Jamb liners and aluminum coil stock shall be installed in opening then window sashes. Window sashes shall not be installed until XRF testing is performed.

#### J. Vinyl Replacement Windows

1. Furnish and install new rigid vinyl replacement windows with 5/8" Low E double-pane insulating glass and non-corroding half-height lockable fiberglass screens in aluminum frames. Windows must have tilt in sashes, welded frames, cam and sash locks, and must comply with Emergency Escape requirement of the building code for all bedrooms.
2. Windows shall be manufactured by Harvey (Classic Series), Viking, Mercury-Excellum, NorthEast (DH 100) or equivalent. Windows shall be installed in accordance with the manufacturer's recommendations.

3. Frames and sash shall be properly adjusted for tight closure and easy operation. Frames shall be thoroughly sealed at the interfaces with the walls (inside & out) prior to completion of finish work.

K. Basement Vinyl Replacement Windows

1. Remove and discard as lead waste any leaded basement windows.
2. Furnish and install new vinyl replacement basement windows manufactured by Harvey, Viking, Mercury-Excellum or equivalent. Windows shall be installed in accordance with the manufacturer's recommendations.

L. Vinyl Siding

1. Siding shall be of first quality manufactured by Vipco, Certainteed, or equivalent. Color by Owner. Provide 50-year warranty. Apply Amocor XP38 fanfold insulation board or equivalent, following the manufacturer's instructions to enclose lead paint.
2. Replace lead-based paint containing components of attic vents or combination gable and soffit vents to meet ventilation requirements for roof and attic areas.
3. Install vinyl siding and aluminum or vinyl wrapped trim following manufacturer specifications.

M. Exterior Porch Flooring

1. Tongue & Groove flooring, if specified or requested as an Alternate, is to be 5/4" Fir or 3/4" Mahogany. When Plywood is specified, materials to be 1/2" Exterior Grade Plywood.
2. Include edge moldings to cover any exposed leaded materials. Caulk all seams. Prime & paint using sand or other non-slip additive.

N. Interior Porch Flooring

1. When specified, material to be 1/4" luan.
2. Include edge moldings to cover any exposed leaded materials. Caulk all seams.

O. Radiator Covers

1. Radiators must be restored to a sound substrate using high heat paint before the cover is installed.
2. Radiator covers must be removable (for example by unscrewing a bracket) in case repairs are necessary. The cover must be a professionally manufactured radiator cover or be made using metal grille mounted in a pine frame. Note that heat must be able to rise through the top as well. Plywood is not acceptable for use in radiator covers.

- P. Sheetrock and wood enclosure materials shall meet current code requirements for such products and specified applications.

Q. Overhead Garage Doors

1. Furnish and install new overhead garage doors (number required to replace those removed) and any and all tracks, rails, springs, hardware, etc. to make operational. Hardware should include an outside handle and keyed lock for each door installed. The doors must be three-layer pressure bonded construction (steel + insulation + steel) construction. Standard Colors – Owner to choose any standard color available from Manufacturer. Warranty must be a minimum of 20 years from Manufacturer.
2. Manufacturer to be Clopay or equal and meet Clopay's Premium Series specifications or equal. No automatic openers are to be included. If, however, the existing Overhead door units being replaced have automatic openers, contractor to reuse and make operable or replace with new unit(s).
3. Submittal of Manufacturers catalog cuts with all pertinent information, including warranty information, to be submitted to Waterbury Health Department and Owner for approval prior to placing order.

## PART 3 - EXECUTION

### 3.1 WORKER HYGIENE PRACTICES

- A. Workers shall don protective gear prior to entering work area including respirators, disposable coveralls, and footwear. No street clothes shall be permitted to be worn under protective clothing. The Contractor shall provide a clean area for workers to store street clothes and personal belongings.
- B. Eye protection, head protection, and ear protection shall be provided to each worker.
- C. While leaving respirators on, workers shall remove all gross contamination, debris, and dust from disposable coveralls and remove coveralls and footwear and place in hazardous waste disposal bag prior to leaving work area.
- D. The Contractor shall establish a wash station in close proximity to the work area where workers shall decontaminate their person. The wash station shall be supplied with warm water and soap and an ample supply of drying towels. Wash water shall be tested for proper disposal.
- E. All equipment used by workers inside the work area shall be wet wiped or bagged for later decontamination before removal from work area.
- F. The Contractor is responsible for using safe procedures to avoid electrical hazards. All temporary electrical wiring will be protected by GFIs.

### 3.2 WORK AREA PREPARATION

- A. Interior
  1. The tenants are responsible for packing all personal items for removal out of proposed abatement area(s). The Lead Abatement Contractor shall move the personal belongings to an easily accessible area to maintain tenant access to their belongings.
  2. The Lead Abatement Contractor shall conduct pre-cleaning activities including HEPA vacuuming floors and horizontal surfaces in the proposed work area.

3. The Lead Abatement Contractor shall remove all moveable objects from the proposed work area.
4. The Lead Abatement Contractor shall cover all non-moveable objects with a single layer of six (6)-mil polyethylene sheeting.
5. The Lead Abatement Contractor shall cover the floors with two (2) layers of six (6)-mil polyethylene sheeting.
6. The Lead Abatement Contractor shall cover ducts, diffusers, exhausts, windows, door openings or other penetrations with a single layer of six (6)-mil polyethylene sheeting.
7. The Lead Abatement Contractor shall post lead warning signs at all ingresses to the work area.
8. The Lead Abatement Contractor shall establish a worker decontamination facility adjacent to the work area(s). The decontamination facility shall be equipped with warm running water, soap, and drying towels.
9. The Lead Abatement Contractor may elect to construct mini-enclosures around the interiors of the windows or components scheduled for abatement. If mini-enclosures are not constructed, the entire room shall be treated as the work area and must be cleaned in accordance with this Specification.
10. Install six (6)-mil critical barriers over the interior of window openings if window will be removed from the exterior of the building.

B. Exterior

1. Cover all shrubbery, plantings, stoops, etc. with opaque tarps, which will prevent damage or burning from the sun.
2. Regulate the exterior work area with lead-warning tape. The lead warning tape shall extend around the perimeter of the work area creating a minimum of a ten (10)-foot buffer zone between abatement operations and the warning tape.
3. Post lead-abatement warning signs at conspicuous areas around the perimeter of the abatement area. Unauthorized personnel shall be prohibited from entering the abatement area.
4. Utilize six (6)-mil polyethylene sheeting on the ground and/or porch floors. The sheeting shall extend a minimum of ten (10) feet from the foundation of the building. Sheeting shall be secured to the foundation utilizing duct tape.
5. The edges of the sheeting shall be weighted to avoid blowing or lifting.

### 3.3 LEAD ABATEMENT PROCEDURES

A. Window Removal and Replacement Procedures

1. The Contractor shall conduct work area abatement preparation as specified in Sections 3.1 and 3.2 prior to conducting abatement activities.
2. The Contractor shall HEPA vacuum any loose or flaking paint from the component prior to removing the component.
3. The Contractor shall manually remove the window sashes in the following sequence:
  - a. Remove exterior window screens/storms where necessary and recycle
  - b. Remove interior window stops
  - c. Remove inner sash by cutting sash cords
  - d. Remove wood parting beads
  - e. Remove outer sash by cutting sash cords
4. Stabilize all loose paint on window jambs, wells and exterior sills. HEPA vacuum window jambs, wells and exterior sills.
5. Prior to installation of new vinyl windows, the Lead Abatement Contractor shall label the components containing lead-based paint with the warning "Danger: Lead-Based Paint" in permanent ink behind the enclosure.
6. The Lead Hazard Reduction Contractor shall Remove window sash weights from cavities and insulate the entire cavity of the window jambs and header with insulation prior to or after window installation. If the Lead Abatement Contractor chooses to use a spray foam insulation, the MSDS must be provided to the Program's consultant for approval prior to use.
7. Exterior blind window stops shall abut the new vinyl window. Exterior blind window stops shall be liquid encapsulated or enclosed with aluminum coil stock depending on the scope of work. Re-use interior stops. Replace at Contractor's cost broken or un-useable interior stops.
8. The Lead Abatement Contractor shall immediately place components into appropriate waste container. All components containing LBP that were removed during the abatement project shall be assumed to be hazardous waste until analytical results of the TCLP test are received. Metal components shall be recycled at an approved recycling facility.

B. Door Removal and Replacement Procedures

1. The Lead Abatement Contractor shall conduct work area abatement preparation as specified in Sections 3.1 and 3.2 prior to conducting abatement activities.
2. Where doors are to be replaced, remove the door from the hinges and remove the hinges from the jamb. Avoid damaging the existing jamb if it is to remain.
3. Reinstall the new door, hinges and appropriate hardware. Ensure the door is plumb and open and closes smoothly.
4. All doors shall be accurately cut and fitted to frames and must operate freely without binding.

5. Entry doors shall be insulated between the door jambs and rough opening with spun fiberglass prior to trimming the interior of the door.
6. Where door systems are to be replaced with pre-hung doors, remove the door, casing if necessary and avoid damage, then remove the door stop and door jamb.
7. Reinstall new pre-hung system, level and plumb. The door should open and close smoothly.
8. Re-install the door casing if removed. If the door casing was damaged during removal, install a new door casing to match existing trim.

C. Enclosure Procedures

1. The Lead Abatement Contractor shall conduct work area abatement preparation as specified in Sections 3.1 and 3.2 prior to conducting abatement activities.
2. The Lead Abatement Contractor shall stabilize all loose paint on components prior to enclosure.
3. The Lead Abatement Contractor shall label the components containing lead-based paint with the warning "Danger: Lead-Based Paint" in permanent ink behind the enclosure.
4. The Lead Abatement Contractor shall utilize materials that will provide a permanent enclosure designed to be effective for twenty (20) years.
5. Aluminum coil stock enclosures shall be fastened with manufacturer recommended materials. All seams shall be caulked with compatible non-asbestos caulk.
6. Rigid enclosure materials such as paneling, sheetrock and plywood shall be mechanically fastened in conjunction with a non-asbestos compatible adhesive. All seams shall be caulked and or compounded with a compatible non-asbestos material.

D. Liquid Encapsulation Procedures

1. The Lead Abatement Contractor shall conduct work area abatement preparation as specified in Sections 3.1 and 3.2 prior to conducting abatement activities.
2. HEPA vacuum and wet scrape all loose and flaking paint from each component to be encapsulated. The surface shall be rendered intact prior to de-glossing activities.
3. Clean each component to be encapsulated. Cleaning solutions shall be compatible to the liquid encapsulant that will be applied. Ensure that encapsulants are not applied over dirt, grease, mildew, rust, oil or chalk. Measures shall be taken to remove dirt, grease, mildew, rust, oil or chalk prior to encapsulation.
4. De-gloss each surface prior to encapsulation in accordance with the manufacturer's recommended procedures for de-glossing.

5. Conduct patch tests on each type of architectural component to be encapsulated. Where feasible, the size of the patch test shall be a minimum of fifteen (15) inches by fifteen (15) inches on each component. The surface shall be rendered intact, cleaned and de-glossed prior to performing the patch test. The encapsulant shall be allowed to dry and cure as required by manufacturer specifications.
6. Cut an "X" into the center of the patch test area ensuring that the cut goes entirely through the encapsulant to the substrate. Each cut shall be a minimum of two (2) inches long. Use the cutting tool to lift the encapsulant from the substrate at the intersection of the cutting points. If greater than one-half (1/2) inch of encapsulant is removed, the patch test fails.
7. Failure of a patch test shall require a second patch test to be performed. The same procedures shall be followed for the second patch test.
8. Fill gouges, holes, gaps, or other imperfections or damage, which may result in failure of the encapsulant. The damaged areas shall be repaired with materials compatible to the encapsulant.
9. Encapsulants shall not be applied when the air temperature of the room where encapsulants are to be applied is below forty (40) degrees F or above ninety-five (95) degrees F. In addition, relative humidity is not to be above eighty-five (85) percent or the temperature of the target surface is above the dew point. Document temperature, relative humidity and the temperature of the target surface on a daily basis. Encapsulation procedures may not be conducted when the temperature, relative humidity or target surface temperature are not in compliance with this section or with the manufacturer's specification, which ever is more stringent.
10. All encapsulants shall be applied in accordance with the manufacturer's specifications, including but not limited to temperature requirements, humidity requirements, mil thickness requirements, number of coats, application methods, surface preparation requirements, dry time, cure time, and tinting.
11. Encapsulants used for this project shall be an encapsulant that has been approved by the State of Connecticut Department of Public Health for use in the State of Connecticut.
12. All lead-based painted components and surfaces that are liquid encapsulated shall be placed on a Lead-Based Paint Management Plan for continual surveillance.

E. Paint Stabilization Procedures

1. The Contractor shall conduct work area abatement preparation as specified in Sections 3.1 and 3.2 prior to conducting abatement activities.
2. Lightly mist the surface to be stabilized with water. Wet scrape the surface with a drag scraper or putty knife to remove the loose paint. Continuously mist during scraping. Do not dry scrape.
3. Feather paint edges as necessary to remove high spots in paint that may be subject to future peeling.
4. Remove all raised paint edges that may be present on surfaces or components.

5. Surface contaminants that prevent adhesion should be removed by cleaning with a five (5) percent trisodium phosphate (TSP) and water solution. These contaminants generally include dirt, grease, and soap films.
6. Once all loose paint is removed, clean the surface with a five (5) percent TSP and water solution.
7. Wet wipe the surface with clean water. Allow to dry, prime and repaint.

F. Paint Removal Procedure

1. Complete all necessary work area preparation in each area prior to commencing abatement in that area.
2. Conduct on-site paint removal utilizing one (1) of the following approved methods or combinations thereof:
  - a. Heat gun (not to be operated over seven hundred (700) degrees F).
  - b. Power equipment with attached HEPA dust collection device
  - c. Chemical removal agent
3. Remove all layers of paint and or primers down to a bare substrate. The contractor is responsible for reducing lead levels below the toxic level on components where paint removal is specified.
4. Eagle Environmental, Inc. shall conduct on site XRF testing of abated components to determine completeness of paint removal. The component(s) shall not be considered completely abated until XRF measurements are below the toxic level as defined by State regulations.

G. Specialized Cleaning Procedures

1. Complete all necessary work area preparation in each area prior to commencing abatement in that area.
2. Follow the cleaning procedure described below for hard smooth or semi-porous surfaces:
  - a. Conduct a thorough HEPA vacuuming of the surface.
  - b. Wash the floor with a string mop equipped with wringer. Use a five (5) percent phosphate and water solution. Wring the mop into an empty bucket after each cleaning and before dipping the mop back into the cleaning solution.
  - c. Conduct a clean rinse mopping on the floor.
  - d. Conduct a second HEPA vacuuming of the surface.
3. Follow the cleaning procedure described below for area rugs:
  - a. HEPA vacuum the top side of the rug for one (1) minute per ten (10) square feet.
  - b. Fold the rug in half and HEPA vacuum the back side of the rug and underlying floor at a rate of one (1) minute per ten (10) square feet.
  - c. Repeat Step 2 for the other half of the rug.
  - d. Unfold the rug and HEPA vacuum the top at a rate of two (2) minutes per ten (10) square feet.

4. Follow the cleaning procedure described below for carpet:
  - a. HEPA vacuum the carpet at a rate no faster than two (2) minutes per ten (10) square feet. Vacuum in a side-to-side motion.
  - b. HEPA vacuum the carpet in the opposite direction at a rate no faster than 2 minutes per 10 square feet. Vacuum in a side-to-side motion.

#### H. Soil Abatement Procedures

1. Complete all necessary work area preparation in each area prior to commencing abatement in that area.
2. Where soil is to be covered, perform the following:
  - a. HEPA vacuum and or rake surface soil to remove loose paint chips.
  - b. Remove small and large debris through raking or manual pick-up.
  - c. Install rolled weed guard material where specified.
  - d. Install the following covering materials at the specified depths:
    - 1) Bark Mulch – four (4) inch minimum depth.
    - 2) Top Dressing Topsoil – two (2) inch minimum depth.
    - 3) Gravel, Pea Stone, etc. – four (4) inch minimum depth.
3. Where soil is to be removed, perform the following:
  - a. Regulate work area around soil removal location(s).
  - b. Remove visible surface paint chips prior to soil removal.
  - c. Manually remove soil to specified depth. Lightly mist soil with water to reduce dust.
  - d. Place soil in appropriate waste container.
  - e. Apply replacement soil or materials as specified. Replacement soil must contain less than two hundred (200) mg/kg of lead.
4. Where ground cover is to be applied, perform the following:
  - a. Perform steps specified in 3.3 and/or 3.3.
  - b. Where grass seed is to be planted, utilize a K31 Fescue or equivalent hearty seed.
  - c. Prepare soil for planting by lightly raking and loosening soil.
  - d. Apply seed at manufacturer's recommended covering rate.
  - e. Cover with straw mulch and water.
  - f. Install temporary caution tape around planted areas.
  - g. Caution tape to be removed by Owner once grass is established.

### 3.4 CLEANING

#### A. Interior

1. The Contractor shall ensure that all tools and materials are adequately cleaned at the completion of each shift.

2. The Contractor shall remove all gross waste from the lead abatement area prior to conducting final cleaning operations. All waste shall be treated as hazardous until the analytical results from the TCLP tests are received.
3. The Contractor shall thoroughly HEPA vacuum all flat surfaces and components including polyethylene sheeting within and/or adjacent to the lead abatement work area.
4. The Contractor shall remove polyethylene sheeting from floors and non-moveable objects following the initial cleaning. Polyethylene sheeting shall be folded inwards from the corners and folded upon itself.
5. The following final cleaning shall be conducted following removal of polyethylene sheeting:
  - a. HEPA vacuum floors and horizontal surfaces.
  - b. Wet clean floors and horizontal surfaces with a five (5) percent phosphate solution
  - c. Conduct second HEPA vacuuming on floors and horizontal surfaces.
  - d. Wait twenty-four (24) hour for dust settlement period.
  - e. Repeat steps a, b and c.

### 3.5 FINISH WORK AND WORKMANSHIP

- A. Refer to the project Architect's specifications for finish work and workmanship requirements.

### 3.6 DISPOSAL OF WASTE MATERIALS

- A. The Contractor shall perform the following:
  1. Assure that all waste is properly disposed of according to local, state and federal law and regulations and at the minimum practical cost.
  2. All waste should be considered hazardous lead waste. The Contractor is responsible for proper disposal of all waste generated during the project.
  3. All primary waste materials generated during lead hazard reduction, i.e. windows, doors, wood components, plaster, etc. shall be characterized for proper disposal utilizing the TCLP method. The cost associated with the TCLP sampling and analysis shall be the responsibility of the Contractor.
  4. All secondary waste materials generated during lead hazard reduction, i.e. disposable clothing, polyethylene sheeting, waste water, etc., shall have confirmatory TCLP testing to determine waste characterization. This testing shall be performed and paid for by the Contractor.
  5. The Lead Abatement Contractor shall comply with the requirements for small quantity generators (generates between one hundred (100) kg and one thousand (1000) kg of hazardous waste in a month or accumulates no more than one thousand (1000) kg of hazardous waste on-site at any one time and stores waste for no greater than ninety (90) days).
  6. The Contractor shall ensure that all hazardous waste generated is sent off-site to permitted hazardous waste treatment, storage, or disposal facilities (TSDF).

7. The Contractor shall use DEEP permitted transporters for transport of hazardous waste.
8. The Contractor shall apply for a temporary EPA identification number, where applicable. Hazardous waste manifests must be utilized which bear this I.D. number.
9. The Contractor must comply with hazardous waste containerization requirements including but not limited to maintaining the containers in good condition, keeping containers closed and locked while in storage, properly labeling and dating containers, and using containers which are DEEP approved for over the road use.
10. The Contractor shall develop a written inspection schedule to inspect any containers of hazardous waste at least weekly.
11. The Contractor must designate an emergency coordinator who will be responsible for coordinating emergency response measures. Basic emergency information must be listed in writing, and posted next to the on-site telephone. This information must include the name and number of the emergency coordinator.
12. The Contractor must develop a written contingency plan for the site, which describe actions personnel will take in response to fires or other emergencies that may result in a release of hazardous waste constituents. The plan must meet certain content requirements and copies of the plan must be submitted to certain local emergency response officials.
13. The Contractor must provide written notification to local fire departments and/or police regarding the location, nature, and duration of the lead-removal project, and regarding the type and quantity of hazardous waste that may be stored at the site.
14. The Contractor must train their employees in hazardous waste management. They must maintain certain documentation regarding their training program, including the names, job titles, and job descriptions of the employees involved with hazardous waste management, a written description of the training that is given, and records documenting that employees have been trained. Annual updates of training must also be given.
15. The Contractor may not store hazardous waste on-site for greater than ninety (90) days without a TSDF permit.
16. Before leaving the site for the last time, the Contractor must remove any remaining hazardous waste and must decontaminate any equipment, storage areas, structures, soil, etc. contaminated as a result of the removal or storage of the hazardous waste generated at the site.

B. Contractor and Owner shall comply with the following:

1. Contractor agrees to assume responsibility of all waste. The homeowner will not participate with the waste disposal in any way.

### 3.7 POST RENOVATION CLEANING VERIFICATION

- A. The Lead Abatement Contractor must perform a visual inspection to determine whether dust, debris or residue is still present. If present, the abatement area shall be re-cleaned following the specified cleaning procedures.

- B. Contractor cleaning verification cloths will not be used for this project. Dust sampling by the Program's Consultant shall be performed in each interior area where lead-hazard reduction work was performed. This includes specialized cleaning procedures and window replacement procedures performed from the exterior of the building.
- C. The following criteria must be met for final clearance dust wipe samples where renovation work is performed:
  - 1. Floors: 40ug/ft<sup>2</sup>
  - 2. Window Sills: 250ug/ft<sup>2</sup>
  - 3. Window Wells: 400ug/ft<sup>2</sup>
- D. Clearance dust wipe samples that fail shall be re-cleaned at the Contractor's expense until dust wipe sampling meets the applicable criteria.

### 3.8 RECORDKEEPING

- A. The Contractor must retain and, if requested, make available to EPA all records necessary to demonstrate compliance with the RRP Rule for a period of 3 years following completion of the renovation.
- B. The Contractor must retain the following records and provide a copy to Program's Consultant at the completion of the project:
  - 1. Records or reports certifying that a determination had been made that lead-based paint was not present on components affected by the renovation including reports by a State of Connecticut licensed Lead Inspector, records by a Certified Renovator after using EPA-recognized test kits, including an identification of the manufacturer and model of any test kits used, a description of the components that were tested including their locations, and the results of each test kit used.
  - 2. Signed and dated acknowledgement of receipt of notification dissemination of pamphlet.
  - 3. Certifications of attempted delivery of pamphlet.
  - 4. Certificates of mailing of pamphlet.
  - 5. Records of notification activities performed regarding common area and child occupied facilities renovations.
  - 6. Documentation of compliance that a certified renovator was assigned to the project, the certified renovator provided on-the-job training for workers used on the project, the certified renovator performed or directed worker who performed all the tasks, the certified renovator performed the post-renovation cleaning verification.

**TABLE A  
SCOPE OF WORK  
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT**

Item #	Room	Component	Side	Quantity	Abatement Method
<b>INTERIOR</b>					
<b>FIRST FLOOR DWELLING UNIT</b>					
1	Foyer (002)	Wood part of wall	B	All	Liquid encapsulate
2		Non-friction door stop	C	1 Opening	Liquid encapsulate
3		Door, door casing, door jamb, door jamb stop, door threshold	A	1 Openings	Replace with new pre-hung solid wood entry door system and liquid encapsulate door casing
4		Area between storm door and entry door: walls, ceiling	A	All	Liquid encapsulate
5		Area between storm door and entry door: Floor	A	All	Replace both door thresholds with new wood. Install luan flooring and caulk seams
6		Floor	Dust Hazard	All	Specialized cleaning
7	Living Room (003)	Window casings, window sills, window stops	A, B	2 Openings	Liquid encapsulate
8		Door stop	A-Center	1 Opening	Strip impact surfaces and liquid encapsulate remaining
9		Closet door casing	A-Right	1 Opening	Liquid encapsulate
10		Baseboards	A, B, C, D	All	Liquid encapsulate
11	Window wells	A, B	2 Openings	Specialized cleaning	
12	Kitchen (004)	Lower walls	A, B	All	Liquid encapsulate
13		Door casings	A, D	2 Openings	Liquid encapsulate
14		Window casing, window stop	B	1 Opening	Liquid encapsulate
15		Door stop	C-left	1 Opening	Strip impact surfaces and liquid encapsulate remaining
16		Basement door casing, door jamb	C	1 Opening	Paint removal on door jamb and liquid encapsulate door casing
17	Rear Entry (005)	Door casings	A, C	2 Openings	Liquid encapsulate
18		Floor	Dust Hazard	All	Specialized cleaning

**TABLE A  
SCOPE OF WORK  
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT**

<b>Item #</b>	<b>Room</b>	<b>Component</b>	<b>Side</b>	<b>Quantity</b>	<b>Abatement Method</b>
<b>FIRST FLOOR DWELLING UNIT (Continued)</b>					
19	Bedroom 3 (007)	Walls	A, D	All	Patch and liquid encapsulate
20		Baseboards	A, B, C, D	All	Liquid encapsulate
21		Window stops, window aprons	C, D	2 Openings	Liquid encapsulate
22		Closet door, door casing, door jamb stop	B	1 Opening	Replace with new pre-hung interior door sytem
23	Bedroom 2 (008)	Window stops, window aprons	A, D	2 Openings	Liquid encapsulate
24	Bedroom 1 (009)	Window casings, window stops, window aprons	A, D	3 Openings	Liquid encapsulate
25		Door casing	C	1 Opening	Liquid encapsulate
<b>SECOND FLOOR DWELLING UNIT</b>					
26	Enclosed Porch (010)	Clapboard, ceiling, boxbeams	C	All	Liquid encapsulate
27		Door casing	C	1 Opening	Liquid encapsulate
28	Front Stair (011)	Stair stringers, header, non-friction part of floor (edge of floor by railings)	-	All	Liquid encapsulate
29		Door, door casing (into unit)	C	1 Opening	Replace with new interior door and liquid encapsulate door casing
30		Door, door casing, door jamb, door jamb stop, door threshold	A	1 Openings	Replace with new pre-hung solid wood entry door system and liquid encapsulate door casing
31		Area between storm door and entry door: walls, ceiling	A	All	Liquid encapsulate
32		Area between storm door and entry door: Floor	A	All	Replace both door thresholds with new wood. Install luan flooring and caulk seams
33		Door casing, door jamb, door jamb stop, door threshold (to enclosed porch)(Door not leaded)	A	1 Opening	Paint removal of all friction impact surfaces. Liquid encapsulate remaining trim components
34		Door, door casing, door jamb, door jamb stop	D-right	1 Opening	Replace with new pre-hung interior door sytem and liquid encapsulate door casing
35		Door casing	D-left	1 Opening	Liquid encapsulate
36		Floor landing	Dust Hazard	All	Specialized cleaning

**TABLE A  
SCOPE OF WORK  
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT**

<b>Item #</b>	<b>Room</b>	<b>Component</b>	<b>Side</b>	<b>Quantity</b>	<b>Abatement Method</b>
<b>SECOND FLOOR DWELLING UNIT (Continued)</b>					
37	Living Room (012)	Window casings, window sills, window aprons, window stops	A, B	2 Openings	Liquid encapsulate
38		Baseboards	A, B, C, D	All	Liquid encapsulate
39		Door, door casing, door jamb, door jamb stop (into bedroom 1)	A-left	1 Opening	Replace with new pre-hung interior door system and liquid encapsulate door casing
40		Door casings	A, C, D	3 Openings	Liquid encapsulate
41		Door, door casing (door does not function and has been sealed off from the other side)	C-left	1 Opening	Fix shut and liquid encapsulate
42	Kitchen (013)	Window casings, window sills, window aprons, window stops	B, C	2 Openings	Liquid encapsulate
43		Door, door casing, door jamb, door jamb stop (to bath)	C	1 Opening	Replace with new pre-hung interior door system and liquid encapsulate door casing
44		Door casing (original door casing)	D	1 Opening	Liquid encapsulate
45	Bathroom 1 (014)	Door casing	A	1 Opening	Liquid encapsulate
46	Bathroom 2 (015)	Baseboard (small area exposed)	B	All	Liquid encapsulate
47	Bedroom 3 (016)	Window casings, window sills, window aprons, window stops	C, D	2 Openings	Liquid encapsulate
48		Baseboards	A, B, C, D	All	Liquid encapsulate
49		Door, door jamb, door jamb stop	A-right	1 Opening	Replace with new pre-hung interior door system
50		Door, door casing, door jamb, door jamb stop	B	1 Opening	Replace with new pre-hung interior door system and liquid encapsulate door casing
51		Closet shelf	A	All	Replace with new wood
52		Closet shelf support	A	All	Liquid encapsulate
53		Closet door casing, door jamb, door jamb stop (There is no door)	A	1 Opening	Liquid encapsulate
54		Window wells	A, D	3 Openings	Specialized cleaning

**TABLE A  
SCOPE OF WORK  
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT**

<b>Item #</b>	<b>Room</b>	<b>Component</b>	<b>Side</b>	<b>Quantity</b>	<b>Abatement Method</b>
<b>SECOND FLOOR DWELLING UNIT (Continued)</b>					
55	Bedroom 2 (017)	Window casings, window sills, window aprons, window stops	A, D	2 Openings	Liquid encapsulate
56		Baseboards	A, B, C, D	All	Liquid encapsulate
57		Door, door casing, door jamb, door jamb stop	B, C	2 Openings	Replace with new pre-hung interior door system and liquid encapsulate door casing
58		Door casing	C-left	1 Opening	Liquid encapsulate
59		Closet shelf supports	C	All	Liquid encapsulate
60	Bedroom 1 (018)	Window casings, window sills, window aprons, window stops	A, D	3 Openings	Liquid encapsulate
61		Door casings, non-friction door jambs	B-left, C	2 Openings	Liquid encapsulate
62		Door, door casing, door jamb, door jamb stop	B-right	1 Opening	Replace with new pre-hung interior door system and liquid encapsulate door casing
63	Bedroom 4 (019)	Door, door casing, door jamb, door jamb stop	C	1 Opening	Replace with new pre-hung interior door system and liquid encapsulate door casing
64		Closet door casing, door jamb	D	1 Opening	Paint removal from door jamb and liquid encapsulate door casing
65	Hallway (020)	Baseboards	A, B, C, D	All	Liquid encapsulate
66		Door casings	A, B, D	3 Openings	Liquid encapsulate
67	Office/Bed (021)	Walls and ceiling	A, B, C, D	All	Patch and liquid encapsulate
68		Window casing, window sill, window apron, window stop	B	1 Opening	Liquid encapsulate
69		Door, door casing, door jamb (door jamb stop not leaded)	D	1 Opening	Replace with new pre-hung interior door system and liquid encapsulate door casing

**TABLE A  
SCOPE OF WORK  
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT**

<b>Item #</b>	<b>Room</b>	<b>Component</b>	<b>Side</b>	<b>Quantity</b>	<b>Abatement Method</b>	
<b>SECOND FLOOR DWELLING UNIT (Continued)</b>						
70	Stairs (023)	Stair stringers	-	All	Liquid encapsulate	
71		Stair risers	-	All	Enclose with luan and caulk seams	
72		Door		A	1 Each	Replace with new door
72A						Remove and dispose
73	Storage Room (025)	Window casing, window sill, window apron, window stop	D	1 Opening	Liquid encapsulate	
74		Baseboards	A, B, C, D	All	Liquid encapsulate	
75		Door casing, door jamb, door jamb stop	D	1 Opening	Paint removal of all friction impact surfaces. Liquid encapsulate remaining trim components	
<b>COMMON AREAS</b>						
76	Basement (001)	Window sashes (windows are vinyl replacements; however, the original sashes still remain)	B, D	6 Openings	Remove and dispose	
77		Window sashes (these are interior window sashes that serve no purpose)	C	2 Openings	Remove and dispose	
78		Door, door jamb stop - to hatchway walkout	C	1 Each	Paint removal at friction and impact surfaces and liquid encapsulate remaining	
79		Stairs to 1st floor unit: stair header, stair lower wood wall	-	All	Liquid encapsulate	
80		Stairs to Rear Stair: stair columns	-	All	Liquid encapsulate	

**TABLE A  
SCOPE OF WORK  
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT**

Item #	Room	Component	Side	Quantity	Abatement Method
<b>COMMON AREAS (Continued)</b>					
81	Rear Stair (027)	Ceiling	-	All	Patch and liquid encapsulate
82		Stair stringers	-	All	Liquid encapsulate
83		Stair treads, risers	-	All	Enclose the stair treads with vinyl stair and enclose stair risers with luan. Install metal nosing at edges and caulk seams
84		Baseboards	A, B, C, D	All	Liquid encapsulate
85		Stair cornerboards	-	2 Each	Liquid encapsulate
86		Basement door, door jamb, door jamb stop	A	1 Opening	Replace with new pre-hung interior door system
87		Non-friction door jamb, door jamb stop to Rear Entry (no door)	C	1 Opening	Liquid encapsulate
88		Door casing (to Bath 2)	C	1 Opening	Liquid encapsulate
89	Rear Entry (028)	Stair treads, risers	-	All	Enclose the stair treads with vinyl stair and enclose stair risers with luan. Install metal nosing at edges and caulk seams
90		Floor	-	All	Enclose with luan and caulk seams
91		Walls	A, B, C, D	All	Liquid encapsulate
92		Ceiling	-	All	Replace with new wood (water damaged)
93		Skirtboard	B, D	All	Liquid encapsulate
94		Brick foundation	D	All	Liquid encapsulate
95		Door casing	A	1 Opening	Liquid encapsulate
96		Door jamb	A	1 Opening	Paint removal
97		Door threshold	A	1 Each	Replace with new wood

**TABLE A  
SCOPE OF WORK  
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT**

Item #	Room	Component	Side	Quantity	Abatement Method
<b>EXTERIORS</b>					
98	Facades	Wood window sashes (Bathroom 006, Office/Bed 021, Storage 025)	B, C, D	3 Openings	Replace with new vinyl window systems
99		Door kick plates	A, C	3 Each	Enclose with aluminum coil stock
100		Door thresholds	A	2 Each	Replace with new wood
101		Basement window casings	B, D	6 Openings	Paint stabilize
102		Exposed skirtboard	B	3 LF	Enclose with aluminum coil stock to match existing
103		Exposed door casing	C	3 LF	Enclose with aluminum coil stock to match existing
104		Porch box beams, decorative upper trim	A	All	Paint stabilize
105		Exposed original railcap (new wood installed over original)	A	All	Paint stabilize
106		Stair newel post (original post under column)	A	All	Paint stabilize
107		Columns	A	6 Each	Paint stabilize
108		Bare soil along porch drip line	A	10 SF	Install 2 inches of new loam, grass seed and straw
NOTE: For any surface where paint removal is performed, confirmatory XRF testing is required prior to painting the surface					

# CAPITAL STUDIO ARCHITECTS

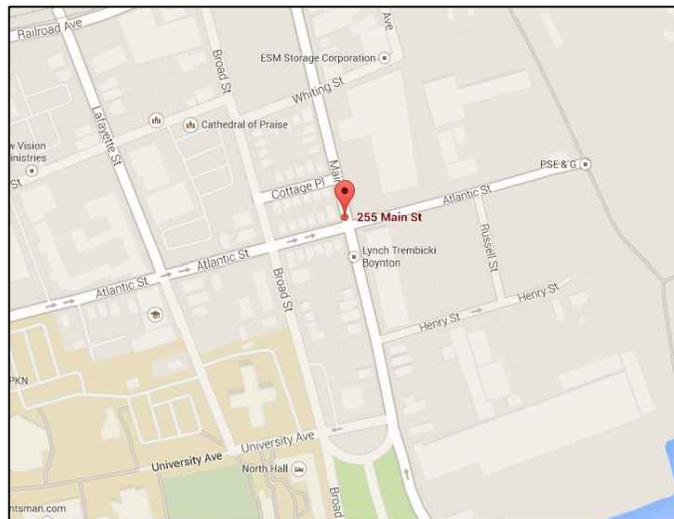
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT

EAGLE PROJECT NUMBER: 14-028.12T22

## INDEX OF DRAWINGS

SP-1 SITE PLAN  
FP-1 BASEMENT PLAN  
FP-2 FIRST FLOOR PLAN  
FP-3 SECOND FLOOR PLAN  
FP-4 THIRD FLOOR PLAN

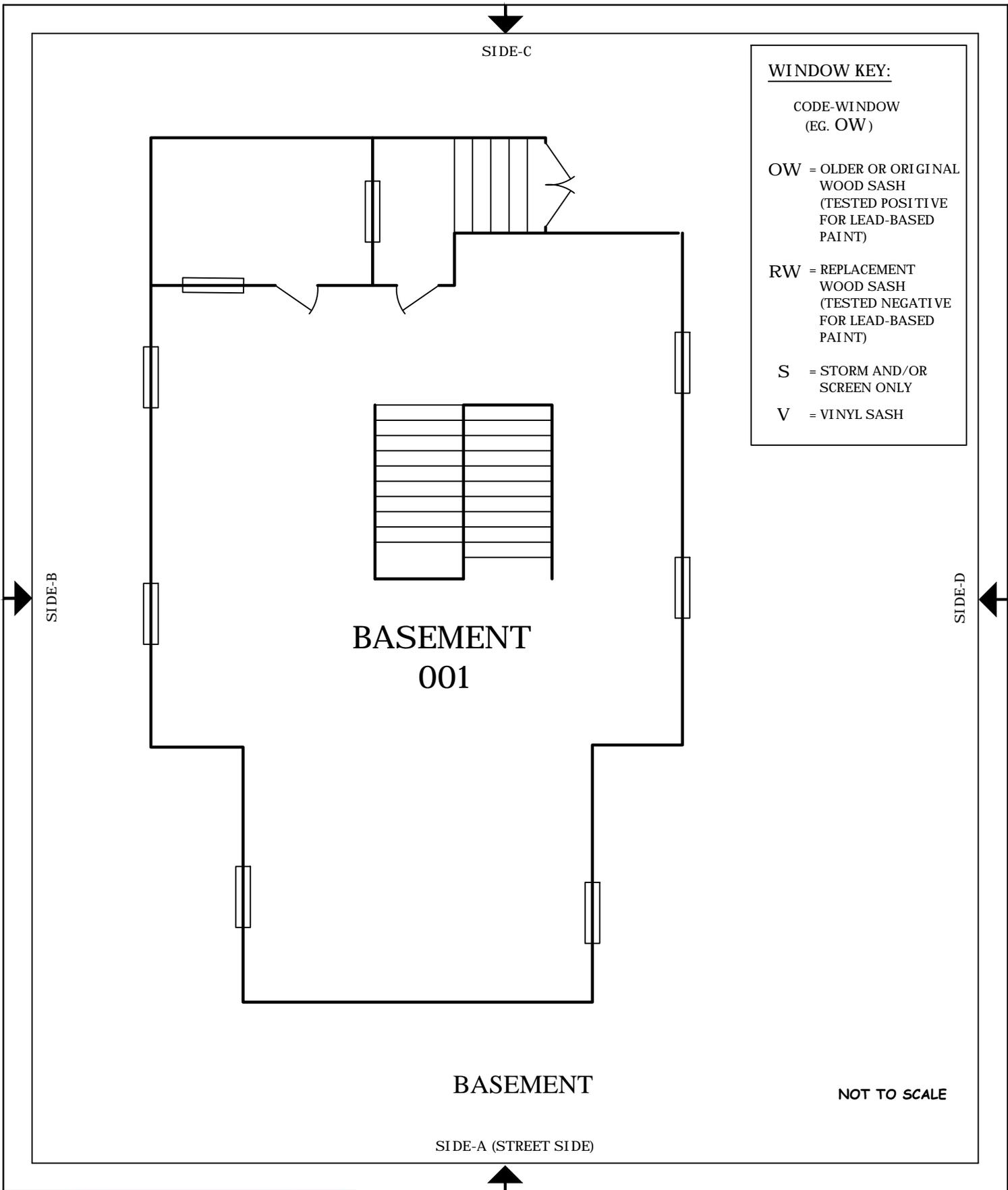
## LOCATION MAP



SEPTEMBER 9, 2014



8 SOUTH MAIN STREET, SUITE 3  
TERRYVILLE, CONNECTICUT 06786  
860-589-8257



**WINDOW KEY:**

CODE-WINDOW  
(EG. OW)

OW = OLDER OR ORIGINAL  
WOOD SASH  
(TESTED POSITIVE  
FOR LEAD-BASED  
PAINT)

RW = REPLACEMENT  
WOOD SASH  
(TESTED NEGATIVE  
FOR LEAD-BASED  
PAINT)

S = STORM AND/OR  
SCREEN ONLY

V = VINYL SASH

**BASEMENT  
001**

**BASEMENT**

**NOT TO SCALE**

SIDE-A (STREET SIDE)



8 SOUTH MAIN STREET, SUITE 3  
TERRYVILLE, CONNECTICUT 06786  
860-589-8257

**SHEET NO.**

**FP-1**

SHEET 2 OF 5

DATE: 09/09/2014  
PROJECT NO.: 14-028.12T22  
DRAWN BY: VB  
REVIEWED BY: AH

ENVIRONMENTAL REVIEW  
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT

SIDE-C

**WINDOW KEY:**

CODE-WINDOW  
(EG. OW)

OW = OLDER OR ORIGINAL  
WOOD SASH  
(TESTED POSITIVE  
FOR LEAD-BASED  
PAINT)

RW = REPLACEMENT  
WOOD SASH  
(TESTED NEGATIVE  
FOR LEAD-BASED  
PAINT)

S = STORM AND/OR  
SCREEN ONLY

V = VINYL SASH

REAR  
ENTRY  
005

OW

BATH  
006

TO  
BASEMENT

REAR  
STAIR  
COMMON

BEDROOM 3  
007

KITCHEN  
004

C

SIDE-B

SIDE-D

LIVING  
ROOM  
003

BEDROOM 2  
008

C  
003A

FOYER  
002

BEDROOM 1  
009

TO  
SECOND  
FLOOR

FIRST FLOOR

NOT TO SCALE

SIDE-A (STREET SIDE)



**EAGLE**  
Environmental, Inc.

8 SOUTH MAIN STREET, SUITE 3  
TERRYVILLE, CONNECTICUT 06786  
860-589-8257

SHEET NO.

**FP-2**

SHEET 3 OF 5

DATE: 09/09/2014  
PROJECT NO.: 14-028.12T22  
DRAWN BY: VB  
REVIEWED BY: AH

ENVIRONMENTAL REVIEW  
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT

SIDE-C

**WINDOW KEY:**

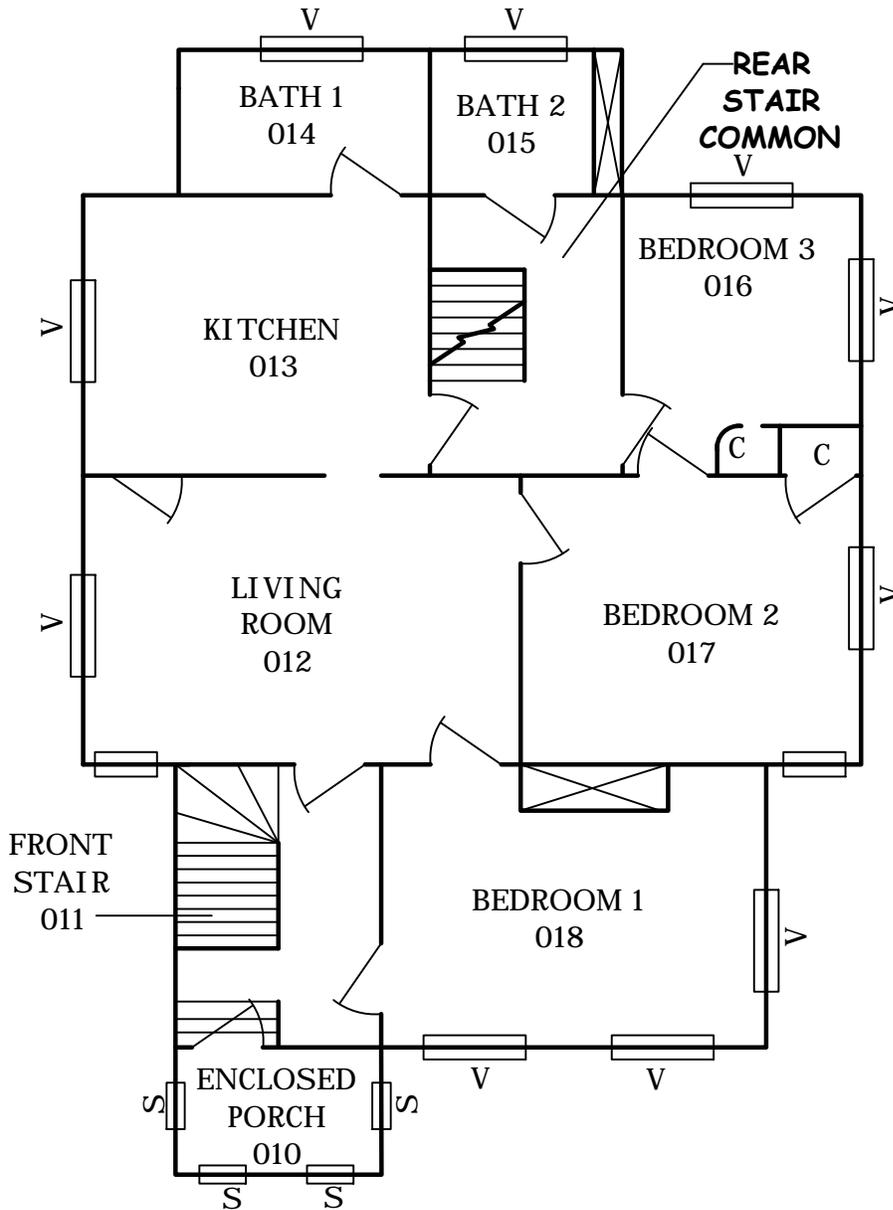
CODE-WINDOW  
(EG. OW)

OW = OLDER OR ORIGINAL  
WOOD SASH  
(TESTED POSITIVE  
FOR LEAD-BASED  
PAINT)

RW = REPLACEMENT  
WOOD SASH  
(TESTED NEGATIVE  
FOR LEAD-BASED  
PAINT)

S = STORM AND/OR  
SCREEN ONLY

V = VINYL SASH



SIDE-B

SIDE-D

NOT TO SCALE

**SECOND FLOOR**  
SIDE-A (STREET SIDE)



**EAGLE**  
Environmental, Inc.

8 SOUTH MAIN STREET, SUITE 3  
TERRYVILLE, CONNECTICUT 06786  
860-589-8257

DATE: 09/09/2014  
PROJECT NO.: 14-028.12T22  
DRAWN BY: VB  
REVIEWED BY: AH

ENVIRONMENTAL REVIEW  
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT

SHEET NO.

**FP-3**

SHEET 4 OF 5

SIDE-C

**WINDOW KEY:**

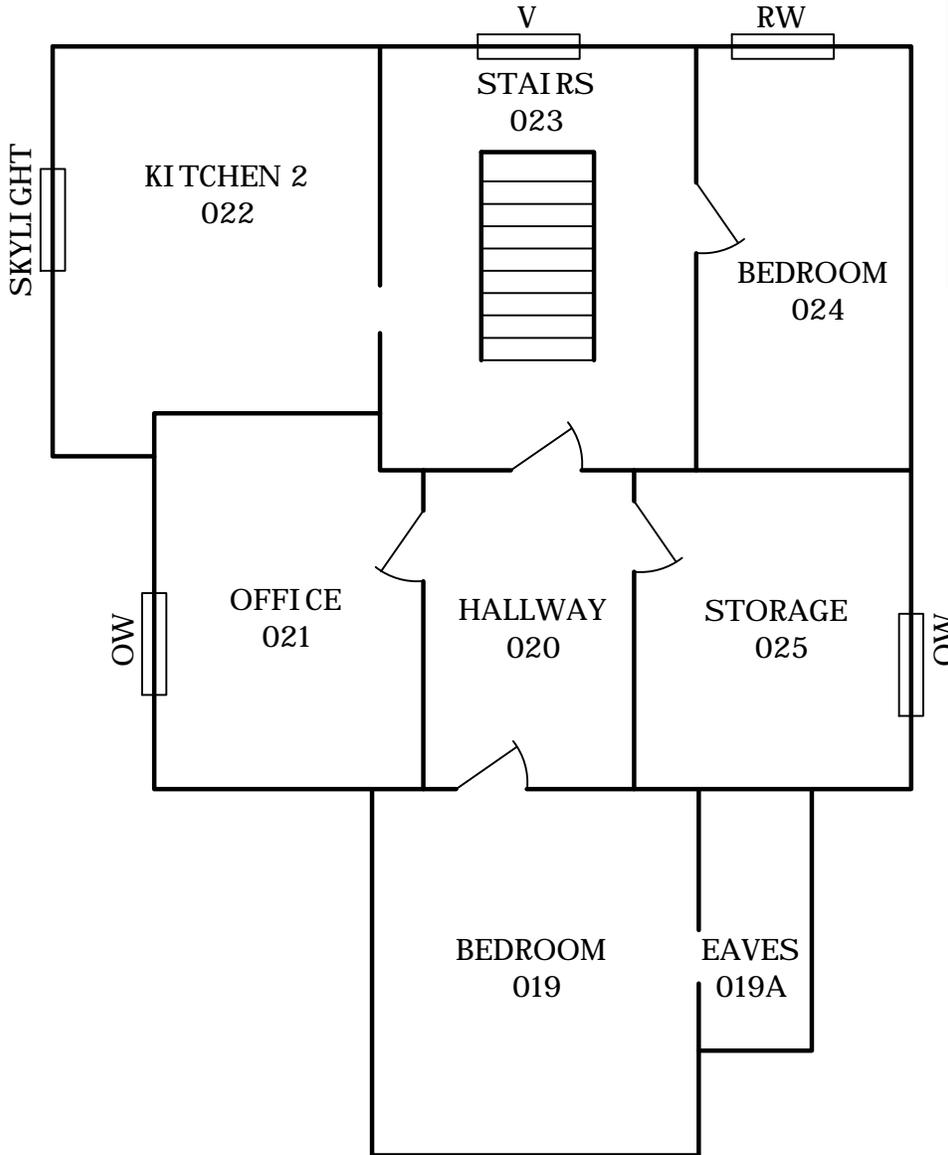
CODE-WINDOW  
(EG. OW)

OW = OLDER OR ORIGINAL  
WOOD SASH  
(TESTED POSITIVE  
FOR LEAD-BASED  
PAINT)

RW = REPLACEMENT  
WOOD SASH  
(TESTED NEGATIVE  
FOR LEAD-BASED  
PAINT)

S = STORM AND/OR  
SCREEN ONLY

V = VINYL SASH



THIRD FLOOR

NOT TO SCALE

SIDE-A (STREET SIDE)



8 SOUTH MAIN STREET, SUITE 3  
TERRYVILLE, CONNECTICUT 06786  
860-589-8257

SHEET NO.

**FP-4**

SHEET 5 OF 5

DATE: 09/09/2014  
PROJECT NO.: 14-028.12T22  
DRAWN BY: VB  
REVIEWED BY: AH

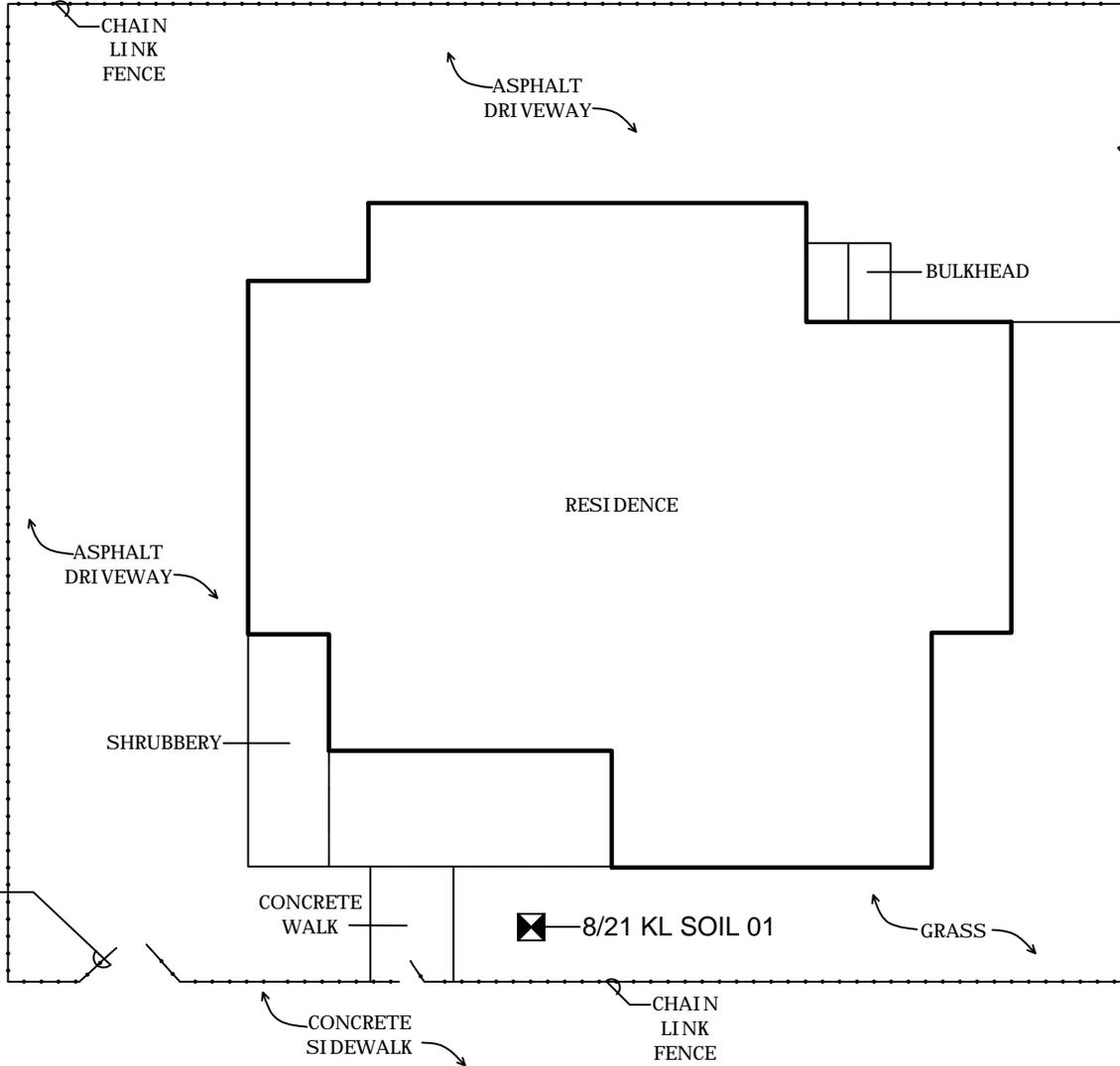
ENVIRONMENTAL REVIEW  
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT

SIDE-C

**SAMPLE KEY:**

■ = NUMBER AND  
8/21 KL LOCATION OF SOIL  
SOIL-01 SAMPLES

**BOLD TEXT INDICATES  
A SOIL-LEAD HAZARD  
FOUND**



**SITE PLAN**

**NOT TO SCALE**

SIDE-A (STREET SIDE)



8 SOUTH MAIN STREET, SUITE 3  
TERRYVILLE, CONNECTICUT 06786  
860-589-8257

**SHEET NO.**

**SP-1**

SHEET 1 OF 5

DATE: 09/09/2014  
PROJECT NO.: 14-028.12T22  
DRAWN BY: VB  
REVIEWED BY: AH

ENVIRONMENTAL REVIEW  
365 BROOKS STREET  
BRIDGEPORT, CONNECTICUT

The State of Connecticut  
Department of Housing (DOH)  
Community Development Block Grant  
Disaster Recovery Program (CDBG-DR)  
DOH Occupied Rehabilitation and Rebuilding Program (OORR)

Bid Package for  
Andreas Residence  
365 Brooks Street  
Bridgeport, Connecticut 06608  
Project # 1886

**-END OF SECTION-**

\\Eaglesvr\public\2014 Files\2014 Specs\CSA - Capital Studio Architects\Hurricane Sandy\365 Brooks St, Bridgeport\020900 \$25K - LBP  
Abatement.docx

**SECTION 06100**  
**ROUGH CARPENTRY**

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

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

1.2 - RELATED WORK SPECIFIED ELSEWHERE

- A. Interior woodwork exposed to view is specified in Section 06200.

1.3 - REFERENCE STANDARDS

- A. Use lumber and plywood grade-marked in accordance with the following standards:
1. Western wood: "Standard Grading Rules for Western Lumber", published by Western Wood Products Association.
  2. Southern Pine: "Standard Grading Rules for Southern Pine Lumber", published by Southern Pine Inspection Bureau.
  3. Plywood: Comply with PS 1 (ANSI A 199.1) or, for products not manufactured under PS 1 provisions, with applicable APA Performance Standard for type of panel indicated.
- B. Preservative pressure treated lumber and plywood shall comply with AWPA C2 and C9, respectively, and with the requirements listed below:
1. Wood for ground contact use: AWPB LP-22.
  2. Wood for above-ground use: AWPB LP-2.
- C. Requirements for all lumber:
1. Lumber shall be seasoned to 19% or less moisture content.
  2. Lumber and plywood shall be grade marked to show conformity to specifications.

## PART 2 - PRODUCTS

### 2.1 - MATERIALS

- A. Sills, bucks, blocking, and nailers for use in conjunction with wood construction and where exposed to concrete, masonry, roofing or other sources of dampness: Any species of structural lumber, construction grade, pressure treated, meeting the requirements listed above.
- B. Joists, rafters, headers, stringers, beams, posts, studs, plates and other structural support members except those listed below: Douglas Fir-Larch, No.2 grade or better.
- C. Blocking, nailers, and other non-structural uses: Any species of structural lumber, construction grade or better.
- D. Exterior wall sheathing: nominal 1/2" tongue & groove, APA rated sheathing, Exposure 1.
- E. Roof Sheathing: Nominal 5/8", square edge, APA Rated Sheathing, Exposure 1.

## PART 3 -EXECUTION

### 3.1 - WORKMANSHIP

- A. Produce joints which are tight, true and well nailed, with members assembled in accordance with the Drawings and with pertinent codes and regulations.
- B. Selection of lumber pieces:
  - 1. Carefully select the members.
  - 2. Select individual pieces so that knots and obvious defects will not interfere with placing bolts or proper nailing, and will allow making of proper connections.
  - 3. Cut out and discard defects which render a piece unable to serve its intended function.
  - 4. Lumber may be rejected by the Architect, whether or not it has been installed, for excessive warp, twist, bow, crook, mildew, fungus, or mold, as well as for improper cutting and fitting.
- C. Do not shim any framing component.

### 3.2 - GENERAL FRAMING

A. General:

1. Provide framing members of the size(s) and spacing shown on the Drawings.
2. In addition to framing operation normal to the fabrication and erection indicated on the Drawings, install solid wood blocking and backing required for fastening of grab bars and other accessories as required. All exterior blocking to be pressure treated.
3. Do not notch, cut, or bore members for pipes, ducts, or conduits, or for other reasons except as shown on the Drawings or as specifically approved in advance by the Architect.

B. Bearings:

1. Make bearings full unless otherwise indicated on the Drawings.
2. Finish bearing surface on which structural members are to rest so as to give sure and even support.
3. Where framing members slope, cut or notch the ends as required to give uniform bearing surface.

### 3.3 - ALIGNMENT

- A. On framing members to receive a finished surface, align the finish subsurface to vary not more than 1/8" from the plane of surfaces of adjacent furring and framing members.

### 3.4 - INSTALLATION OF PLYWOOD SHEATHING & UNDERLAYMENT

A. Placements:

1. Place plywood with face grain perpendicular to supports and continuously over at least two supports, except where otherwise shown on the Drawings.
2. Center joints accurately over supports, unless otherwise shown on the Drawings.

- B. Protect plywood from moisture by use of waterproof coverings until the plywood in turn has been covered with the next succeeding component or finish.

### 3.5 - FASTENING

- A. Fasteners:
1. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
  2. Power-Driven Fasteners: CABO NER-272.
  3. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.
- B. Metal framing anchors: Provide timber connection hardware by Simpson or approved equal of the gauges shown on the Drawings, or as otherwise required. Provide galvanized anchors for attaching carpentry to masonry or concrete.
- C. Nailing:
1. Use only common wire nails or spike of the sizes shown in Table 2304.9.1 of the Connecticut State Building Code, except where otherwise specifically noted on the Drawings.
  2. For conditions not covered in the Table, provide penetration into the piece receiving the point of not less than  $\frac{1}{2}$  the length of the nail or spike, provided, however, that 16d nails may be used to connect two pieces of 2" (nominal) thickness.
  3. Nail without splitting wood.
  4. Pre-bore as required.
  5. Remove split members and replace with members complying with the specified requirements.
- D. Bolting:
1. Drill holes  $\frac{1}{16}$ " larger in diameter than the bolts being used.
  2. Drill straight and true from one side only.
  3. Do not bear bolt threads on wood, but use washers under head and nut where both bear on wood, and use washers under all nuts.

E. Screws:

1. For lag screws and wood screws, pre-bore holes same diameter as root of threads, enlarging holes to shank diameter for length of shank.
2. For screws at plywood underlayment, countersink screws such that head of screw is 1/32" below the uppermost surface of the plywood.

END OF SECTION 06100

SECTION 07310  
FIBERGLASS BASED ASPHALT SHINGLES

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this section.

1.2 - WORK INCLUDED

- A. Provide all materials, labor, equipment and services necessary to furnish, deliver and install asphalt shingle roofing and related work as required by the Drawings and/or herein specified, generally as follows:
  - 1. Asphalt shingle roofing on all re-roofed areas of existing roof as shown on the Drawings.
  - 2. Felt underlayment under all new asphalt roofs.
  - 3. Ice and water barrier at all new eaves, all new valleys and elsewhere as shown.

1.3 - RELATED WORK SPECIFIED ELSEWHERE

- A. Rough Carpentry is specified in Section 06100.
- B. Gutters and leaders are specified in Section 07630.

1.4 - REFERENCES

- A. The National Roofing Contractors Association Roofing and Waterproofing Manual, "Steep Roofing" section, is hereby incorporated by reference. Contractor shall be familiar with this reference, and a copy shall be on the job.
- B. Follow roof shingle manufacturer's recommendations unless they are less stringent than these specifications. If roof shingle manufacturer's recommendations prohibit parts of these Specifications, notify Architect.

1.5 - SUBMITTALS

- A. Samples: Submit samples of asphalt shingles for matching existing roofing.
- B. Certificate: Furnish manufacturer's certification that asphalt shingles furnished meet or exceed the requirements of this section.
- C. Manufacturer's Literature: Material description and recommended installation procedures.

D. Manufacturer's Warranty.

1.6 - DELIVERY, STORAGE & HANDLING

- A. Deliver materials with manufacturer's labels intact and legible.
- B. Deliver materials in sealed packages with Underwriters Laboratories, Inc. labels.
- C. Store materials on raised platforms and protect with coverings at outdoor locations.
- D. Do not stack bundles of shingles more than 4 high.
- E. Store rolled goods on end.

1.7 - WARRANTY

- A. The asphalt roof shingle shall be guaranteed against material defects for a period of 30 years minimum by the manufacturer.

PART 2 - PRODUCTS

2.1 - ASPHALT ROOF SHINGLES

- A. Self-sealing "Architectural" style fiberglass shingles, UL Class "A", Standard Weight: Mineral-surfaced, self-sealing, 3-tab asphalt fiberglass strip shingles complying with ASTM D 3018, bearing UL Class "A" external fire exposure label and UL "Wind Resistant" label, with thirty (30) year warranty. Color, texture and style as selected. Basis of Design: GAF "Timberline". Subject to compliance with requirements of the Contract, equal products from one of the following manufacturers may also be acceptable:
  - 1. CertainTeed.
  - 2. Owens – Corning.

2.2 - OTHER MATERIALS

- A. Underlayment: Manufacturer's recommended fiberglass-reinforced asphalt-saturated roofing felt underlayment conforming to the requirements of ASTM D226, Type 1, or ASTM D4869, Type 1, and manufactured for use as fiberglass-asphalt shingle underlayment. Product shall be GAF "Shingle-Mate" or equivalent by same manufacturer as shingles.
- B. Nails: Aluminum or hot-dip galvanized, minimum 12 gauge, sharp pointed conventional roofing nails with barbed shanks, 3/8" diameter head. Nails length shall be of sufficient length to penetrate minimum 3/4" into sheathing.

- C. Eave Flashing (Ice & Water Barrier): GAF "Weatherwatch" or equivalent by same manufacturer of shingles, 36" wide rolls to dimensions indicated on drawings.
- D. Metal Rake and Drip Edge: Minimum .024" thick aluminum sheet as manufactured by Alcoa, or approved equal, with 3" roof deck flange, and 1-1/2" fascia flange and 3/8" drip at lower edge. Furnish in 8' or 10' lengths. Color shall be white.
- E. Ridge ventilator: Use one of the following, complete with all parts required for complete installation. Ventilators shall not allow rain or snow infiltration.  
  
Air Vent, Inc., "Shinglevent II" ridge vent.  
"Cor-A-Vent". Manufacturer's phone: (219) 255-1910.  
GAF "Cobra Rigid Vent II".  
North American Building Products, Inc., "Ridgeline Vent".
- F. Roof Cement: Complying with ASTM D 4586.
- G. Provide auxiliary products such as rubber-metal boots for flashing vents and other penetrations. Such products shall be manufactured by the shingle manufacturer or recommended by them.

### PART 3 - EXECUTION

#### 3.1 - PREPARATION

- A. Assure the surfaces to which shingles are to be applied are uniform, smooth, sound, clear, dry and free of irregularities. Do not start shingle installation until all unsatisfactory conditions are corrected. The installation of shingles shall represent the acceptance of existing conditions by the installer.
- B. When the outside temperature is expected to be 40 degrees or below, the shingles shall be warmed sufficiently so as to prevent cracking. All cracked or damaged shingles shall be discarded as debris.

#### 3.2 - DEMOLITION

- A. Where specifically shown on the Drawings, remove existing layer(s) of asphalt shingle, wood shake starter course, underlayment, metal drip and rake edges, etc., down to the existing sheathing. Avoid damage to the existing sheathing. Set or replace any loose or missing nails.
- B. Protect the public, the building and the landscaping from damage from materials removed from the roof. Use plywood chutes or other approved method.
- C. All demolition materials shall be legally disposed of off-site, at the Contractor's expense including disposal fees and permits.

- D. Inspect all existing sheathing, fasciae, soffits and framing for damage (rotting, delaminating, structural impairments) and notify Architect in writing.

### 3.3 - INSTALLATION

- A. Coordinate work with flashings specified in Section 07600 and work specified in Divisions 15 and 16 which passes through roof. Build in flashings for mechanical and electrical work.
- B. Apply materials generally in the following order:
1. Apply eave flashings. At bottom edge turn eave flashing material over and down wall to the bottom of the gutter or to the bottom of the metal drip or fascia. Install eave flashings to extend from the eaves up the roof slope to a point 24" or more inside and above the projected interior plane of the exterior wall of the building, measured on the slope. Within 8'-0" of dormers and at dormers, extend eave flashings up the roof slope to a point 48" or more inside and above the projected interior plane of the exterior wall of the building. Apply eave flashing material up valleys, 33" to both side of valleys. If roof slope is less than 6:12, extend eave flashing material 48" to both sides of valleys. Lap flashing 6", and seal laps.
  2. Apply metal fascia or metal eave drips.
  3. Apply underlayment over all roof surfaces, including over eave and valley flashings down to the edge. Lap joints 12", the upper over the lower. Apply patches where underlayment is cut, broken, or fitted around penetrations. Tape patches and all penetration and edge joints.
  4. At valleys, weave underlayment.
  5. At intersections between sloped roof and walls, install metal step flashing as recommended by SMACNA. Lower flashings shall extend 5" or more out between shingles, and shall extend 5" or more up wall, behind siding.
  6. At eaves for which gutters are indicated, install gutter hangers. Install gutter hangers before installing shingles, so that hangers are under shingles. Install gutter hangers so that gutter will slope downward toward drains. If slope toward drains is not possible, notify Architect and modify installation as directed.
  7. Install shingles as recommended by manufacturer. Apply six nails per shingle. If the temperature and season at the time of installation are not such that self-sealing shingles will bond, warm them with hot air gun and press them to adhere self-sealing material, or apply mastic and press shingles into it to adhere them.
  8. At ridges install ventilators as shown on the Drawings.
  9. Make all shingles, including lowest courses and rake shingles, tight to the wind.

10. Follow manufacturer's instructions for installation of starter shingles to ensure that there are self-sealing strips under the butts of the lowest courses of shingles. This may require removing tabs from shingles. In addition to following manufacturer's and reference recommendations, set lowest two courses of shingles with full bed of roof cement between all layers.
11. In addition to following manufacturer's and reference recommendations, set rake shingles with full bed of roof cement between all layers, 12" wide.
12. If the shingles are not effectively self-sealed within 1 month of installation provide a bed of roof cement or "Blackjack" asphalt sealant to hold them.
13. Flatten all shingles which do not naturally lie flat, and cement them in place. Note that fiberglass shingles do not always flatten by themselves.

#### 3.4 - EXTRA STOCK

- A. At the conclusion of the Work, the Contractor shall provide the Owner with a minimum of 2% of shingle used. Provide in unopened clearly labeled bundles.

**END OF SECTION 07310**

**SECTION 07600**  
**FLASHING AND SHEET METAL**

**PART 1 - GENERAL**

**1.1 - RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this section.

**1.2 - RELATED WORK SPECIFIED ELSEWHERE**

- A. Fiberglass based asphalt shingles are specified in Section 07310.
- B. Gutters & leaders are specified in Section 07630.
- C. Sealants are specified in Section 07900.

**PART 2 - PRODUCTS**

**2.1 - FLASHING MATERIALS**

- A. For use in Contact with Concrete or Concrete Masonry Units: Galvanized sheet metal. Thickness: 24 gauge.
- B. For all other uses: Aluminum, .027" thick.

**2.2 - ACCESSORIES**

- A. Fasteners: Use broad-head deformed shank roofing nails for nailing, and use screws, pop-rivets, and other fasteners where appropriate. Use double galvanized or stainless steel fasteners to fasten galvanized steel. Use double galvanized or aluminum fasteners to fasten aluminum. Use of improper fasteners shall be cause for rejection of the work.
- B. Solder: ASTM B32, of grade recommended for metal being specified.
- C. Sealant: See Section 07900.

PART 3 - EXECUTION

3.1 - INSTALLATION, GENERAL

- A. Unless shown otherwise, installation of sheet metal work shall conform to the recommendations of "Roofing and Waterproofing Manual", published by the National Roofing Contractors Association (NRCA), and "Architectural Sheet Metal Manual", published by Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA).
- B. Wherever metal comes in contact with dissimilar metals, insulation shall be provided between same consisting of a layer of 15 lb. saturated roofing felt bonded in mastic, or the surfaces in contact shall be given a coat of bituminous base paint.

END OF SECTION 07600

**SECTION 07630**  
**GUTTERS AND LEADERS**

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this section.

1.2 - RELATED WORK SPECIFIED ELSEWHERE

- A. Fiberglass based asphalt shingles are specified in Section 07310.
- C. Flashing and sheet metal are specified in Section 07600.

1.3 - REFERENCES

- A. Unless shown otherwise, standard details shall conform to the recommendations of "Architectural Sheet Metal Manual", published by Sheet Metal and Air Conditioning Contractors' National Association, Inc.

PART 2 - PRODUCTS

2.1 - GUTTERS

- A. Gutters shall be an "OGEE" or "K" style gutter fabricated from 0.032" thick aluminum. Finish shall be baked on enamel. Color shall be white.
- B. All miscellaneous items shall be the manufacturer's standard including end caps, corners, fasteners, gutter straps, and support brackets.

2.2 - LEADERS

- A. Leaders shall be a rectangular, corrugated leaders fabricated from 0.024" thick aluminum. Finish shall be baked on enamel. Color shall be white.

PART 3 - EXECUTION

3.1 - GENERAL REQUIREMENTS

- A. All metal work shall be fabricated and installed in accordance with details shown on the Drawings unless otherwise recommended by the gutter and leader manufacturers. Details shown on the Drawings shall be considered typical and shall apply for all similar conditions or features where not otherwise shown. Where details are not shown and typical details do not apply, details of the work shall comply with reference standard stated in 1.3 above.

- B. Adequate provisions shall be made in all metal work to compensate for thermal expansion and contraction. Provide expansion joints where required as directed by the material's manufacturer.
- C. Wherever metal comes in contact with dissimilar metals, insulation shall be provided between same consisting of a layer of 15 lb. saturated roofing felt bonded in mastic, or the surfaces in contact shall be given a coat of bituminous base paint or elastic cement.
- D. Surfaces upon which metal will be applied shall be made smooth, free from projections and depressions, and surface irregularities.
- E. All fasteners proposed shall be corrosion and rust resistant and electrolytically compatible with material being fastened.

### 3.2 - INSTALLATION

- A. Install gutters at all roof eaves and elsewhere as indicated. Slope all gutters not less than 1/16" per foot toward downspouts locations. Place gutter to allow snow and ice to slide clear; vary with roof pitch. Install gutters with adjustable hangers fastened directly to the roof sheathing under the shingles. Typical spacing to be 3'-0" o.c., maximum. Reduce spacing to 2'-0" o.c. maximum on north exposure and other areas where ice and snow may accumulate. In all instances, hangers shall be uniformly spaced.
- B. Secure leaders plumb by use of matching strap anchors. Fasten strap anchors using corrosion resistant machine driven screws of sufficient length to fully penetrate exterior sheathing. Secure at top, bottom, and at a maximum spacing of 8'-0" o.c. or minimum of two anchors per piece. Provide eave offsets and drainage shoes where required.
- C. Provide expansion joints at 40'-0" maximum. At expansion joints, provide concealed joint covers. Prior to installing joint covers, provide a bead of caulking on each side of the expansion joint.
- D. All work shall be installed so that it is water-tight and free from visible waves, buckles, cracks, tool marks, dirt, stain and other defects of materials and workmanship which would affect its strength, durability and appearance.

END OF SECTION 07630

SECTION 07900  
SEALANTS

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this section.

1.2 - WORK INCLUDED

- A. Caulk all openings in exterior walls, including doors, windows, mechanical openings, and control joints and elsewhere as shown. Caulk both inside and outside.
- B. The required interior applications of sealant work include, but are not necessarily limited to the following general locations:
  - 1. Sound sealed and waterproof joints.
  - 2. Joints between metal door frames and other finished surfaces.
  - 3. Joints between wood frames or wood trim and other finished surfaces.

1.3 - RELATED WORK SPECIFIED ELSEWHERE

- A. Finish Carpentry is specified in Section 06200.
- B. Acoustical sealant is specified in Section 09250.

1.4 - SUBMITTALS

- A. Submit manufacturer's color charts for color selection.

1.5 - DELIVERY, STORAGE AND HANDLING

- A. Do not retain at the job site material which has exceeded the shelf life recommended by its manufacturer.

1.6 - PROJECT/SITE CONDITIONS

- A. Apply sealants only to dry surfaces.
- B. Do not apply sealants when temperature is below 40 degrees F. or less than 46 degrees F. and falling.

## PART 2 - PRODUCTS

### 2.1 - MATERIALS

- A. General Exterior sealant: 1-Part type silicone joint sealant complying with Federal Specification TT-S-001543A, Dow Corning 790 Silicone Building Sealant. Equal products by Pecora or General Electric are also acceptable. Color: As selected by the Architect.
- B. Sealant for use in filling interior cracks at door and window trim, countertops, wood base, etc.: Acrylic Latex Caulk (ASTM C384) suitable for painting. Color: white.
- C. Joint Backing: Rod stock compatible with sealant being used, size as required.

## PART 3 - EXECUTION

### 3.1 - INSPECTION

- A. Prior to application of sealants, the Contractor shall examine the surfaces of the work to which sealants will be applied. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

### 3.2 - PREPARATION

- A. Bonding surfaces on both new and remedial jobs must be clean, dust and frost free. Solvent wipe the surfaces using a clean oil-free rag saturated with solvent compatible with surface being cleaned, as recommended by sealant manufacturer. Do not flood surfaces with more solvent than necessary.
- B. Do not clean surfaces with soap, detergent or any water-based cleaner. Make sure that apparently clean surfaces are not covered with a thin film of construction dust.

### 3.3 - APPLICATION

- A. Apply joint backing to joints open in back or over 1/2" deep. Compress backing so as to form a firm stop which will resist sealant pressure.
- B. Sealants shall be installed with either a hand operated or air-operated caulking gun with sufficient pressure to completely fill voids and joints solidly. Extreme care shall be taken to prevent smearing onto adjacent surfaces. Material shall be heated as recommended by the manufacturer. Joints shall have a neat, uniform, slightly concave appearance.
- C. All sealant work shall strictly conform to the sealant manufacturer's technical instructions for surface preparation and application procedures to accomplish a weathertight seal.
- D. Tool joints within 10 minutes of application. If masking tape is used, remove tape before a surface skin begins to form.

- E. After applying the sealant and after a "skin" has formed, do not disturb the joint for 48 hours.

#### 3.4 - REMEDIAL WORK AND LIMITATIONS

- A. Should sealant not completely fill or fully adhere to intended surfaces on first pass, remove bead and reapply. Do not apply successive beads to fill opening or obtain adhesion.
- B. If cleaning solvents stain, abrade, or otherwise damage adjacent materials or surfaces, all repair, replacement, etc. shall be performed at no additional cost.

#### 3.5 - CLEAN UP

- A. Completely remove excesses, spillage, "tails", and properly dispose of same; use solvents recommended by manufacturer of sealant being applied.
- B. Select solvents that are compatible with surfaces being cleaned.

END OF SECTION 07900

SECTION 08550  
VINYL REPLACEMENT WINDOWS

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions, and Division 1 Specification sections, apply to work specified in this section.

1-2 - WORK INCLUDED

- A. Provide insulated glass, vinyl replacement windows, complete with screens, in the locations shown on the Drawings and in the Lead Paint Abatement Window Schedule. Size and type of window shall match existing.

1.3 - RELATED WORK SPECIFIED ELSEWHERE

- A. Flashing and sheet metal are specified in Section 07600.
- B. Sealants are specified in Section 07900.

1.4 – WARRANTY

- A. Provide manufacturer's limited lifetime warranty against defects in workmanship and materials.
- B. Provide manufacturer's standard 25 year warranty against glass breakage.

PART 2 - PRODUCTS

2.1 - MATERIALS

- A. Vinyl Replacement Windows: Where shown, provide 400 series vinyl windows as manufactured by Andersen Windows, Inc. Subject to compliance with the requirements of the contract, equal products by Viking, Mercury Excelum Inc. and Harvey Industries may also be acceptable when approved in advance by the Architect.
  - 1. Color: White.
  - 2. Glazing: Provide 5/8" low-E insulating glazing for all sash.
  - 3. Windows must have tilt-in sash, welded frames, and cam & sash locks.
  - 3. Screens: Provide one (1) lockable half screen for each double hung window, fiberglass mesh in aluminum frame. Provide full screens for awning and casement windows.
  - 4. Provide manufacturer's standard extension sills & headers, panning systems, etc. and any other accessories required to complete the installation. Color to match windows.

5. Emergency escape windows: Bedroom windows scheduled for replacement must comply with the emergency escape requirements of the 2009 International Residential Code, as amended by the State of Connecticut.

### PART 3 - EXECUTION

#### 3.1 - INSTALLATION

- A. Install windows in accordance with manufacturer's recommendations and instructions. Anchor windows securely into existing construction, plumb and true.
- B. As required for watertightness, furnish and install continuous vinyl sections of profiles required to accomplish a watertight closure condition. Where aluminum is existing or shown on the drawings, use aluminum. Seal entire window perimeter and all other joints with sealant. Color to match windows.
- C. Adjust sash for tight closure and easy operation without binding or racking.
- D. Adjust sash lock, screens and other features for smooth operation.

END OF SECTION 08550

**SECTION 09250**  
**GYPSUM WALLBOARD**

**PART 1 - GENERAL**

**1.1 - RELATED DOCUMENTS**

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

**1.2 - RELATED WORK SPECIFIED ELSEWHERE**

- A. Rough framing is specified in Section 06100.
- B. Painting is specified in Section 09900.

**PART 2 - PRODUCTS**

**2.1 - ACCEPTABLE MANUFACTURERS**

- A. In general, specified products and systems are by U.S. Gypsum Co. Equivalent products and systems by National Gypsum Co., & Celotex Corp. are also acceptable.

**2.2 - MATERIALS**

- A. Gypsum Board: ASTM C36-78, tapered edge and square edge gypsum board. Where indicated, use water-resistant gypsum board, or fire rated gypsum board. Board thickness shall be as shown on the Drawings.
- B. Edge & corner beads, and other required accessories:
  - 1. Corner beads: Paper covered metal type, equal to USG "Bead-X".
  - 2. Casings: Vinyl concealed type typically, equal to U.S.G. P-1, abutting windows or at intersections of gypsum wallboard to dissimilar materials. No casings shall be exposed. Metal type may be used at locations not subject to wetness or condensation.
- C. Drywall screws:
  - 1. For fastening gypsum board only to wood studs, use type S bugle head screws with rust resistant finish meeting ASTM C1002 in length recommended by manufacturer. Use galvanized screws with WR-GWB.
  - 2. For fastening gypsum wall board and any combination of cement board or plywood to wood studs, use type S-12 bugle head screws. Use galvanized screws with WR-GWB.

- D. Tape, compound and other required products:
  - 1. Standard products by manufacturer of gypsum board.
- E. Acoustical Insulation: Unfaced fiberglass or mineral wool batts meeting the requirements of F.S. HH-521E, type 1, thickness as shown on the Drawings.
- F. Acoustical Sealant: Butyl rubber base or water base acoustical sealant manufactured for the purpose by U.S. Gypsum Co. or approved equal.
- G. Other Materials:
  - 1. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor from the gypsum board manufacturer's list of recommended or acceptable products.

### PART 3 - EXECUTION

#### 3.1 - SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

#### 3.2 - INSTALLATION

- A. If U.S. Gypsum products are used, install gypsum drywall according to "Gypsum Drywall Construction Handbook", latest edition, published by U.S. Gypsum Company. Also, conform to the requirements of ASTM C840 and Gypsum Association GA-216-96, Application and Finishing of Gypsum Board. Also conform to the requirements and recommendations of Gypsum Association GA-600-97, Fire Resistance Design Manual, Sound Control, Gypsum Systems, including Section III, Requirements for Fire Protection, and Section IV, Sound Control. Also conform to gypsum drywall system manufacturer's standards. Note that these designs stipulate use of acoustical insulation for certain designs and acoustical sealant at perimeter of walls and penetrations through walls, for all sound-rated construction. If specified standards require control joints not shown on the Drawings, notify Architect and install control joints at locations selected by Architect. Do not use water resistant gypsum board on ceilings. Do not use nails at any time.
- B. Use double studs at door and window jambs. Fasten multiple framing members securely together.
- C. Make fire-rated partitions continuous from slab or from top of floor deck to bottom of floor or roof deck above.
- D. Use tapered-edge gypsum board for finish surfaces; use square-edge for backing board. Fasten gypsum board to all studs as per manufacturer's recommendations.

- E. Use casing beads at all butt transitions to dissimilar materials and/or as detailed on Drawings. Compound, tape and compound over bead. Feather out for smooth finish surface. Completely conceal bead.
- F. Use acoustical sealant in gypsum board unit separation walls to seal all cut-outs and all intersections with adjoining walls, ceiling, and floors.
- G. Finish fasteners and joints with drywall compound and tape. Apply at least 3 coats of compound over tape and heads of screws. Conform to the requirements of Gypsum Association Publications GA-214, Levels of Gypsum Board Finish, and GA-216-96, Application and Finishing of Gypsum Board. Unless specified otherwise, the level of gypsum board finish shall be Level 4.

### 3.3 - CLEANING UP

- A. In addition to other requirements for cleaning, use necessary care to prevent tracking gypsum and joint finishing compound onto floor surfaces.

END OF SECTION 09250

SECTION 09900  
PAINTING

PART 1 - GENERAL

1.1 - RELATED DOCUMENTS

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

1.2 - WORK INCLUDED

- A. Paint all new interior and exterior surfaces as set forth below. Painting work includes, but is not necessarily limited to, the following:
1. Paint all new interior wood trim provided at windows scheduled to be replaced.
  2. Paint all existing interior wall surfaces disturbed by the work of this Contract, entire wall surface, to next corner or break point.
  3. Paint all new exterior wood trim, soffits, and fasciae provided on a unit price basis as a part of this Contract.
  4. Unit Price: Paint lead based paint wall surfaces encapsulated during the remediation process when desired color cannot be achieved through tinting process. Provide 2 finish coats on a unit price basis (SF).

1.3 – RELATED WORK SPECIFIED ELSEWHERE

- A. Unit Prices are specified in Section 01270.
- B. Lead-Based Paint Abatement is specified in Section 020900.

1.4- SUBMITTALS

- A. Submit complete list of proposed materials. For each surface, list materials by manufacturer and name, and list number of coats. List thinners, if any.
- B. Submit complete range of standard and custom mix colors of the selected manufacturer for color selections.

1.5 - DELIVERY, STORAGE & HANDLING

- A. Deliver all products to job site in manufacturers' unopened containers with seals unbroken and labels intact.
- B. Store products so as to minimize danger of fire and protect building surfaces from spills.

## 1.6 - PROJECT/SITE CONDITIONS

- A. Do not paint when temperature of air or surfaces being painted is below 40 degrees F. Do not apply epoxy paint when temperature of air or surfaces being painted is below 60 degrees F. Do not paint when atmosphere is damp, and do not paint when surfaces are damp, unless paint manufacturer states that paint is intended for such use.
- B. Do not paint unless lighting is adequate.
- C. Provide ventilation during painting and drying periods.

## PART 2 - PRODUCTS

### 2.1 - ACCEPTABLE MANUFACTURERS

- A. Besides manufacturer listed in schedule (PPG Industries, Inc. - Pittsburgh Paints), the following manufacturers are also acceptable:

Benjamin Moore Co.  
Sherwin-Williams Co.

No other paint manufacturer will be accepted.

### 2.2 - MATERIALS

- A. Use first quality products of the types specified in schedule. "First quality" means best, most expensive line of professional quality paints produced by selected manufacturer.
  - 1. If requested, submit formulations to Architect to demonstrate compliance with above requirements.
  - 2. Deliver all materials to job site in unopened containers, bearing names of manufacturer and contents.
- B. All paints and primers must be less than or equal to the following VOC levels:
  - 1. Flats: 50 grams/liter.
  - 2. Non-Flats: 50 grams/liter.
  - 3. Floor Paint: 100 grams/liter.
- B. Use thinners recommended by manufacturers. In general, use mineral spirits to thin oleoresinous paints.
- C. Materials shall meet all requirements of ANSI Z66.1, "Specifications to Minimize Hazards to Children from Residual Surface Coating Materials".

## 2.3 - COLORS

- A. For interior and exterior surfaces, the Architect shall select colors from full range of standard ready-mixed and custom-mixed colors offered by supplying manufacturer. Architect shall submit color selections in schedule form. Follow Architect's schedule exactly.
- B. Concealed surfaces, such as door bottoms, may be painted grey.

## PART 3 - EXECUTION

### 3.1 - INSPECTION

- A. Examine all surfaces to receive paint.
  - 1. If surfaces are not fit to receive paint; scrape, brush, or remove unsatisfactory materials by mechanical means, then clean and prepare surfaces for painting operation. Follow manufacturer's instructions concerning surface suitability.
- B. The start of work on any surface shall constitute acceptance of the condition of that surface.

### 3.2 - PREPARATION

- A. Broom-clean entire area before painting.
- B. Clean surfaces to be painted.
- C. Remove rust. If, in Architect's opinion, primed products have corroded significantly, strip all primer from such products, prepare again and reprime.
- D. Sand and fill rough surfaces, which are not intended to be rough. Spackle interior holes and cracks. Putty fastener holes after applying prime coat.
- E. Seal knots and pitch spots. Wash sap and pitch from surface, and apply Western Pine Association Formula WP-578 sealer or equivalent as recommended by selected manufacturer.
- F. Protect adjacent surfaces and items. Remove or protect such items as electrical plates and hardware. After painting, reinstall items removed for protection.
- G. On galvanized metal products scheduled to be painted, remove factory applied stabilizers using solvent, brush blasting or chemical treatment as required.

### 3.3 - APPLICATION

- A. Architect has specified number of coats of paint based on the assumption that quality of paint, opacity of pigments, extent of thinning, and quality of workmanship will be good. If Contractor

disputes Architect's schedule, notify Architect in writing before starting work.

- B. Use products as packaged, unless manufacturer specifically directs thinning or other alteration for proper application. Mix all products thoroughly before, and regularly during application.
- C. Follow manufacturer's directions for millage thickness application and rate of coverage.
- D. Apply paint evenly. Produce uniform surfaces. Avoid runs, sags, brush or roller marks, "holidays", differences in sheen or color, and other blemishes.
- E. If specified number of coats is not sufficient to satisfy requirements specified in D. above, as adjudged by Architect, apply additional coats as required to do so.
- F. Brush paint into cracks and seams. Cut straight, neat edges.
- G. Do not allow paint to get on adjacent surfaces. Clean up spills and spatters as soon as possible, and no later than end of same day.
- H. Allow each coat to dry as recommended by manufacturer before applying following coat.
- I. Between coats, trowel in place drywall compound to cover defects in surface and sand smooth to match adjacent surfaces. Reprime those areas.
- J. At substantial completion, all surfaces shall be clean. If painted surfaces cannot be uniform, rectify condition by cleaning, or repaint them in accordance with 3.2 and 3.3 of this specification section.
- K. Sand smooth finish enamel between coats.

### 3.4 - SCHEDULE

- A. General
  - 1. Paint concealed surfaces such as door tops and bottoms and panel frames and edges.
  - 2. Paint mechanical/electrical products unless they are fully concealed and corrosion-resistant.
  - 3. If shop-applied primer coat is in good condition, field prime coat is not required. Patch primer where scratched or abraded.
  - 4. If shop-applied finish coat is in good condition, and if it matches Architect's selected color, field finishing is not required. Patch where not smooth, uniform, and in tact.
- B. Paint all new exposed interior surfaces and any existing surfaces disturbed by the work of this

Contract, except the following:

1. Items such as window glass, acoustical tile, ceramic tile, plastic laminates, and resilient flooring which are customarily not painted.
  2. Shop-finished items such as cabinets, window frames, and toilet partitions, except as required in A. above.
  3. Wood doors, wood trim, and architectural woodwork scheduled for transparent finish.
  4. Concrete floors and walls, except where schedule on the Drawings specifically calls for painted concrete floors or walls.
  5. Floor, wall, and ceiling surfaces listed in finish schedule not to be painted.
- C. Schedule by surfaces. The following schedule is based on the products of Pittsburgh Paints as manufactured by PPG Industries, Inc. Equal products of other manufacturers listed in 2.1 above are also acceptable. Submit schedule to the Architect as required in 1.4 above. Primer coat may be deleted on previously painted surfaces or surfaces receiving liquid encapsulation performed under specification section 020900.
1. Interior Gypsum Wallboard Surfaces:  
Primer: 1 coat Speedhide Quick-drying Latex Primer-Sealer, 6-2.  
Finish: 2 coats Speedhide Interior Enamel Eggshell Latex, 6-411 series.
  2. Interior Wood Trim scheduled for opaque finish:  
Primer: 1 Coat Speedhide Quick-drying Latex Primer-Sealer, 6-2.  
Finish: 2 coats Speedhide Interior Semi-Gloss Acrylic Latex, 6-500.
  5. Exterior Wood Trim:  
Primer: 1 Coat Speedhide Exterior Latex Wood Primer, 6-609.  
Finish: 2-coats Sun-Proof Exterior House and Trim Satin Latex 100% Acrylic, 76-110.
  4. Other Surfaces:  
  
Follow master specification of selected paint manufacturer for three (3) coat work in normal service area.

END OF SECTION 09900