

GENERAL REQUIREMENTS

General

Project Name: Brownell Library – Re-Roofing and Entry Project, Essex Junction, VT

Owner: City of Essex Junction, c/o Harlan Smith, City Offices, 2 Lincoln St. Essex Jct., VT.

Brief Summary: Remove and replace existing roofing; Alternate: Construct new entry canopy and relocate entry.

Project Team:

Architects	Scott + Partners, Inc.
Project Architect	John Alden, AIA
Structural	DuBois & King, Inc., Tim Dall, P.E.
Electrical	DuBois & King, Inc., Alan Gould, P.E.
Mechanical	DuBois & King, Inc., Dave Anderson, P.E.
Environmental	Provided by the Owner's special consultant

Owner's Bidding Method: Advertised Bid based on Drawings & Specs

Bid Documents:

Written Project Specifications
Project Manual including limited technical specifications
Bid Form (Attachment A)

Drawings
See attached drawing package

DIVISION 0 - BIDDING REQUIREMENTS

00 0100 Advertisement to Bidders

1. The City of Essex Junction, hereinafter called the "Owner", invites qualified Contractors to bid on this reroofing and renovation project.
2. Information for bidders and bid forms may be obtained, without charge, at the City Manager's Office or by calling (802) 878-6944.
3. Bids shall be received at the City Manager's Office, 2 Lincoln Street, Essex Junction, Vermont, 05452 no later than 4:00PM on Wednesday, October 5, 2022.
4. Bids will be opened at 9:00AM Thursday, October 6, 2022, at the City Office, 2 Lincoln Street, Essex Junction, Vermont, 05452.
5. Pre-bid Conference will be held on-site on Tuesday, September 27th, 2022 at 9:00am.
6. The Village of Essex Junction Trustees reserves the right at their sole discretion to reject all bids, wholly or in part, to waive any informalities or any irregularities therein, to accept any bid even though it may not be the lowest bid, to call for rebids, to negotiate with any bidder, and to make an award which in its sole and absolute judgment will best serve the Village's interest. The Trustees reserve the right to investigate the financial condition of any bidder to determine his or her ability to assure service throughout the term of the contract. The Village may cancel this bid request in whole or in part when rejection is in the best interest of the Village. Notice of cancellation shall be sent to all vendors solicited.

00 0200 Instructions to Bidders

1. BIDS Qualified bidders are invited to submit bids as indicated above and as published by the City.
2. METHOD OF BIDDING
 - A. Proposals must be submitted on prescribed *Bid Forms* (attached below) or copies thereof.
 - B. Faxed or emailed bids will not be accepted.

3. METHOD OF AWARD

- A. Owner will award Contract on base bid and selected alternates.

4. IRREGULAR BIDS

- A. Bids may be considered irregular or non-responsive and rejected for the following reasons unless otherwise provided by law:
1. If form provided is not used or altered.
2. If there are unauthorized additions, conditional bids or irregularities of any kind which may tend to make bid incomplete, indefinite or ambiguous as to its meaning.
3. If bidder fails to insert alternate prices for all alternates or unit prices.
B. Owner reserves the right to reject any and all bids and to waive irregularities or informalities as may be deemed in the Owner's interest.

5. BID BOND

- A. A Bid Bond will not be required.

6. PERFORMANCE AND PAYMENT BOND

- A. A Performance and Payment Bond will be required in the amount of 100% of the contract amount.
B. Bidders shall show evidence of their ability to obtain a bond. Include a letter from Bonding Agent stating that the bidder has sufficient bonding capacity for this project.

7. BIDDERS QUALIFICATIONS

- A. Bidders shall have been in business for a minimum of 3 years doing work of a similar nature and size.
B. Bidders shall provide a list of three recent similar projects with contact persons and current phone numbers (see Bid Form).

8. INSURANCE

- A. The General Contractor shall carry adequate liability insurance, meeting or exceeding the requirements as established herein. (The Owner shall carry Builder's Risk Insurance).

Table with 2 columns: Type of Coverage, Limits of Liability. Rows include Workers Compensation and Employers Liability (\$300,000 per person), Bodily Injury Liability, Property Damage, and Contractual Liability (\$1,000,000 per Occur, \$2,000,000 Aggregate).

- B. Automobile \$500,000
C. The Bodily Injury Liability and Property Damage Liability insurance above shall be written on a comprehensive form and shall include, but not be limited to, coverage for Premises and Operations, Products and Completed Operations, removal of "XCU" exclusions, and Broad Form Property Damage. The Contractual Insurance shall specifically cover and insure the indemnity set forth above. All of the above-described insurance policies shall contain provisions that the insurance companies will have no right of recovery or subrogation against the Owner.
D. The Owner and the Architect shall be named as "Additional Insured" on the Contractors Insurance Certificate submitted for this project.
E. The Contractor shall submit certificates of insurance prior to beginning work.

9. CONTRACT FORM

- A. A.I.A. document A104 - 2017, *Abbreviated Owner – Contractor Agreement for Projects of Limited Scope*, will be used on this project and is hereby made a part of the Contract Documents.

10. GENERAL CONDITIONS OF THE CONTRACT

- A. Use of A.I.A. document A201 – 2017 General Conditions of the Contract for Construction is hereby made a requirement of the Contract Documents and is made part hereof.

11. SUPPLEMENTAL GENERAL CONDITIONS

- A. Resolution of Disputes: Omit all references to Arbitration, including *AIA A201 Article 4.6 Arbitration* in its entirety. Disputes shall be resolved first by Mediation as outlined in the AIA A201, and secondly, if necessary, through the courts.

00 3000 **Bid Form**

Attached after this document (Attachment A)

00 8500 **Special Project Requirements**

1. This project is on Public Property. No firearms, tobacco, alcohol or illegal substances are permitted on site.
2. This project is tax exempt. The owner will furnish the tax exempt number to the successful contractor.
3. See other requirements in Division 1 and subsequent technical sections.

DIVISION 1 - GENERAL REQUIREMENTS

01 1005 **General Requirements**

1. State and local Building permit and fees paid for by ___ Contractor Owner .
2. Construction schedule: Contractor shall provide a bar chart Schedule outlining proposed work components and schedules and showing coordination with Owner's ongoing activities..
3. Contractors field office not required ___ required
4. Temporary heat, water, power ___ paid by Contractor paid by Owner. Available at the building.
5. Temporary toilets portable toilets ___ designated toilet in building. Locate where directed by the Owner.
6. Construction fence required, Contractor shall secure the work area and protect building users and the public from equipment, staging, lifts and other potential dangerous conditions.
7. Construction photographs or videotapes not required ___ required.
8. See other requirements in Section 01 1000 Summary.
9. Contractor shall comply with state and federal regulations for demolition and renovation activities.
 - Training and certification required on ALL renovation work. In April 22, 2010, a new FEDERAL requirement took affect requiring EPA approved Renovation, Remodeling and Painting (RRP) certifications. The Contractor shall provide the required certifications and EPA-RRP trained staff for this project.
 - Asbestos: Except for the Cement Roof Shingles shown to be removed as part of this project, the building is believed to be free of Asbestos Containing Materials (ACMs) by virtue of previous abatement procedures. See other Division 1 and Technical Sections for a description of the abatement work to be done as part of this project by certified roofers.
 - Lead: The project area is believed to be free of significant Lead Based Paint but may contain some paint with measurable lead content. The EPA now regulates ANY/ALL

renovation work. See requirements for testing of painted surfaces and waste stream analysis/disposal in Section 01 7330; that section includes directions for following the new (4-22-2010) EPA regulations. Note: Contractor Certifications are required.

- At least 10 days prior to the start of any onsite work, the Contractor shall fill out and file all notifications to AHJs including the VT Dept of Health and the EPA (NESHAP). The forms are available at <http://www.healthvermont.gov/enviro/asbestos/asbestosregulatoryprogram.aspx>
 - Other hazardous materials may be discovered in concealed spaces. Follow safety procedures and avoid disturbing any suspect hazardous materials. Notify the Owner's representative at once if any suspect materials are found during the performance of the work. However, the Contractor will be required to sample/test and follow procedures as required by the State.
10. The Owner is not aware of the presence of any other known hazardous materials in the jobsite work area. However, if the Contractor encounters any suspect materials, the Contractor shall not disturb the suspect materials and shall immediately notify the Owner and Architect. The Owner will provide any required testing and treatment/removal as necessary.

Special project requirements:

1. Existing Site Conditions and Restrictions: Public Build. No alcohol, firearms, illegal substances, etc.
2. Owner's use of the premises. Owner will continue to have staff only at the building, however, no members of the public will be allowed to access the building. Note that the building is surrounded by public space or public parking on all sides. The work zone must be established and maintained to provide for the ongoing use of adjacent buildings and parking while providing for public safety and site security. See additional requirements elsewhere in these specifications.
3. Contractor's Use of Premises and Adjacent Facilities: Contractor will have parking and delivery access in the adjacent municipal lot. The contractor will have access to building power and water from this space.
4. Pre-purchased and Pre-ordered Items: none
5. Owner-Furnished and Owner-Installed Items: None.
6. Reuse of existing items: many items related to the existing entry are scheduled to be removed and reinstalled. Items include relatively new storefront doors and sidelights, hardware, door operators, exit lights, people counters and other systems. Contractor shall carefully remove, store, and reinstall these items. Replace any parts damaged during the work. Return all systems to full operation in their new locations.
7. Special Mock-Ups: none.
8. Submittals: submit product data sheets for all new finishes, equipment, electrical fixtures and accessories. Submit color charts where finishes or colors are to be selected.

Allowances

None

Alternates

1. Alternate No. 1 shall include all work associated with relocating the main entry and constructing a new roof canopy.
2. Base bid: roof stays "as is". All roofing replacement work shown on the plan remains included but without the new roof element.

Unit Prices

1. Price for replacing deteriorated roof sheathing, match existing in type, rating and thickness. Assume 5/8" structural plywood. See Bid Form.

Inspection and Testing Requirements

The owner will arrange and pay for air quality testing prior to and after the contract work.

Submittal Form Provide name, address, phone number, submittal information, details of installation and other requirements noted on plans. Allow up to 7 days for review.

DIVISION 2-16: Summary of Work in Technical Sections

DIVISION 2 - SITE WORK

Selective Demolition, Salvage items for reuse, Concrete sidewalk removal, replacement.
See the drawings and Technical Sections following these General Requirements.

DIVISION 3 - CONCRETE

New cast-in-place concrete footings, piers. Sidewalks.
See the drawings and Technical Sections following these General Requirements.

DIVISION 4 – MASONRY

Limited masonry repair and cleaning at existing/new entry work.
New veneer brick column enclosures. Match existing brick.

DIVISION 5 – METALS

New steel columns at new entry. See structural drawings.

DIVISION 6 - WOOD AND PLASTICS

Rough and limited finish carpentry. See drawings.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

New roofing and associated underlayment, flashings and sheet metal.
New gutters by Owner.

DIVISION 8 - DOORS AND WINDOWS

Removal and relocation of existing doors and hardware. See drawings.

DIVISION 9 – FINISHES – See Section 02 4000 - General Architectural Provisions.

New Flooring – limited to new vestibule and side bay affected by entry relocation. See drawings.
Painting – limited to new materials at new entry and affected existing walls, soffits, and trim at new entry modifications.

DIVISION 10 – 14 N/A

DIVISION 15 – MECHANICAL/PLUMBING

Design-Build Mechanical work as necessary to remove and relocate existing baseboard heat at new entry bay. See drawings.

DIVISION 16 - ELECTRICAL

Limited electrical work to relocate existing devices and wiring associated with relocating the entry.
See drawings.

END OF SECTION

**SECTION 02 4000
GENERAL ARCHITECTURAL PROVISIONS**

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Division 1, and all technical specification sections.
- B. Contract Drawings and other Contract Documents.

1.02 SUMMARY

- A. General:

This section includes general system descriptions and requirements for Architectural installations. This work has been designed for bidding and construction under the terms of this bid package.

- B. Architectural Work:

1. General Scope: Provide all labor and materials necessary to furnish a complete and functional product.
2. Architectural Work shown herein has been designed and stamped by a Licensed VT Architect.
3. All fabrication and installation work shall comply with the current editions of the VT Fire and Building Safety Code, current edition (2015).
6. Specific Abbreviations and Definition of Terms
 - a. "Contractor" shall mean the successful Contractor (Prime) awarded the Work.
 - b. "Provide" shall mean the Contractor shall furnish and install complete.
 - c. "Owner" or "Contract Administrator" shall mean the Village of Essex Junction.
 - d. "MEP/FP" shall mean mechanical, electrical, plumbing, and fire protection.

7. **General Requirements:**

The following general Work categories and scopes are required for the Work.

- a. **Existing Conditions:** Contractor shall make a complete survey of the existing building and specific area of work required to assess and deliver the finished product called for in the bid documents.

Provide field confirmation of existing building construction, dimensions, layout, and other conditions affecting delivery of the project.

Not all items to be removed or to remain are noted herein; Contractor is responsible for its own field survey, exiting system discovery, and full coordination with existing conditions.
- b. **Roof Replacement:** This project is primarily a roof replacement project. See drawings and specifications for full Scope.
 - i. Slate roof areas are not in contract except where disturbed by work in adjacent areas. Any repair/adjustment shall be done by a qualified slate roofer. The City has a slate roofer to be contacted as necessary.
 - ii. At all other sloped roof areas: remove the existing asphalt or cement board shingles and underlayment and install new materials as scheduled. During removals, inspect exposed substrate and wood elements. Advise Owner on condition. Be prepared to repair/replace damaged or deteriorated materials. See Bid Form for Unit Pricing. Touch up painting at existing surfaces where disturbed or damaged by the reroofing work.
 - a. Note that the cement shingles have been found to contain asbestos and shall be removed by the Contractor as allowed by Section 6 of the VT Regulations

for Asbestos Control. The Contractor shall be appropriately trained and certified as required by the State. The Owner will provide the appropriate Environmental Consultant to perform oversight and testing before, during and after the removal work to ensure compliance with State requirements.

- iii. At membrane roof areas: Contractor shall remove and replace the existing membrane. Tie into adjacent roofing and existing drain is necessary.

c. ALTERNATE #1 – relocate main entry and add entry canopy

- i. New Entry Canopy: New columns with masonry veneer supporting a wood framed, gabled entry canopy. New trim should match existing in appearance/profile but is called out to use new low maintenance materials, painted. See drawings.
- ii. Existing Walls: A small section of brick wall shall be removed below the window to be relocated. This brick wall shall be replicated below the new window location. New and existing walls in the area of the entry Work shall be repaired and cleaned.
- iii. Fire Caulking: Where new penetrations are created, or existing penetrations are uncovered or disturbed, provide all necessary fire caulking at wall, floor and ceiling penetrations. Provide/maintain required fire barrier ratings for all penetrations.
- iv. Doors and hardware: None except storefront work called out below.
- v. Ceiling assemblies: Examine existing ceiling assemblies and patch/repair to restore integrity, fire-rating if applicable, appearance and finish required. Coordinate with MEP/FP. Infill all abandoned penetrations to match existing assembly conditions as described in the specification section on Cutting and Patching.
- vi. Concrete: New footings, foundations, slabs. Sidewalk replacement. See structural drawings.
- vii. Painting: The Contractor shall paint all new construction and all affected existing construction in the project area. See detailed requirements on the bid drawings and below. Primer and two topcoats on any new or patched surfaces. Touch up at existing with one topcoat.
 - a. Exterior Painting: Paint new entry trim and other existing trim affected by the work. Color and paint type to match existing. Assume 100% Acrylic latex exterior paint. Commercial grade.
 - b. Interior Painting: Repaint entry and side bay area, including soffits with low VOC, 100% acrylic latex paint. Color to match existing.
- viii. Windows/Glazing/Storefront: Intent is to carefully remove and reinstall (3) existing sections of storefront including the entry doors, interior vestibule and one window unit.
- ix. Sealants: See Specification Section 07 9200 Joint Sealants.
- x. Demolition, Cutting and Patching: Limited demolition, cutting and patching is required as part of this project. The intent is to minimize the disruption to the existing building fabric while achieving the project goals. When complete, disturbed floors, walls and ceilings should be repaired or patched to be indistinguishable from surrounding construction. See detailed requirements above and on the drawings. Coordinate with work of all other trades. See Specification Section 02 4110 Cutting and Patching.

1.03 SUBMITTALS

- A. Submit all proposed products to be installed on this job to the Architect for review. Include product data, warranty information, installation instructions, and samples for color selection.
- B. Apply Contractor's stamp on each copy of each submittal, signed or initialed, certifying that the product/submittal is in accordance with the requirements of the Work and Contract Documents.
- C. Architect's acceptance of submittal(s) shall not relieve Contractor of responsibility for any deviation from the requirements of the Contract unless Contractor has informed the Architect, in writing, of such deviation at the time of submission and Architect and Owner has given written acceptance to the specific deviation, nor shall acceptance relieve Contractor from responsibility for errors or omissions in the submittal.
- D. Submit shop drawings and product data grouped to include complete submittals or related systems, products and accessories in a single submittal.
- E. Contractor shall not purchase or install any equipment or material without accepted submittal. Equipment purchased or installed without submittal acceptance by the Owner/Architect is done at the sole financial risk of the Contractor.
- F. Provide "attic stock", left over paint, spare parts and other accessories as indicated the specifications or customary in the trade.
- G. Provide all record drawings, warranties, and O&M Manuals at close of the project.

1.04 REGULATORY REQUIREMENTS

- A. Refer to Division 01 and VT Asbestos regulations noted above.
- B. Coordinate specifically with the Owner on use of the premises, parking lot and building areas. All schedules must be reviewed and accepted by the Owner.

1.05 PROJECT COORDINATION

- A. Coordinate and install work in locations as described for a complete and functioning system.
- B. Proposed rearrangement of work to meet project conditions including changes to work specified in other trades shall be accepted by the Owner before proceeding.
- C. It is the responsibility of the Contractor to coordinate the work of their trade with all other trades prior to the commencement of construction. Where performance standards are indicated, the Contractor shall provide all materials and labor, means and methods to achieve the finish product indicated.

1.06 RECORD DRAWINGS

- A. Submit in accordance with Division 01 Closeout Procedures.
- B. During the progress of the work, the Contractor shall furnish and keep on file at all times a complete and separate set of black or blue line print record documents. Each shall be clearly, neatly and accurately noted, promptly, as the work progresses, all changes, revisions, additions, deletions and deviations from the work. Wherever the work was installed, other than as shown on the Contract Drawings, the changes shall be so noted.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to the project properly identified with names, model numbers, types, grades, compliance labels, and other information needed for identification.
- B. Storage of materials, equipment, etc. as directed by the Owner and/or as described in Division 01.
- C. Demolition: Contractor shall demolish existing materials and systems as shown on the plans or described in the Contract Documents. Contractor shall separate materials for recycling; dispose all debris in a legal manner. See Section 02 4100 Demolition.

1.08 OPERATION AND MAINTENANCE MANUALS

- A. Submit in accordance with Division 01 Closeout Procedures.

1.09 SUBMITTALS AND PRODUCT SUBSTITUTIONS

- A. Submit in accordance with Division 01 Submittal and Substitution Procedures.
- B. SUBSTITUTIONS – Materials shall be as specified herein, except, consideration shall be given to other products that meet or exceed those specified if requested as substitutions. See Division 1 for request requirements.

PART 2 PRODUCTS

2.01 GENERAL

- A. All materials and equipment shall be new and of the best quality and shall conform to standards and carry labels in every case where standards have been established.
- B. To the maximum extent possible, all related components and equipment for any one system shall be the product of a single manufacturer, unless specifically noted otherwise. Contract Administrator or Architect reserves the right to not accept and reject equipment from various manufacturers when acceptable components can be secured from fewer manufacturers and to require that source of materials be unified to the maximum extent possible.

2.02 PAINTING

- A. Clean and paint to match original finish, all items scratched or otherwise damaged. Provide factory touch-up paint for equipment repairs.
- B. Provide all hollow metal components including doors and frames with manufacturers shop primer. Paint final finish coats on all exposed surfaces according to paint schedule above.

PART 3 EXECUTION

3.01 ROUGH-IN

- A. Verify final locations for rough-ins with field measurements and with the requirements of the actual equipment to be connected.

3.02 INSTALLATION

- A. All wall, doors ceilings and other components shall be installed true, level and in the location shown on the Drawings. Precision gauges, laser levels and other industry standard methods shall be used in establishing plumb, straight and square lines.
- B. Equipment shall be erected in a neat and workmanlike manner on the foundations and supports at the locations and elevations shown on the Drawings or approved submittals, unless otherwise directed by the Architect/Contract Administrator during installation.
- C. Furnish, install and protect all necessary guides, anchors and attachment bolts, and all other appurtenances required for the installation of components and systems. These shall be of ample size and strength for the purpose intended.
- D. Anchor new wall installation into existing/new slab areas to prevent movement.

3.06 CLEANING

- A. Protect equipment against mortar, dust, weather, etc., during construction and leave all equipment clean. Wipe down all equipment and remove shipping labels. Sweep the work areas; remove from the premises all debris and unused material and leave premises in a clean and neat condition.

- B. Observe all new materials thoroughly. Repair any items dented, scratched, or otherwise damaged in any manner and paint to match original/final finish. All items so repaired and refinished shall be brought to the attention of the Architect/Engineer for observation and acceptance.

3.07 GUARANTEE

- A. Guarantee all work and equipment installed under this Section of the Specifications against any defects which may occur per Division 01. Guarantee all other work and damage as a result of such defects. Coordinate with the Owner for requirements of guarantee.
- B. Replace any material and equipment prior to final acceptance, which is corroded or otherwise damaged through the failure to properly operate and maintain the installation during construction or testing.
- C. Keep the work in repair and replace any defective materials, equipment or workmanship upon notice from the Contract Administrator for a period of one (1) year from date of acceptance. Where longer warranties are required (e.g. shingles), provide all warranty materials in the Owner's name in the O&M/ closeout submittal documents.
- D. Materials or equipment requiring excessive service during the first year of operation shall be considered defective.

END OF SECTION

**SECTION 004100
BID FORM**

THE PROJECT AND THE PARTIES

1.01 TO:

- A. Owner: City of Essex Junction
- B. Attention: City Manager
- C. 2 Lincoln Hall, Essex Junction, VT 05452

1.02 FOR:

- A. Project: Brownell Library Re-Roofing and New Entry

1.03 DATE: _____ (BIDDER TO ENTER DATE)

1.04 SUBMITTED BY: (BIDDER TO ENTER NAME AND ADDRESS)

- A. Bidder's Full Name _____
 - 1. Address _____
 - 2. City, State, Zip _____

1.05 OFFER

- A. **BASE BID:** Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Bid Documents prepared by Scott + Partners, Inc. for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of:
- B. (words) _____
_____ dollars
(\$ _____), in lawful money of the United States of America.
- C. All applicable federal taxes are included and State of Vermont taxes are included in the Base Bid Sum above and the Bid Alternate below. This municipal project is tax-exempt to the extent allowed by law.
- D. **ALTERNATE NO. 1:** Relocate Main Entry and construct new Entry Canopy. Work includes all trades including demolition, concrete, steel, masonry, carpentry, MEP, and others as indicated on the drawings.
- E. (words) _____
_____ dollars
(\$ _____), in lawful money of the United States of America.

1.06 UNIT PRICES

- A. **Roof Sheathing:** Indicate cost per square foot to replace damaged/wet/deteriorated roof sheathing to match existing (assume 5/8" CDX plywood). \$ _____/SF.
- B. **Running Trim/fascia:** Indicate cost per linear foot to replace damaged/wet/deteriorated wood trim to match existing (assume 3/4" x 6", built-up or multi-layer trim to be measured every 6" increment). \$ _____/LF.

1.07 ACCEPTANCE

- A. This offer shall be open to acceptance and is irrevocable for thirty days from the bid closing date.
- B. If this bid is accepted by Owner within the time period stated above, we will:
 - 1. Execute the Agreement within seven days of receipt of Notice of Award.

1.08 CONTRACT TIME

- A. Roofing replacement is the primary driver for this project and the Owner expects the roof work or the bulk of the roof work to be completed this year, in 2022. Bidders may propose completion date(s) and phasing which they believe will best satisfy the Owner's goals and the construction climate and weather. If awarded the bid, we will:

- B. Complete the Work in [] calendar weeks from Notice to Proceed, or;
- C. Complete the Work in _____ Phase(s), with roofing work completed by _____, and the entire project by _____.

1.09 CHANGES TO THE WORK

- A. When Architect establishes that the method of valuation for Changes in the Work will be net cost plus a percentage fee in accordance with General Conditions, our percentage fee will be:
 - 1. _____ percent overhead and profit on the net cost of our own Work;
 - 2. _____ percent on the cost of work done by any Subcontractor.

1.10 ADDENDA

- A. The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.
 - 1. Addendum # _____ Dated _____.
 - 2. Addendum # _____ Dated _____.

1.11 BID FORM SIGNATURE(S)

- A. (Bidder - print the full name of your firm)
- B. (Authorized signing officer, Title)

END OF SECTION

**SECTION 024100
DEMOLITION**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Selective demolition of building elements for alteration purposes.

1.02 RELATED REQUIREMENTS

- A. General Requirements, General Architectural Provisions.
- B. Section 070150.19 - Preparation for Re-Roofing: Removal of existing roofing, roof insulation, flashing, trim, and accessories.

1.03 REFERENCE STANDARDS

PART 3 EXECUTION

2.01 SCOPE

- A. Remove portions of the work described on the drawings for the purposes of replacing the designated roofing systems.
 - 1. Base Bid involves the roof coverings only and should not disturb other surrounding finishes included painted woodwork. Monitor actual operations carefully and advise the Owner if existing painted surfaces are being impacted. Some are old enough to be a concern for Lead. Compliance with EPA and the Vermont Lead Regulations for Lead Control shall be maintained.
- B. Removal of exterior storefront and entry systems for reinstallation.
- C. Removal of sidewalks to allow for new footings/piers.

2.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Obtain required permits.
 - 2. Comply with applicable requirements of NFPA 241.
 - 3. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
 - 4. Provide, erect, and maintain temporary barriers and security devices.
 - 5. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
 - 6. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
 - 7. Do not close or obstruct roadways or sidewalks without Owner's permission.
 - 8. Coordinate temporary obstruction or closure of building exits with Owner. Allow 2 weeks notice for closures.
- B. Do not begin removal until receipt of notification to proceed from Owner.
- C. Protect existing structures and other elements that are not to be removed.
 - 1. Provide bracing and shoring if required to prevent collapse.
 - 2. Prevent movement or settlement of adjacent structures.
 - 3. Stop work immediately if adjacent structures appear to be in danger.
- D. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
- E. Known hazardous materials are present in the roofing materials scheduled for removal. Perform work in compliance with applicable VT and EPA regulations.

- F. If other suspected hazardous materials are discovered during removal operations, stop work and notify Architect and Owner; hazardous materials include regulated asbestos containing materials, lead, or PCB's.
- G. Perform demolition in a manner that maximizes salvage and recycling of materials.
 - 1. Comply best practices for Waste Management.
 - 2. Dismantle existing construction and separate materials.
 - 3. Set aside reusable, recyclable, and salvageable materials; store and deliver to collection point or point of reuse.
 - 4. Comply with all containment, bagging, transportation and disposal requirements in a safe and legal manner.
 - 5. Provide completed manifest documents showing proper disposal at a certified disposal site to the Owner for their record.

2.03 EXISTING UTILITIES

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner.
- F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.

2.04 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as indicated.
 - 2. Report discrepancies to Architect before disturbing existing installation.
 - 3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Separate areas in which demolition is being conducted from other areas that are still occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions of construction indicated on drawings in locations indicated on drawings.
- C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
 - 1. At roofing removals, remove only as much roofing as can be recovered that day or before inclement weather reaches the site.
 - 2. Keep the building interior dry at all times.
- D. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove items indicated on drawings.
- E. Protect existing work to remain.
 - 1. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 2. Repair adjacent construction and finishes damaged during removal work.
 - 3. Patch as specified for patching new work.

2.05 DEBRIS AND WASTE REMOVAL

- A. Remove debris, waste materials, and trash from the work area daily. Secure waste from access by the public.
- B. Leave site in clean condition, ready for subsequent work.

C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION

**SECTION 070150.19
PREPARATION FOR RE-ROOFING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Partial removal of existing roofing system in preparation for replacement roofing system in designated areas as indicated on drawings.
- B. Removal of existing flashing and counterflashings.
- C. Temporary roofing protection.

1.02 RELATED REQUIREMENTS

- A. Division 1 and 2 which outline general scopes of work.
- B. See Section 07 3113 Asphalt Shingles for re-roofing specification.

1.03 PRICE AND PAYMENT PROCEDURES

- A. See Section 012200 - Unit Prices, for additional unit price requirements.
 - 1. Provide the following work using the unit price method.
 - 2. Repair Existing Roof Wood Decking:
 - a. Basis of Measurement: By square foot.
 - b. Basis of Payment: Includes replacing decking with new material of same thickness.
 - c. Roof sheathing:
 - 1) If, after removal of the existing shingle roofing system (including underlayments), it is determined by the contractor and the architect that the existing plywood deck needs selective repairs or replacement, this unit price will cover the removal of existing deck materials and replacement in kind.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate with affected mechanical and electrical work associated with roof penetrations.
- B. Preinstallation Meeting: Convene one week before starting work of this section.
 - 1. Attendees:
 - a. Architect.
 - b. Contractor.
 - c. Owner.
 - d. Environmental/Abatement engineer
 - e. Abatement contractor- if not done by this contractor.
 - f. New roofing Installer/sub-contractor.
 - 2. Meeting Agenda: Provide agenda to participants prior to meeting in preparation for discussions on the following:
 - a. Removal and installation schedule.
 - b. Necessary preparatory work.
 - c. Protection before, during, and after roofing system installation.
 - d. Removal of existing roofing system.
 - e. Installation of new roofing system.
 - f. Temporary roofing and daily terminations.
 - g. Transitions and connection to and with other work.
 - h. Inspections and testing of installed systems.
- C. Intent: Schedule work to coincide with commencement of installation of new roofing system to minimize time that building is potentially exposed to weather.

1.05 SUBMITTALS

- A. Product Data: Submit for each type of material.
- B. Shop Drawings: Indicate sequence of work, area by area. Coordinate quantity per day and other factors with all involved parties.

1.06 QUALITY ASSURANCE

- A. Materials Removal Company Qualifications: Company specializing in performing work of type specified with at least three years of documented experience.
 - 1. Comply with EPA notification regulations prior to start of roofing removal work.
 - 2. Comply with removal and disposal regulations of local authorities having jurisdiction (AHJ) for each material being removed. Sort and recycle per Waste Management Section.
- B. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of documented experience.
 - 1. When same installer as new roofing system, comply with related requirements of section indicated for new roofing system.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Ensure storage and staging of materials does not exceed static and dynamic load-bearing capacities of roof decking.

1.08 FIELD CONDITIONS

- A. Existing Roofing System: EPDM single-ply roofing - Back entry only.
 - 1. Do not remove existing roofing membrane when weather conditions threaten the integrity of building contents or intended continued occupancy.
- B. Maintain continuous temporary protection prior to and during installation of new roofing systems.
- C. Owner will occupy building areas directly below re-roofing area for limited staff access only. The Public will not be allowed access to the building or site work area. See Division 1.
 - 1. Provide Owner with at least 48 hours written notice of roofing activities that may affect their operations and to allow them to prepare for upcoming activities as necessary.
 - 2. Maintain access of Owner's personnel to at least two exits at all times.

PART 2 PRODUCTS

2.01 COMPONENTS

- A. See the following sections for additional information on components relating to this work:
 - 1. Partial removal of existing roofing system in preparation for new roofing system in designated areas as indicated on drawings, see Section 075100.
 - 2. Remove existing flashing and counterflashings in preparation for replacement of these materials as part of this work, see Section 07 3113 for material requirements.

2.02 MATERIALS

- A. Patching Materials: Provide necessary materials in accordance with requirements of existing roofing system.
- B. Temporary Roofing Protection Materials:
 - 1. Contractor's responsibility to select appropriate materials for temporary protection of roofing areas as determined necessary for this work.

2.03 ACCESSORIES

- A. Fasteners: Type and size as required and compatible with existing and new roofing system to resist local wind uplift.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that EPA paperwork and other notifications have been made. Confirm access to site with Owner. Confirm that protective barriers have been erected to contain the work site.
- B. Verify that existing roof surface is sound and ready for removals to proceed.
- C. Coordinate with abatement engineer and abatement activities not being performed under this contract.

3.02 PREPARATION

- A. Sweep roof surface clean of loose matter.
- B. Remove loose refuse and dispose of properly off-site.

3.03 MATERIAL REMOVAL

- A. Remove only existing roofing materials that can be replaced with new materials the same day.
- B. Remove metal counter flashings where indicated on the drawings. Alert the Architect if additional existing flashings scheduled to remain are deteriorated and cannot be reused.
- C. Remove any damaged insulation and fasteners, cant strips, and blocking.
- D. Remove sheathing paper and underlay.
- E. Repair existing wood deck surface to provide smooth working surface for new roof system.
 - 1. Refer to 012200 - Unit Prices and 012000 - Price and Payment Procedures

3.04 INSTALLATION

- A. Coordinate scope of this work with requirements for installation of new roofing system, see Section 07 3113 for additional requirements.

3.05 FIELD QUALITY CONTROL

- A. Environmental consultant or Inspection firm will identify the approximate limits to material removal and monitor the removal process to ensure compliance with VT requirements.

3.06 PROTECTION

- A. Provide protection of existing roofing system that is not having work performed on it.
- B. Provide temporary protective sheeting over uncovered deck surfaces.
- C. Turn sheeting up and over parapets and curbing. Retain sheeting in position with weights.
- D. Provide for surface drainage from sheeting to existing drainage facilities.

3.07 SCHEDULES

- A. Remove roofing materials at areas indicated on the drawings

END OF SECTION

**SECTION 073113
ASPHALT SHINGLES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Asphalt shingle roofing.
- B. Flexible sheet membranes for eave protection, underlayment, and valley protection.
- C. Associated metal flashings and accessories.

1.02 REFERENCE STANDARDS

- A. ASTM D1970/D1970M - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection 2021.
- B. ASTM D3462/D3462M - Standard Specification for Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules 2019.
- C. ASTM D4586/D4586M - Standard Specification for Asphalt Roof Cement, Asbestos-Free 2007 (Reapproved 2018).
- D. ASTM D7158/D7158M - Standard Test Method for Wind Resistance of Asphalt Shingles (Uplift Force/Uplift Resistance Method) 2020.
- E. ASTM E108 - Standard Test Methods for Fire Tests of Roof Coverings 2020a.
- F. ASTM F1667 - Standard Specification for Driven Fasteners: Nails, Spikes, and Staples 2021.
- G. ICC-ES AC188 - Acceptance Criteria for Roof Underlayments 2012, with Editorial Revision (2015).
- H. SMACNA (ASMM) - Architectural Sheet Metal Manual 2012.

1.03 SUBMITTALS

- A. Product Data: Provide data indicating material characteristics.
- B. Shop Drawings: For metal flashings, indicate specially configured metal flashings.
- C. Samples: Submit two samples of each shingle color indicating color range and finish texture/pattern ; for color selection.
- D. Manufacturer's Installation Instructions: Indicate installation criteria and procedures.
- E. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
- F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project. See Section 02 2400 - General Architectural Provisions.

1.04 QUALITY ASSURANCE

1.05 FIELD CONDITIONS

- A. Do not install shingles or eave protection membrane when surface temperatures are below 45 degrees F.

1.06 WARRANTY

- A. Correct defective work within a 5-year period after Date of Substantial Completion.
- B. Provide limited lifetime manufacturer's warranty.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Asphalt Shingles:
 - 1. Basis of Design: IKO Industries Inc; Cambridge: www.iko.com/#sle.
 - 2. Other acceptable manufacturers:
 - a. Owens Corning Corp: www.owenscorning.com/#sle.
 - b. GAF; Timberline HDZ RS Shingles: www.gaf.com/#sle.

2.02 ASPHALT SHINGLES

- A. Asphalt Shingles: Asphalt-coated glass felt, mineral granule surfaced, complying with ASTM D3462/D3462M.
 - 1. Fire Resistance: Class A, complying with ASTM E108.
 - 2. Algae Resistant.
 - 3. Color: Gray, Slate look

2.03 SHEET MATERIALS

- A. Eave Protection Membrane:
 - 1. Eave Protection Membrane: Self-adhering polymer-modified asphalt sheet complying with ASTM D1970/D1970M; 40 mil total thickness; with strippable treated release paper and polyethylene sheet top surface.
 - 2. Products:
 - a. Grace - Ice and Water Shield, or accepted equal..
- B. Underlayment: Synthetic non-asphaltic sheet, intended by manufacturer for mechanically fastened roofing underlayment without sealed seams.
 - 1. Type: Woven polypropylene with anti-slip polyolefin coating on both sides.
 - 2. Minimum Requirements: Comply with requirements of ICC-ES AC188 for non-self-adhesive sheet.
 - 3. Self Sealability: Passing nail sealability test specified in ASTM D1970/D1970M.
 - 4. Low Temperature Flexibility: Passing test specified in ASTM D1970/D1970M.
 - 5. Water Vapor Permeance: Vapor retarder; maximum of 1 perm, when tested in accordance with ASTM E96/E96M Procedure A (desiccant method).
 - 6. Fasteners: As recommended by manufacturer or building code qualification report or approval.
- C. Flexible Flashing: Self-adhering polymer-modified asphalt sheet complying with ASTM D1970/D1970M; 40 mil total thickness; with strippable treated release paper and polyethylene sheet top surface.

2.04 ACCESSORIES

- A. Roofing Nails: Standard round wire shingle type, galvanized steel, stainless steel, aluminum roofing nails, or copper roofing nails, minimum 3/8-inch head diameter, 12-gauge, 0.109-inch nail shank diameter, 1-1/2 inches long and complying with ASTM F1667.
- B. Other fasteners as recommended by shingle manufacturer.
- C. Asphalt Roof Cement: ASTM D4586/D4586M, asbestos-free.
- D. Plastic Ridge Vents: Extruded plastic with vent openings that do not permit direct water or weather entry; flanged to receive shingles.

2.05 METAL FLASHINGS

- A. Metal Flashings: Provide sheet metal eave edge, gable edge, ridge, ridge vents, open valley flashing, chimney flashing, dormer flashing, and other flashing indicated.
 - 1. Form flashings to profiles indicated on drawings or as contained in the latest edition of SMACMA.
 - 2. Form sections square and accurate to profile, in maximum possible lengths, free from distortion or defects detrimental to appearance or performance.
 - 3. Hem exposed edges of flashings minimum 1/4 inch on underside.
- B. Sheet Metal: Prefinished aluminum, 26-gauge, 0.017-inch minimum thickness; PVC coating, color as selected.
- C. All flashings to conform to SMACMA recommended gauge for use and material type.
- D. Sheet Metal: Copper. 16 oz. or as per the latest edition of SMACMA.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions prior to beginning work.
- B. Verify that roof deck is of sufficient thickness to accept fasteners.
- C. Verify that roof penetrations and plumbing stacks are in place and flashed to deck surface.
- D. Verify deck surfaces are dry, free of ridges, warps, or voids.

3.02 PREPARATION

- A. See Demolition and Section 07 0150.19 - Preparation for Re-Roofing for removal of existing shingles, roof components.
- B. Coordinate with phasing schedule for removal of existing roof coverings and preparation for re-roofing.
- C. Follow underlayment and shingle manufacturer's written instructions for sub-surface/roof preparation.
- D. At areas where eave protection membrane is to be adhered to substrate, fill knot holes and surface cracks with latex filler.
- E. Broom clean deck surfaces before installing underlayment or eave protection.

3.03 INSTALLATION - EAVE PROTECTION MEMBRANE

- A. Install eave protection membrane from eave edge at least 4 feet up-slope beyond interior face of exterior wall, or as shown on drawings.
- B. Install eave protection membrane in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.

3.04 INSTALLATION - UNDERLAYMENT

- A. Underlayment at Roof Slopes Greater than 4:12: Install underlayment perpendicular to slope of roof, with ends and edges weather lapped minimum 4 inches; stagger end laps of each consecutive layer, nail in place, and weather lap minimum 4 inches over eave protection.
- B. Weather lap and seal watertight with roof cement any items projecting through or mounted on roof.

3.05 INSTALLATION - VALLEY PROTECTION

- A. Install valley protection in accordance with SMACNA (ASMM), Detail [____].
- B. At Exposed Valleys: Over eave protection membrane, Install one layer of sheet metal copper flashing, minimum 24 inches wide, centered over open valley and crimped to guide water flow; weather lap joints minimum 2-inch wide band of lap cement along each edge of first layer, press roll roofing into cement, and nail in place minimum 18 inches on center and 1 inch from edges.

3.06 INSTALLATION - METAL FLASHING AND ACCESSORIES

- A. Install flashings in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.
- B. Weather lap metal flashing joints at least 2 inches and seal joints weathertight.
- C. Items Projecting Through or Mounted on Roofing: Flash and seal weathertight with roof cement.

3.07 INSTALLATION - SHINGLES

- A. Install shingles in accordance with manufacturer's instructions manufacturer's instructions and NRCA (RM) applicable requirements.
 - 1. Fasten strip shingles using four nails per strip, or as required by manufacturer and local building code, whichever is greater.
- B. Project first course of shingles 1/2 inch beyond fascia boards.

- C. Extend shingles 1/4 inch beyond face of gable edge fascia boards.
- D. Cap hips with individual shingles, maintaining 5-inch weather exposure, and place to avoid exposed nails.
- E. Coordinate installation of roof-mounted components or work projecting through roof with weathertight placement of counterflashing.
- F. Complete installation to provide weathertight benefits.

3.08 PROTECTION

- A. Do not permit traffic over finished roof surface.

END OF SECTION