

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

Rizzuto Residence

Rehabilitation and Mitigation

90 Pratt Road

Clinton, CT 06413

Prepared by:

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Project #: 1819

CSA Project # 1347-49

October 05, 2015



Project # 1819**Table of Contents****Section 1:.....Number of Pages**

Advertisement for Bids	1
Information to Bidders	3
Bid Form	2
Bid Security.....	1
Form of Non-Collusive Affidavit.....	1
Bidders Certification of Eligibility.....	1
Certification of General Bidders on CDBG-DR Construction Projects	1
Certification of Sub Bidders on CDBG-DR Construction Projects.....	1
Bid Bond	1
Performance and Payment Bond	1
Certificate As To Corporate Principal.....	
Subcontractor Identification	1
Certification of Bidder Regarding Equal Employment Opportunity	1
Certificate of Bidders Regarding Section 3 and Segregated Facilities	1
Contractor's Section 3 Plan.....	3
Green Building Standards Checklist	4

Section 2:

General Conditions.....	6
-------------------------	---

Section 3:

Technical Specifications

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS

SECTION 00900 – SPECIAL CONDITIONS.....	7
---	---

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01200 – SUMMARY OF THE WORK	3
SECTION 01210 – ALLOWANCES	2
SECTION 01230 – ALTERNATES.....	2

SECTION 01270 – UNIT PRICES.....	2
SECTION 01300 – DEMOLITION.....	2
SECTION 01400 – SUBMITTALS.....	4
SECTION 01500 – CUTTING AND PATCHING	4
SECTION 01700 – PROJECT CLOSE-OUT.....	5

DIVISION 2 - SITEWORK

SECTION 02200 – EXCAVATION	3
SECTION 02215 – FILL AND BACKFILL	7
SECTION 02230 – CLEARING & GRUBBING.....	4
SECTION 02374 – EROSION CONTROL.....	3
SECTION 02750 – CONCRETE PAVEMENT	5
SECTION 02900 – LAWN & PLANTING RESTORATION	2

DIVISION 3 – CONCRETE (NOT USED)

DIVISION 4 – MASONRY (NOT USED)

DIVISION 5 - METALS (NOT USED)

DIVISION 6 - WOODS AND PLASTICS

SECTION 06670 – EXTERIOR PVC FABRICATIONS	3
---	---

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

SECTION 07150 – DAMPROOFING	1
SECTION 07200 – INSULATION	2
SECTION 07600 – FLASHING & SHEET METAL.....	2
SECTION 07900 – SEALANTS	3

DIVISION 8 - DOORS AND WINDOWS (NOT USED)

DIVISION 9 – FINISHES (NOT USED)

DIVISION 10 – SPECIALTIES (NOT USED)

DIVISION 11 - EQUIPMENT (NOT USED)

DIVISION 12 – FURNISHINGS (NOT USED)

DIVISION 13 - SPECIAL CONSTRUCTION (NOT USED)

DIVISION 14 - CONVEYING SYSTEMS (NOT USED)

DIVISION 15 – MECHANICAL (NOT USED)

DIVISION 16 - ELECTRICAL (NOT USED)

LIST OF DRAWINGS

Title Sheet

A-0.0	GENERAL INFORMATION
P-1	PLOT PLAN
S1.0	GENERAL NOTES AND TYPICAL DETAILS
S-1.1	FOUNDATION PLAN
S-1.2	FIRST FLOOR FRAMING PLAN
S-2.1	SECTION
S-2.2	3-D VIEW
D-1.0	DEMOLITION FLOOR PLANS
A-1.0	NEW FLOOR PLANS
A-2.0	ELEVATIONS
A-3.0	SCHEDULES SECTIONS & DETAILS
A-4.0	PORCH STAIR DETAILS
A-4.1	DECK AND STAIR DETAILS
A-4.2	DECK AND STAIR DETAILS
A-5.0	BID ALTERNATE No. 1 ELEVATIONS
MEP-1.0	MEP DEMOLITION FLOOR PLANS
P-1.0	PLUMBING FLOOR PLANS
P-5.0	PLUMBING SPECIFICATIONS
E-1.0	ELECTRICAL FLOOR PLANS
E-5.0	ELECTRICAL SYMBOLS, ABBREVIATIONS, AND SPECIFICATIONS

Section 1

ADVERTISEMENT FOR BIDS

Project #1819

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 #1819, Rizzuto Residence Rehabilitation and Mitigation, 90 Pratt Road, Clinton, CT 06413** will be received by Capital Studio Architects, LLC. located at 1379 Main Street, East Hartford, CT 06108 until **4:00 PM on Friday, November 20, 2015.**

A **Mandatory Walk Through** will be held at the Project Site located at **90 Pratt Road, Clinton, CT 06413 at 1:00PM on Friday, November 06, 2015.**

The Information to Bidders, Form of Bid, Form of Contract, Plans, Specifications, Form of Bid Bond 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/ 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 \$50.00 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 PM on Friday, November 20, 2015.**

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 #1819, Rizzuto Residence Rehabilitation and Mitigation, 90 Pratt Road, Clinton, CT 06413.**

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 **1:00 PM on Friday, November 06, 2015.**

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 data 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/ and click on the "Hurricane Sandy" link.

Bid Security: Each bid must be accompanied by an irrevocable letter of credit from the bank, certified check, or bank cashier's check in the amount not less than five percent (5%) of the bid. Bid bonds may be accepted as bid security. Such checks will be returned to all except the three lowest bidders within three days after the opening of bids, and the remaining cash, or checks will be returned promptly after DOH and the accepted bidder have executed the contract, or opening of bids, upon demand or the bidder at any time thereafter, so long as he/she has been notified of the acceptance of his/her bid.

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.

Security for Faithful Performance: Simultaneously with his/her delivery of the executed contract, the Contractor shall furnish a surety bond or bonds as security for faithful performance of this contract and for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract, as specified in the General Conditions included herein. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the DOH.

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.

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.

Power of Attorney: Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

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 to 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.

BID FORM

The undersigned, being familiarized with the local conditions affecting the cost of the work and with the Drawings, Specifications, Invitation to Bidders, Instructions to Bidders, General Conditions, Bid Form, Form of Contract and Form of Bonds for **Project No. 1819** and Addenda No. _____ and _____ thereto, as prepared by Capital Studio Architects, LLC. East Hartford, Connecticut, and on file in the office of DOH, hereby proposes to furnish all permits, labor, materials, tools, equipment and related items required for the rehabilitation and reconstruction including general construction, site improvements, plumbing, heating, electrical and finish items for said **Project No. 1819 located at 90 Pratt Road, Clinton, CT 06413.**, all in accordance with the Drawings and Specifications, for the sum of:

_____ Dollars (\$ _____).

<i>Section #</i>	<i>Scope of Work</i>	<i>Subcontractor</i>	<i>Labor Cost</i>	<i>Material</i>	<i>Total</i>
TOTAL COST					

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 _____ \$

No. 2 _____ \$

Unit Price

Unit Measure

No. 1 _____ \$/ sf

No. 2 _____ \$/ lf

No. 3 _____ \$/ lf

No. 4 _____ \$/ lf

No. 5 _____ \$/ lf

No. 6 _____ \$/ sf

No. 7 _____ \$/ sf

The undersigned agrees to commence the work on a date to be specified in the contract and to complete such work within **180** 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 all executed documents 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) _____

(Bank Letterhead)

BID SECURITY

IRREVOCABLE LETTER OF CREDIT

Dear _____:

We hereby authorize you to draw on us to the aggregate amount of \$_____ (five percent of the amount of the bid) in the event _____ withdraws its bid within the bid holding period, or upon being awarded a contract, fails to provide adequate performance and payment security as required by the Contract documents.

Such drafts must be accompanied by the following document:

A written certification by you that the proceeds of any draft drawn on this Letter of Credit will be used solely to indemnify the DOH against loss or damage suffered by it resulting from any act or omission described in the above paragraph.

We warrant to you that all drafts drawn in compliance with the terms of this Letter of Credit will be unconditionally and duly honored upon delivery of the documentation specified and presented to this office.

This Letter of Credit is irrevocable and shall be in full force and effect until notification in writing is received from you that a contract for Project_____ has been awarded and executed, whereupon this Letter of Credit shall automatically be canceled.

This Letter of Credit shall not be modified or amended except upon the written agreement of this Bank and the DOH.

Sincerely yours,

President

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.

(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

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,

_____ as Principal,
and _____ Surety, are hereby held and firmly bound unto

_____ as DOH in the penal sum of
_____, for the payment of which, well and truly be made,
we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and
assigns. Signed this _____ day of _____, 2015.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted to
_____ a certain Bid, attached hereto and hereby
made a part hereof to enter into a contract in writing, for the _____

NOW, THEREFORE,

1. If said Bid shall be rejected, or in the alternate,
2. If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with the Bid) and shall furnish a bond for this faithful performance of said contract, and for the payment of all person performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid,

Then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any or all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time which the DOH may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____ (L.S)
Principal

Surety

SEAL

By: _____

PERFORMANCE AND PAYMENT BOND

(For contracts over \$100,000)

KNOW ALL MEN BY THESE PRESENTS: THAT we, _____, as PRINCIPAL, and _____, as SURETY, are held firmly bound unto _____ hereinafter called the DOH, in the penal sum of _____ (\$_____), for the payment of which sum we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally. WHEREAS, Principal has entered into a certain Contract with DOH, dated _____, a copy of which is hereto attached and made a part hereof.

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall in all respects fully perform the Contract and all duly authorized modifications thereof, during its original term and any extensions thereof that may be granted and during any guaranty period for which the Contract provides, and if the Principal shall fully satisfy all claims arising out of the prosecution of the work under the Contract and shall fully indemnify DOH for all expenses which it may incur by reason of such claims, including its attorney's fees and court costs, and if the Principal shall make full payment to all persons supplying labor, services, materials, or equipment in the prosecution of the work under the Contract, in default of which such persons shall have a direct right of action hereupon; and if the Principal shall pay or cause to be paid all sales and use taxes payable as a result of the performance of the Contract as well as payment of gasoline and special motor fuel taxes in the performance of the Contract and all motor vehicle fees required for commercial motor vehicles used in connection with the performance of the Contract, then this obligation shall be void; otherwise, it shall remain in full force and effect. No modification of the Contract or extension of the term thereof, nor any forbearance on the part of DOH shall in any way release the Principal or the Surety from liability hereunder. Notice to the Surety of any such modification, extension, or forbearance is hereby waived.

IN WITNESS WHEREOF, the aforesaid Principal and Surety have executed this instrument and affixed their seals hereto, this _____ day of _____.

Principal

Surety

Name and Title

(Signatures must be notarized.)

(Power-of-Attorney for person signing for Surety Company must be attached to bond.)

The rate of premium on this bond is \$_____ per thousand.

The total amount of premium charge is \$_____.

(The above is to be filled in by Surety Company.)

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the
_____ Secretary of the corporation

named as Principal in the foregoing bond; that _____,
who signed the bond on behalf of the Principal, was then _____
of said corporation; that I know his/her signature thereto is genuine; and that said bond was
fully signed, sealed, and attested for and in behalf of said corporation by authority of its
governing body.

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

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

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

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.

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

CERTIFICATION OF BIDDERS REGARDING SECTION 3 AND SEGREGATED FACILITIES

Project Name:

Project No:

Name of Prime Contractor:

The undersigned hereby certifies that:

1. Section 3 provisions are included in the Contract
2. A written Section 3 plan was prepared and submitted as part of the bid proceedings (if bid equals or exceeds \$100,000.00)
3. No segregated facilities will be maintained.

Name and Title of Signer (Print or Type)

Signature

Date

CONTRACTOR

Section 3 Plan Format

_____ agrees to implement the following specific affirmative action steps directed at increasing the utilization of lower income residents and business within the _____.

- A. To ascertain from the DOH the exact boundaries of the Section 3 covered project area and where advantageous, seek the assistance of local officials in preparing and implementing the affirmative action plans.
- B. To attempt to recruit from within the city the necessary number of lower income residents through: local advertising media, signs placed at the proposed site for the project, and community organizations and public or private institutions operating within or serving the project area such as Service Employment and Redevelopment (SER), Opportunities Industrialization Center (OIC), Urban League, Concentrated Employment Program, Hometown Plan, or the U. S. Employment Service.
- C. To maintain a list of all lower income residents who have applied either on their own or on referral from any source, and to employ such persons, if otherwise eligible and if a vacancy exists.
- D. To insert this Section 3 plan in all bid documents, and to require all bidders on subcontracts to submit a Section 3 Affirmative Action Plan including utilization goals and the specific steps planned to accomplish these goals.
- E. To insure that contracts which are typically let on a negotiated rather than a bid basis in areas other than Section 3 covered project areas, are also let on a negotiated basis, wherever feasible, when let in a Section 3 covered project area.
- F. To formally contact unions, subcontractors and trade associations to secure their cooperation for this program.
- G. To insure that all appropriated project area business concerns are notified or pending subcontractural opportunities
- H. To maintain records, including copies of correspondence, memoranda, etc., that document all above affirmative action steps have been taken.
- I. To appoint or recruit an executive official of the company or agency as Equal Opportunity Officer to coordinate the implementation of the Section 3 plan.
- J. To list on Table A, information related to subcontracts to be awarded.
- K. To list on Table B, all projected workforce needs for all phases of this project by occupation, trade, skill level and number of positions.

As officers and representatives of _____

We, the undersigned, have read and fully agree to this Affirmative Action Plan, and become a party to the full implementation of this program.

Signature

Title

Date

Loans, grants, contracts and subsidies for less than \$100,000.00 will be exempt.

Table A

Proposed Subcontracts Breakdown

For Period Covering _____, 20____ Through _____, 20____
(Duration of CDBG-DR OORR Assisted Project)

Column 1	Column 2	Column3	Column 4	Column 5
Type of Contract (Business of Profession)	Total Number of Contracts	Total Approximate Dollar Amount	Estimated Number of Contracts to Project Area Businesses*	Estimated Dollar Amount to Project Area Businesses*

*The Project Area is defined as the Town/City boundaries in which the assisted project resides.

Company

Project Name/Residence

Project Number

EEO Officer or Designee's Signature

Date

Table B**Estimated Project Workforce Breakdown**

<i>Column 1</i>	<i>Column 2</i>	<i>Column 3</i>	<i>Column 4</i>	<i>Column 5</i>
Job Category	Total Estimated Population	No. Positions Currently Occupied by Permanent Employees	No. Positions Not Currently Occupied	No. Positions to be filled with LIPAR*
Officers/Supervisors				
Professionals				
Technicians				
Housing Sales/Rental Management				
Office Clerical				
Service Workers				
Others				
TRADE:				
Journeyman				
Helpers				
Apprentices				
Maximum No. of Trainees				
Others				
TRADE:				
Journeyman				
Helpers				
Apprentices				
Maximum No. of Trainees				
Others				
TRADE:				
Journeyman				
Helpers				
Apprentices				
Maximum No. of Trainees				
Others				
Total				

**Lower Income Project Area Residents. Individuals residing within the project area whose family income does not exceed 80% of the area median income in the SMSA.*

Company

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.

X

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.

N/A	Windows When replacing windows, install geographically appropriate ENERGY STAR rated windows.
N/A	Sizing of Heating and Cooling Equipment 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.
N/A	Domestic Hot Water Systems 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.
N/A	Efficient Lighting: Interior Units Follow the guidance appropriate for the project type: install the ENERGY STAR Advanced Lighting Package (ALP); OR 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; OR when replacing, new fixtures and ceiling fans must meet or exceed ENERGY STAR efficiency levels.
N/A	Efficient Lighting: Common Areas and Emergency Lighting (if applicable to building type) 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; OR 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.
X	Efficient Lighting: Exterior Follow the guidance appropriate for the project type: install ENERGY STAR-qualified fixtures or LEDs with a minimum efficacy of 45 lumens/watt; OR 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; OR when replacing, install ENERGY STAR compact fluorescents or LEDs with a minimum efficacy of 45 lumens/watt.

INDOOR AIR QUALITY

N/A	Air Ventilation: Single Family and Multifamily (three stories or fewer) Install an in-unit ventilation system capable of providing adequate fresh air per ASHRAE 62.2 requirements.
N/A	Air Ventilation: Multifamily (four stories or more) 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.
N/A	Composite Wood Products that Emit Low/No Formaldehyde

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.
N/A	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.]
N/A	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.

N/A

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 no wise 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 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.
- B. Where the Specifications refer to Property Owner, this shall be construed to mean the property owner or homeowner living in the residence where the work will be performed.

2. BIDDING REQUIREMENTS

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

Suzanne Mazzotta, Grants and Contracts Specialist
CDBG-Disaster Recovery Program
Connecticut Department of Housing
505 Hudson Street
Hartford, CT 06106
(860) 270-8194

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

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

3. SALES TAX

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

4. INSURANCE

- A. No insurance shall be terminated by the Contractor without ten (10) days 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 shown on the Drawings or in the Specifications will only be entertained during the submittal process after contract award. Substitutions will only be entertained during the bid period if specified material or equipment is either unavailable, or unworkable for the proposed use. Determinations regarding product equality shall be made solely by the Architect, who's decision shall be final.

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 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 local towns and cities where the work of this contract will be performed. The Contractor shall include costs 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 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.

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

- C. 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.
- D. The Contractor must provide the DOH 48 hours' notice prior to the start of work so they may provide proper notice to the Property Owner.

16. OCCUPANTS' CONTINUED USE OF THE PREMISES

- A. In general, the project area is occupied and will remain occupied during the course of the work. All work shall be carried out in such a manner so as to cause minimal interference with the use of the property by the occupants. The occupants are responsible for moving all items to the center of the room (or out of the room) within the areas where the work is to be performed. They are also responsible for moving the items back at the completion of the work.
- B. In some cases, the nature of the work requires the occupants to leave the premises for the duration of such work. Generally, this applies to work associated with environmental remediation. The individual technical specification sections that follow specifically address occupancy (or vacating) the premises when this is required. The Contractor shall be responsible for coordinating the specific work requiring vacating the premises with DOH and the occupants. Once a schedule to leave and return to the premises has been established, it is imperative that the Contractor adhere to the schedule.
- C. **Lifted Structures:** For projects requiring lifting (and moving) the structure, the basement, crawl space, attached garage and any other areas affected by the lift shall be emptied by the occupants prior to the start of the Contract of all non-permanent items.

17. 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.

18. 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.

19. TEMPORARY FACILITIES

- A. The contractor shall provide and maintain an adequate office at the project site at his discretion. If provided, it shall be located as directed by the DOH. 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.

20. TEMPORARY SERVICE

- A. The Contractor may connect to water available at the project without payment to the Property

Owner.

- B. The Contractor may connect to the existing electrical service without payment to the Property Owner.
- C. Fixtures, or other modifications, shall be the responsibility of the contractor.

21. 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 Property Owner.

22. 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 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.

23. SALVAGABLE MATERIALS

- A. NO SALVAGABLE MATERIALS.

24. 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.
- 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.

25. 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 residence 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.

26. 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.

27. 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.

28. GUARANTEE PERIOD

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

29. 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.

30. 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.

31. 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.

32. HAZARDOUS MATERIALS

- A. A hazardous material report has been completed by Eagle Environmental; this report is available within these Specifications. The report states that there are no hazardous materials located at this site. 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.

33. 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.

34. 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.

35. 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.

36. CONTRACT PERIOD

- A. The Contract period will be one hundred eighty (180) consecutive calendar days from day of "Notice to Proceed" until day of "Substantial Completion".

37. 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, part of the Community Development Block Grant Disaster Recovery for the Owner Occupied Recovery and Rehabilitation Program for the Connecticut Department of Housing, is known as **Project No. 1819, located at 90 Pratt Road, Clinton, CT 06413.**
- 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, including existing foundation after house lift.
 - 2. Lifting of existing house framing.
 - 3. New concrete foundation.
 - 4. New pressure treated wood deck and stairs.
 - 5. Modifications to existing mechanical, electrical, and plumbing systems to accommodate house lift.

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 occupants 48 hours 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.	Asphalt 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
C.P.S.C.	Consumer Products Safety Commission
C.S.I.	Construction Specification Institute
D.O.H.	Department of Housing
Form 816	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.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
TCNA	Tile Council of North America
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 under this program. 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 01210 - ALLOWANCES

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. This Section includes administrative and procedural requirements governing the following:
 - 1. Lump-sum allowances.
- B. See Division 1 Section "Unit Prices" for procedures for using unit prices.

1.3 - SELECTION AND PURCHASE

- A. Coordinate first paragraph below with Division 1 Section "Submittal Procedures." Indicate critical dates on both Contractor's Construction Schedule and Submittals Schedule.
- B. At the earliest practical date after award of the Contract, advise Architect and Owner of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- C. At Architect's request, obtain proposals for each allowance based on Owner's input. Include recommendations that are relevant to performing the Work.
- D. Purchase products and systems selected by Owner from the designated supplier.

1.4 – SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders. Approved proposals will be the basis for Change Orders to the Contract. Unused allowance sums shall return to DOH in the form of a credit change order. Costs for materials in excess of the allowances stipulated in the Contract Documents shall be borne by the property owner.
- B. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.
- D. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

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

3.2 PREPARATION

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

3.3 SCHEDULE OF ALLOWANCES

- A. Light Fixtures: Furnish all light fixtures (material only) as selected by the Owner. Costs associated with wiring and fixture installation shall be included in the Base Bid.

- 1. Lump-Sum Allowance: \$400.00.

- B. Insulated Exterior Entry Door: Furnish one (1) pre-hung insulated exterior door complete with specified frame, threshold, and entry hardware (Installation shall be included in the Base Bid). Paint door and frame in accordance with the door manufacturer's instructions and recommendations. Color as selected by Owner.

- 1. Lump-Sum Allowance: \$1,500.00.

END OF SECTION 01210

SECTION 01230 - ALTERNATES

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. This Section includes administrative and procedural requirements for alternates.

1.3 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.

1.4 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 (if any) 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. Bid Alternate #1: Replace existing front porch guard/railing and rear screen porch balusters with new stainless steel wire guard system. Replace existing rear screened porch decking with composite decking. Reference sheets D-1.0, A-1.0, & A-5.0.
- B. Bid Alternate #2: Furnish and install new wheelchair lift equal to "Savaria" Multilift Vertical Platform Lift, including all associated electrical wiring and power and new 9'x5' thick reinforced concrete pad. Modify existing porch railing as required to accommodate installation.

END OF SECTION 01230

SECTION 01270 - UNIT PRICES

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. 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.

1.3 – 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.

1.4 – 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 Framing (match existing)**
1. Condition – Areas where the existing wood framing is deteriorated, provide new wood framing to match existing.
 2. Unit of measure – Per linear foot.
- F. Unit Price No. 6 – Remove Existing Flooring Underlayment**
1. Condition – Remove existing flooring underlayment that is unsuitable to receive new resilient flooring. Thickness up to 1/2".
 2. Unit of measure – Per square foot.
- G. Unit Price No. 7 – New Flooring Underlayment**
1. Condition – Furnish and install new 1/4" thick APA rated flooring underlayment as specified in specification section 06100.
 2. Unit of measure – Per square 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 – RELATED WORK SPECIFIED ELSEWHERE

- A. Environmental Remediation is specified in Division 2.

1.3 - 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.

1.4 - 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 foundation.
 - 2. Removal of portions of existing structure as shown on the Drawings.
 - 3. Removal of related interior materials as needed in relation to other work.
- 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 co-ordination 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 – PRODUCTS

NOT USED

PART 3 – EXECUTION

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 02200 - EXCAVATION

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. Excavate for new building footings and foundations.
- B. Trench for site utilities as shown on the Drawings.
- C. Coordinate with lifting contractor as per schedule and location of cribbing.

1.3 – RELATED WORK SPECIFIED ELSEWHERE

- A. Fill and Backfill is specified in Section 02215.
- B. Concrete operations are specified in General Notes.

1.4 - PROJECT CONDITIONS

- A. Verify that survey bench mark and intended elevations for the Work are as indicated.
- B. Protect bench marks, survey control points, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- C. Notify "Call Before You Dig" prior to beginning the work.
- D. Existing house will be elevated during excavation operations.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.1 - PREPARATION

- A. Identify required lines, levels, contours, and datum locations.
- B. Locate, identify, and protect utilities that remain and protect from damage.
- C. Notify utility company to remove and relocate utilities as required.

3.2 - EXCAVATING

- A. Excavate to accommodate new structures and construction operations.
- B. Notify Architect of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- C. Slope banks of excavations deeper than 4 feet to angle of repose or less until shored.
- D. Do not excavate below a 2 hor: 1 ver line drawn outward and downward from the bottom outside edge of an existing footing to remain.
- E. Cut utility trenches wide enough to allow inspection of installed utilities.
- F. Hand trim excavations. Remove loose matter.
- G. Remove lumped subsoil, boulders, and rock up to 1/3 cu yd measured by volume.
- H. Correct areas that are over-excavated and load-bearing surfaces that are disturbed; see Section 02215.
- I. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- J. Remove excavated material that is unsuitable for re-use from site.
- K. Stockpile excavated material to be re-used in area designated on site. Protect from erosion.
- L. Remove excess excavated material from site.

3.3 – PREPARATION FOR BUILDING FOUNDATIONS

- A. Excavate at new footing locations to design bearing grade shown on drawings.
- B. Excavate deeper, as needed, to expose natural granular soils at footings.
- C. Recompact footing bearing surface, after Architect has observed conditions, to consist of natural soil.
- D. Lower footing or place compacted structural fill to design footing grade.

3.4 - PREPARATION FOR UTILITY PLACEMENT

- A. Cut out soft areas of subgrade not capable of compaction in place. Backfill with structural fill.
- B. Compact subgrade to density equal to or greater than requirements for subsequent fill material.
- C. Until ready to backfill, maintain excavations and prevent loose soil from falling into excavation.

3.5 - FIELD QUALITY CONTROL

- A. Provide for visual inspection of load-bearing excavated surfaces before placement of foundations.

3.6 - PROTECTION

- A. Prevent displacement of banks and keep loose soil from falling into excavation; maintain soil stability.
- B. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.
- C. Protect load bearing cribbing installed by lifting contractor.

END OF SECTION 02200

SECTION 02215 - FILL AND BACKFILL

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. Filling, backfilling, and compacting for building volume below grade, footings, and utilities within the building perimeter. Contractor shall provide fill as required to achieve required elevation.
- B. Backfilling and compacting for utilities trenches shown on the Drawings. Contractor shall backfill and compact trenches to elevation of adjacent grade or as otherwise shown on the Drawings.
- C. Prepare base for cribbing supports, location by lifting contractor.

1.3 – RELATED WORK SPECIFIED ELSEWHERE

- A. Lawn & Planting Restoration is specified in Section 02900.
- B. Concrete operations are specified in General Notes.

1.4 - REFERENCES

- A. ASTM C 136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates; 2001.
- B. ASTM D 698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)); 2000a.
- C. ASTM D 1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method; 2000.
- D. ASTM D 1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³(2,700 kN-m/m³)); 2002.
- E. ASTM D 2487 - Standard Practice for Classification of Soil for Engineering Purposes (Unified Soil Classification System); 2000.

- F. ASTM D 3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth); 2001.

1.5 - SOURCE QUALITY CONTROL

- A. Where fill materials are specified by reference to a specific standard, test and analyze samples for compliance before delivery to site.
- B. If tests indicate materials do not meet specified requirements, change material and retest.
- C. Provide materials of each type from same source throughout the Work.

1.6 - SUBMITTALS

- A. Submit Compaction Density Test Reports.
- B. Submit soil gradation reports for all types of materials.

1.7 - PROJECT CONDITIONS

- A. Provide sufficient quantities of fill to meet project schedule and requirements. When necessary, store materials on site in advance of need.
- B. When fill materials need to be stored on site, locate stockpiles as directed by the Owner.
 - 1. Separate differing materials with dividers or stockpile separately to prevent intermixing.
 - 2. Prevent contamination.
 - 3. Protect stockpiles from erosion and deterioration of materials.
- C. Verify that survey bench marks and intended elevations for the Work are as indicated.
- D. Existing house will be elevated during backfill operations.

PART 2 - PRODUCTS

2.1 - FILL MATERIALS

- A. General Fill: Subsoil excavated on-site, or off-site material.
 - 1. Graded.
 - 2. 100% passing 3 ½ inch, not more than 20% passing No. 200 sieve.

B. Structural Fill: (off-site material) for use below building footings:

1. Well graded within the following limits:

<u>Sieve Size</u>	<u>Percent Finer By Weight</u>
4 in.	100
No. 4	20-80
No. 40	5-50
No. 200	0-10

2. Free of stones larger than 4 inches, organic matter, and debris.
3. All structural fill shall be sand, sand/gravel, gravelly sand or processed material that is obtained from off site.

C. Common Fill – (off-site material) for use below the building footprint:

1. Well graded within the following limits:

<u>Sieve Size</u>	<u>Percent Finer By Weight</u>
5 in.	100
No. 4	20-80
No. 40	0-50
No. 200	0-20

2. Free of stones larger than 5 in. and organic matter. (see item below for additional information).
3. All granular fill shall be sand, sand/gravel, gravelly sand or processed material that is obtained from off-site sources or on-site excavation.

D. Stone Fill - Pea Gravel: Natural stone; washed, free of clay, shale, organic matter.

1. Grade in accordance with ASTM D 2487 Group Symbol GM.
2. Graded in accordance with ATM C 136, within the following limits:
- a. Minimum Size: 1/4 inch.
 - b. Maximum Size: 5/8 inch.

- E. Sand: Natural river or bank sand; washed; free of silt, clay, loam, friable or soluble materials, and organic matter.
 - 1. Grade in accordance with ASTM D 2487 Group Symbol SW.
 - 2. Graded in accordance with ASTM C 136; within the following limits:
 - a. No. 4 sieve: 100 percent passing.
 - b. No. 14 sieve: 10 to 100 percent passing.
 - c. No. 50 sieve: 5 to 90 percent passing.
 - d. No. 100 sieve: 4 to 30 percent passing.
 - e. No. 200 sieve: 0 percent passing.

2.2 - ACCESSORIES

- A. Geotextile Fabric: Non-biodegradable, woven, silt film.

PART 3 - EXECUTION

3.1 - EXAMINATION

- A. Identify required lines, levels, contours, and datum locations.
- B. Verify subdrainage, dampproofing, or waterproofing installation has been inspected.

3.2 - PREPARATION

- A. Scarify and proof roll subgrade surface to a depth of 6 inches to identify soft spots.
- B. Cut out soft areas of subgrade not capable of compaction in place. Backfill with fill as directed.
- C. Compact subgrade to density equal to or greater than requirements for subsequent fill material.
- D. Until ready to fill, maintain excavations and prevent loose soil from falling into excavation.
- E. Compact base area under load bearing cribbing by lifting contractor.
- F. Remove all existing building foundation components prior to placing fill.

3.3 - FILLING

- A. Fill to contours and elevations indicated using unfrozen materials.
- B. Fill up to subgrade elevations unless otherwise indicated.
- C. Employ a placement method that does not disturb or damage other work.
- D. Systematically fill to allow maximum time for natural settlement. Do not fill over porous, wet, frozen or spongy subgrade surfaces.
- E. Maintain optimum moisture content of fill materials to attain required compaction density.
- F. Common Fill: Place and compact materials in equal continuous layers not exceeding 6 inches compacted depth.
- G. Correct areas that are over-excavated.
 - 1. Load-bearing foundation surfaces: Use structural fill, flush to required elevation, compacted to 95 percent of maximum dry density.
 - 2. Other areas: Use common fill, flush to required elevation, compacted to minimum 92 percent of maximum dry density.
 - 3. Compaction Density Unless Otherwise Specified or Indicated:
 - a. Under paving, slabs-on-grade, and similar construction: 95 percent of maximum dry density.
 - b. At other locations: 92 percent of maximum dry density.
 - 4. Reshape and re-compact fills subjected to vehicular traffic.

3.4 - FILL AT SPECIFIC LOCATIONS

- A. Use general fill unless otherwise specified or indicated.
- B. Fill at building:
 - 1. Use structural fill below building footings and common fill at all other areas..
 - 2. Fill up to subgrade elevations.
 - 3. Maximum depth per lift: 8" prior to compaction.
 - 4. Compact to minimum percent of maximum dry density as directed.

C. Buried Utility Piping and Conduits in Trenches:

1. Bedding: Use structural fill.
2. Cover with general fill.
3. Fill up to existing grade elevation.
4. Maximum depth per lift: 12" prior to compaction.
5. Compact to minimum percent of maximum dry density as directed.

3.5 - TOLERANCES

- A. Top Surface of General Filling: Plus or minus 1 inch from required elevations.
- B. Top Surface of Filling Under Paved Areas: Plus or minus 1 inch from required elevations.

3.6 - FIELD QUALITY CONTROL

- A. Perform compaction density testing on compacted fill in accordance with ASTM D1556, ASTM D2167, ASTM D2922, or ASTM D3017.
- B. If tests indicate work does not meet specified requirements, remove work, replace and retest.
- C. All expenses in connection with tests specified herein shall be borne by the Owner. The testing laboratory selected to conduct the tests shall be approved by the Owner and the Architect.

3.7 - CLEAN-UP

- A. Leave unused materials in a neat, compact stockpile.
- B. Remove unused stockpiled materials, leave area in a clean and neat condition. Grade stockpile area to prevent standing surface water.
- C. Leave borrow areas in a clean and neat condition. Grade to prevent standing surface water.

3.8 – REMEDIAL WORK

- A. At the completion of the work, patch lawn areas disturbed by the work of this Contract. Provide additional topsoil, regrade and reseed as required.
- B. Patch paved areas disturbed by trenching with the same surface material removed. See additional requirements in Section 01500, cutting and patching.

END OF SECTION 02215

SECTION 02230 – CLEARING & GRUBBING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Protecting existing vegetation to remain.
2. Removing existing vegetation and shrubs shown on the plans.
3. Clearing and grubbing.
4. Stripping and stockpiling topsoil.
5. Removing above- and below-grade site improvements.
6. Temporary erosion- and sedimentation-control measures.

1.2 MATERIAL OWNERSHIP

- A. Except for stripped topsoil and other materials indicated to be stockpiled or otherwise remain on Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.3 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, driveways, parking areas, walks, and other adjacent occupied or used facilities during site-clearing operations.
1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from the Town of Groton and/or property owners.
 2. Provide alternate routes around closed or obstructed traffic ways to the extent possible.
- B. Salvable Improvements: Carefully remove items indicated to be salvaged or relocated and store on Owner's premises.
- C. Utility Locator Service: Notify 'Call Before You Dig' prior to the construction effort.
- D. Do not commence site clearing operations until erosion and sedimentation control measures are installed.

- E. The following practices are prohibited within close proximity to trees to be preserved:
1. Storage of construction materials, debris, or excavated material.
 2. Parking of vehicles or equipment.
 3. Excavation unless otherwise indicated.
 4. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Erosion Control Materials: Shall meet all requirements of the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, and conform to the details provided in the Drawings.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Locate, clearly identify, and protect trees, shrubs, and other vegetation to remain or to be relocated.
- C. Protect existing site improvements to remain from damage during construction.
1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to the Drawings and requirements of authorities having jurisdiction.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not create impacts outside the limits of construction.

- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3.3 TREE AND PLANT PROTECTION

- A. General: Protect trees and plants remaining on-site.
- B. Repair or replace trees, shrubs, and other vegetation indicated to remain that are damaged by construction operations, in a manner approved by Architect.

3.4 EXISTING UTILITIES

- A. Locate, identify, and disconnect utilities indicated to be removed or relocated.
 - 1. Coordinate with applicable utility companies if necessary.
- B. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Owner not less than four days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Owner's permission.

3.5 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
 - 1. Remove stumps and roots of shrubs to be removed.
 - 2. Use care to protect trees to be saved.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
 - 1. Place fill material in horizontal lifts not exceeding a loose depth of 8 inches, and compact each lift to 95% modified proctor density.

3.6 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil in a manner to prevent intermingling with underlying subsoil or other waste materials.
- C. Stockpile topsoil away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.

3.7 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.

3.8 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.

3.9 STORM DRAINAGE

- A. Protect existing storm drainage structures to remain from damage during construction.

END OF SECTION 02230

SECTION 02374 – EROSION CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Temporary erosion and sedimentation control materials and practices.

1.2 QUALITY ASSURANCE

- A. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers.
- B. Comply with all governing codes and regulations including the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

1.3 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, handle, and store materials in accordance with manufacturer's written instructions.

1.4 MAINTENANCE SERVICE

- A. Maintain temporary erosion control measures until site is stabilized and accepted by the Engineer.

PART 2 - PRODUCTS

2.1 EROSION CONTROL MATERIALS

A. Silt Fencing:

1. Filter Fabric: Extra strength filter fabric (50 lbs/lin.in. min.), or a combination of standard strength (30 lbs/lin inch minimum) and 14 gauge woven wire fence.

2. Fence posts: 2"x2" pressure treated wood, minimum of 48" high.
- B. Haybales: Haybales shall be composed of non-degraded straw in reasonable condition.
- C. Filter Fabric; Filter Fabric for drywell grate wrap shall meet requirements for Silt Fencing Filter Fabric.

PART 3 - EXECUTION

3.1 GENERAL LAND CONSERVATION

- A. All structural erosion and sediment control practices shall be placed prior to or as the first step in grading for all areas.
- B. Permanent or temporary soil stabilization shall be applied to disturbed areas within 14 days after final grade is reached on any portion of the site.
- C. Any disturbed area not stabilized with seeding, sodding, paving, or built upon by November 1st, or areas disturbed after that date, shall be mulched immediately with hay or straw at the rate of 2 tons per acre and over-seeded by April 15th.
- D. At the completion of construction, and establishment of vegetation, all temporary sediment controls shall be removed.

3.2 EROSION CONTROL

- A. Provide straw bales and silt fencing in areas shown on the plans, or in other areas deemed as potential erosion locations.
- B. Silt fencing shall be placed down-gradient of construction areas, as necessary, to control sediment and minimize erosion until turf is established.

3.3 SILT FENCING

- A. Set posts maximum ten feet (10') apart. Angle posts approximately 5 degrees upslope.

- B. Excavate a 6"x6" trench upslope and along the line of posts.
- C. Staple wire fencing to upslope side of posts, if applicable.
- D. Attach filter fabric to wire fence or upslope side of posts and extend fabric into trench. Top of fabric is to be a minimum of 30" above ground level.
- E. Backfill and compact excavated soil.

3.4 MAINTENANCE

- A. All erosion and sediment control measures shall be checked weekly and within 24 hours after each rainfall to assure that the measures are functioning adequately. Sediment that is collected will be distributed on the protected portion of the site and stabilized.
- B. All stockpiles of earth and topsoil shall be protected with temporary seeding, erosion control fence around the entire perimeter, or other means to prevent erosion.

3.5 SILT FENCE

- A. Silt fences and filter barriers shall be inspected immediately after each rainfall, at least daily during prolonged rainfall, and weekly during other periods. Any required repairs shall be made immediately.
- B. Should the fabric on a silt fence or fabric barrier decompose or become ineffective and the barrier is still necessary, it shall be replaced immediately.
- C. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.
- D. For any sediment deposits remaining after the silt fence or filter barrier is no longer required, the sediment shall be spread, dressed, and seeded to conform to the surrounding area.

END OF SECTION 02374

SECTION 02750 – CONCRETE PAVEMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Concrete Walks

1.2 SUBMITTALS

- A. Submittals:
 - 1. Design Mixtures: For each concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
 - 2. Joint Filler: Include manufacturer's product data sheet.

1.3 QUALITY ASSURANCE

- A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
- B. ACI Publications: Comply with ACI 301 (ACI 301M) unless otherwise indicated.

PART 2 - PRODUCTS

2.1 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of same type, brand, and source throughout Project:

1. Portland Cement: Shall meet CT DOT Form 816 M.03.01.

a. Fly Ash: Shall meet CT DOT Form 816 M.03.01 13(a)

B. Normal-Weight Aggregates: Shall meet CT DOT Form 816 M.03.01 1&2.

C. Water: Potable and complying with CT DOT Form 816 M.03.01 4.

D. Air-Entraining Admixture: Shall meet CT DOT Form 816 M.03.01 9 (a).

E. Chemical Admixtures: Shall meet CT DOT Form 816 M.03.01 9

F. Joint Filler for Sidewalk Expansion Joint Repair: Sikaflex-2C SL Two-component, self-leveling, polyurethane elastomeric sealant. Or approved equal.

2.2 CURING MATERIALS

A. Curing Materials: Shall meet CT DOT Form 816 M.03.01 10

2.3 CONCRETE MIXTURES

A. Concrete Mixtures: shall meet CT DOT Form 816 M.03.01 Class 'C'.

2.4 CONCRETE MIXING

A. Ready-Mixed Concrete: shall meet CT DOT Form 816 M.03.01.

PART 3 - EXECUTION

3.1 EXAMINATION AND PREPARATION

A. Proof-roll prepared subbase surface below concrete walks, pads, etc. Identify soft pockets and areas of excess yielding.

- B. Remove loose material from compacted subbase surface immediately before placing concrete.

3.2 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.3 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness.
- E. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 1/4-inch (6-mm) radius. Repeat tooling of edges after applying surface finishes. Eliminate edging-tool marks on concrete surfaces.

3.4 CONCRETE PLACEMENT

- A. Moisten subbase to provide a uniform dampened condition at time concrete is placed.

- B. Comply with CT DOT Form 816 M.03.01 requirements for measuring, mixing, transporting, placing, and consolidating concrete.
- C. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- D. Screed paving surface with a straightedge and strike off.
- E. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.

3.5 FLOAT FINISHING

- A. General: Do not add water to concrete surfaces during finishing operations.
- B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.
 - 1. Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture.
 - 2. Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.
 - 3. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8 inch (1.6 to 3 mm) deep with a stiff-bristled broom, perpendicular to line of traffic. Match finish texture to existing concrete to remain adjacent to new sidewalks.

3.6 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with ACI 306.1 for cold-weather protection.

- C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h (1 kg/sq. m x h) before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.
- D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- E. Curing Methods: Cure concrete in accordance with CT DOT Form 816 M.03.01 10.

3.7 REPAIRS AND PROTECTION

- A. Remove and replace concrete sidewalk that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Engineer.
- B. Protect concrete sidewalks from damage.
- C. Maintain concrete sidewalks free of stains, discoloration, dirt, and other foreign material. Sweep sidewalks not more than two days before date scheduled for substantial completion inspections.

END OF SECTION 02750

SECTION 02900 – LAWN & PLANTING RESTORATION

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 of this Section.

1.2 WORK INCLUDED:

- A. Furnish and install loam and grass seed as required to repair and restore grass areas disturbed by the work of this contract.

1.3 SUBMITTALS

- A. Submit grass seed analysis.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Loam: Clean natural agricultural soil capable of sustaining healthy growth. Soil shall be porous enough to permit adequate aeration and drainage. Soil shall be relatively free of subsoil, stones, roots, debris, trash and other foreign materials. Use loam stripped from site and provide additional loam from off site as required.
- B. Grass Seed:
 - 1. Analysis:
 - 70% "Kentucky 31" fescue with 98% purity and 90% germination.
 - 15% "Kentucky Bluegrass" with 97% purity and 70% germination.
 - 15% "Creeping Red Fescue" or "Chewing's Fescue" with 98% purity and 75% germination.
 - 2. Grass seed shall be fresh, clean, and of latest crop. Deliver seed in unopened containers bearing date and guaranteed analysis, or submit certificate of date and analysis.

PART 3 - EXECUTION

3.1 PREPARATION AND SEEDING

- A. Spread loam to compacted depth of 6" or greater.
- B. Rake out clods, stones, roots, debris and trash. Largest size of remaining foreign material shall be $\frac{3}{4}$ " diameter.
- C. Rake loam smooth.
- D. Distribute seed at rate of 5 pounds per 1000 square feet with mechanical seeder on calm day. Seed 50% - 50% at right angles. Seed when weather and ground conditions are proper.
 - 1. Seeding seasons:
 - From August 15 to October 15
 - From March 15 to May 1
- E. Rake and lightly water seeded loam.
- F. In place of dry seeding, hydroseeding may be used. Rate of application shall be the same as specified for dry seeding.
- G. Prevent erosion. In areas subject to erosion, stake soil stabilization mat within topsoil. Stakes shall be as recommended by Enka Building Products/Colbond. Alternate methods of preventing erosion may be used if approved by Architect.

3.2 PREPARATION

- A. Prevent construction traffic from crossing grass areas.
- B. Water grass lightly and frequently until healthy stand of grass is established.
- C. Perform maintenance of grass. Water, regrade, reseed and otherwise maintain grass so as to produce healthy uniform lawn.

END OF SECTION 02900

SECTION 06670 – EXTERIOR PVC FABRICATIONS

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 exterior PVC Trim Boards in the sizes and locations shown on the drawings.

1.3 – RELATED WORK SPECIFIED ELSEWHERE

- A. Sealants are specified in Section 07900.

1.4 – SUBMITTALS

- A. Product Data: Submit manufacturer's product data for specified products.
- B. Samples: Submit three (3) material samples representative of the texture, thickness and widths required and specified herein.

1.5 - DELIVERY, STORAGE AND HANDLING

- A. Trim materials should be stored on a flat and level surface on a full shipping pallet. Handle materials to prevent damage to product edges and corners. Store materials under a protective covering to prevent jobsite dirt and residue from collecting on the boards.

1.6 - WARRANTY

- A. Provide manufacturer's 25 year warranty against defects in manufacturing that cause the products to rot, corrode, delaminate or excessively swell from moisture.

PART 2 - PRODUCTS

2.1 – MATERIALS

- A. Acceptable products: AZEK Trimboards as manufactured by Vycom Corporation, 801 Corey Street, Moosic, PA or approved equal.

2.2 – ACCESSORY PRODUCTS

- A. Fasteners: Standard wood fasteners, stainless steel or hot dipped galvanized.
- B. Adhesives:
 - 1. For bonding AZEK to AZEK, use solvent based adhesive systems used for rigid PVC pipe.
 - 2. For bonding AZEK to various substrates, use standard construction adhesives. In general, contact cement, epoxy, rubber based and urethane adhesives are acceptable. Test selected adhesive for suitability.
- C. Sealants:
 - 1. Use urethane, polyurethane or acrylic based sealants without silicone.

2.3 – FINISHES

- A. Preparation
 - 1. Clean, Dry surface.
 - 2. Nail holes may be finished with a polyurethane or acrylic based caulk matching the board color.

PART 3 – EXECUTION

3.1 – INSTALLATION

- A. Manufacturer's instructions: Comply with manufacturer's product catalog installation instructions and product technical bulletin instructions.
- B. Cutting: Cut sheets and boards using standard saws and carbide blades used for wood.
- C. Drilling: Drill using twist drills recommended for metals.
- D. Milling: Mill using standard milling machines of various types. Relief angle 20 degrees to 30 degrees; Cutting speed to be optimized with the number of knives and feed rate.
- E. Routing: Rout using standard carbide tipped routers used in woodworking.
- F. Edge Finishing: Various sanding, grinding or filing tools. Do not allow excessive frictional heat to build up.
- G. Nail Location: Standard nailing patterns as recommended by Manufacturer's instructions.

- H. Joints: Where AZEK joins AZEK, provide butt joints. Provide full length boards in as much as possible. Joints should only occur where material run exceeds board length.
- I. Linear Thermal Expansion and Contraction: When properly fastened, allow for ½" movement for each 18 feet of board.

END OF SECTION 06670

SECTION 07150 - DAMPPROOFING

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. Furnish and install vapor barrier under all new stone surfaced areas on grade.

PART 2 - PRODUCTS

2.1 - MATERIALS

- A. Vapor Barriers:
 - 1. Sub-stone vapor barriers: 10 mil thickness Polyethylene.

PART 3 - EXECUTION

3.1- INSTALLATION OF SUBSLAB VAPOR BARRIER

- A. Install vapor barrier over compacted fill prior to pouring concrete floor slab. Do not install more material than will be covered with stone surface on a given day.
- B. Minimum lap 6" at joints. Seal all joints as recommended by barrier manufacturer.
- C. Avoid tearing. Patch tears with pieces of vapor barrier lapping tear 6" in all directions. Tape patches in place. Tape around all penetrations through vapor barrier.

END OF SECTION 07150

SECTION 07200 - INSULATION

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. Furnish and install insulation of the types, thicknesses and R values, as shown on the Drawings and specified herein.

1.3- RELATED WORK SPECIFIED ELSEWHERE

- A. Sealants are specified in Section 07900.

PART 2 - PRODUCTS

2.1 – GENERAL REQUIREMENT

- A. All batt, blanket, and fill materials specified in this Section shall conform to the requirements of ASTM E84 as follows:
 - 1. Where exposed as installed in rooms or spaces, including attics, and crawl spaces, shall have a flame spread rating of 25 or less and a smoke-developed rating of 450 or less.
 - 2. Where concealed as installed shall have a flame spread of 75 or less and a smoke-developed rating of 450 or less.

2.2 – MATERIALS

- A. Rigid Foam Insulation: "Foamular High-R CW Plus" extruded polystyrene rigid foam insulation board as manufactured by Owens Corning. Thickness and/or R values as shown on the Drawings.
- B. Flashing Tape: "3M All Weather Flashing tape 8067", or approved equal.
- C. Closed Cell Foam Insulation: "CertaSpray Extreme Weather" Closed Cell Foam Insulation as manufactured by CertainTeed Corp. Thickness and/or R values as shown on the Drawings.

PART 3 - EXECUTION

3.1 – INSTALLATION OF BOARD INSULATION

- A. Rim joists, headers: Provide rigid foam insulation board of the thicknesses/R value shown at rim joists of each floor level, and elsewhere as shown on the Drawings.
- B. Floors over exterior spaces: Fasten rigid foam insulation board to the underside of floor system located over newly created exterior space. Install in accordance with manufacturer's instructions. Seal all board joints using specified flashing tape.

3.2 – INSTALLATION OF CLOSED-CELL FOAM INSULATION

- A. Apply closed-cell foam spray on insulation to the thicknesses/ R values shown in specific locations on the Drawings. Apply in strict accordance with manufacturer's installation instructions.

END OF SECTION 07200

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. 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 use in wrapping exterior wood trim, fasciae, and rake boards: Aluminum, 0.032" thick. Color/finish: As selected by Architect.
- C. For all other uses: Aluminum, 0.024" thick. Color/finish: As selected by Architect.

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 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 new openings in exterior walls, including doors, windows, mechanical openings, 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. New sound sealed and waterproof joints.
 - 2. New joints between metal door frames and other finished surfaces.
 - 3. New joints between wood frames or wood trim and other finished surfaces.

1.3 - RELATED WORK SPECIFIED ELSEWHERE

- A. Exterior PVC fabrications are specified in Section 06670.

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: Single-component Non-sag Urethane Sealant:
 - 1. Products: Pecora Corporation: Dynatrol I LX. Equal products by Tremco or Sonneborn may also be acceptable. Color(s): As selected by the Architect. Multiple colors may be selected.
 - 2. Type and Grade: S (single component) and NS (non-sag).
 - 3. Class: 50.
 - 4. Use(s) Related to Exposure: NT (non-traffic).
 - 5. Sealant Movement: 25/25 - % compression/% extension.
 - 6. Service Temperature: -20 to + 180 degrees F.
 - 7. Meets ASTM C920, TT-S-00230C.
- 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