

STATE OF NEW HAMPSHIRE
DEPARTMENT OF NATURAL AND CULTURAL RESOURCES
DIVISION OF PARKS AND RECREATION
PLANNING AND DEVELOPMENT SECTION

***METAL AND ASPHALT SHINGLE ROOF REPLACEMENT
CANNON MTN. TRAMWAY SUMMIT BUILDING
260 TRAMWAY DRIVE FRANCONIA, NH 03580***

SPECIFICATIONS

PROJECT # CAP-2139



OCTOBER 15, 2021,

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF NATURAL AND CULTURAL RESOURCES
DIVISION OF PARKS AND RECREATION
PLANNING AND DEVELOPMENT
172 Pembroke Road
Concord, NH 03301
Tel. (603) 271-2606 Fax (603) 271-2629**

SPECIFICATIONS

**METAL & ASPHALT SHINGLE ROOFING REPLACEMENT
CANNON MTN. TRAMWAY SUMMIT BUILDING
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PROJECT # CAP-2139

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STATE OF NEW HAMPSHIRE
DEPARTMENT OF NATURAL AND CULTURAL RESOURCES
DIVISION OF PARKS AND RECREATION
PLANNING AND DEVELOPMENT
172 Pembroke Road
Concord, N.H. 03301
TEL. 603-271-2606 FAX 603-271-2629

NOTICE TO BIDDERS

Project: #CAP-2139 METAL AND ASPHALT SHINGLE ROOFING REPLACEMENT
CANNON MTN. TRAMWAY SUMMIT BUILDING
FRANCONIA, NH 03580

Sealed bid proposals for the above project will be accepted until 2:00 P.M., prevailing time, on Thursday November 18, 2021. Proposals should be mailed to: Attn: Edward Mussey Public Works Project Manager I Department of Natural and Cultural Resources 172 Pembroke Road, Concord, NH 03301.

Specifications will be available to interested contractors at the Planning and Development Office on October 15, 2021. They may also be viewed at the following locations:

- 1.) Construction Summary of New Hampshire Inc. 734 Chestnut Street, Manchester, NH 03104 Tel. (603) 627-8856.
- 2.) Infinite Imaging 933 Islington Street, Portsmouth, NH 03801 Tel. 1-800-581-2712
- 3.) McGraw-Hill Construction Plan Room 34 Crosby Drive Suite 201 Bedford, MA, 03170 Tel. (781) 430-2006
- 4.) Signature Press & Blueprinting, 45 Londonderry Turnpike, Hooksett, NH 03106 Tel. (603) 624-4025
- 5.) Works in Progress, 20 Farrell Street, Suite 103, South Burlington, VT 05403 Tel. 1-800-669-7048
6. New Hampshire Department of Administrative Services Bureau of Purchase and Property Website <https://das.nh.gov/purchasing/index.aspx>
- 7.) New Hampshire State Parks Website <https://www.nhstateparks.org/news-events/improving-state-parks/rfps-projects>

All companies, corporations, and tradenames bidding must be registered and have a certificate of existence from the Secretary of State, Corporate Division <https://quickstart.sos.nh.gov/online/Account/LandingPage> (telephone 603-271-3244) in order to do business with the State of New Hampshire.

All bidders will be required to attend the mandatory pre-bid conference at the Cannon Mtn. Tramway Base Station 260 Tramway Drive Franconia, NH 03580 at 10:00 a.m. sharp, on Tuesday November 2 2021. Promptly at 10:15 AM Bidders will be provided with transportation via the Cannon Mtn. Aerial Tramway to the Cannon Mtn. Tramway Summit Building. Please contact Edward Mussey at 603-271-3973 or by e-mail: Edward.V.Mussey@dnrc.nh.gov prior to the bid conference if you will be attending.

Bid Proposals must be made out on the forms provided in the specifications packet and submitted in a sealed envelope marked: "Bid Proposal": Metal and Asphalt Roofing Replacements Cannon Mtn. Tramway Summit Building Project No. CAP-2139

Edward V Mussey
Public Works Project Manager I

STATE OF NEW HAMPSHIRE
DEPARTMENT OF NATURAL AND CULTURAL RESOURCES
DIVISION OF PARKS AND RECREATION
PLANNING AND DEVELOPMENT
172 Pembroke Road
Concord, N.H. 03301
TEL. 603-271-2606 FAX 603-271-2629

BID PROPOSAL FORM

PROJECT: #CAP-2101

METAL AND ASPHALT SHINGLE ROOFING
REPLACEMENTS CANNON MTN. TRAMWAY SUMMIT
BUILDING FRANCONIA, NH 03580

MANDATORY PRE BID CONFERENCE: November 2, 2021 at 10:00 a.m. Sharp

DATE BID OPENING: November 18, 2021 at 2:00 p.m. Sharp.

START DATE: December 22, 2021

COMPLETION DATE: No later than August 30, 2022

Sealed bid proposals for the above project will be accepted until 2:00 p.m., prevailing time, on November 18, 2021. Bids should be MAILED TO: Attn: Edward Mussey Public Works Project Manager I Department of Natural and Cultural Resources, 172 Pembroke Road, Concord, NH 03301 Please note on the outside of the envelope "Bid Proposal" Metal & Asphalt Roofing Tramway Summit Building. Project No. CAP-2139.

DATE: _____

PROPOSAL OF: _____
(Bidders Name)

(Bidders Address)

TOTAL LUMP SUM OF CONTRACT: _____
(Enter the number from Bid Proposal Page 5)

STATE OF NEW HAMPSHIRE
DEPARTMENT OF NATURAL AND CULTURAL RESOURCES
DIVISION OF PARKS AND RECREATION
PLANNING AND DEVELOPMENT

PROPOSAL

Proposal of...

(Bidders name)

(Bidders address)

To furnish and deliver all materials except as noted and to perform all work in accordance with the Contract of the State of New Hampshire, Department of Natural and Cultural Resources for the construction of...

Project #CAP-2139 Metal & Asphalt Shingle Roofing replacement for the Cannon Mtn. Tramway Summit Building. Franconia, NH 03580

Commissioner
Department of Natural and Cultural Resources
172 Pembroke Road
Concord, N.H. 03301

Commissioner:

In accordance with the advertisement of the Department of NATURAL AND CULTURAL RESOURCES inviting proposals for the project herein before named and in conformity with the Plans and Specifications on file in the office of the Department of Natural and Cultural Resources, _____ (firm name) hereby certifies that _____ is/are the only person, or persons, interested in this proposal as principals; that this proposal is made without collusion with any person, firm, or corporation; that an examination has been made of the Plans, of the Standard Specifications, and Special Attentions, Supplemental Specifications, and Special Provisions, all of which are attached hereto, and also of the site of the work; and I, or we, propose to furnish all necessary machinery, equipment, tools, labor, and other means of construction, and to furnish all materials specified in the manner and at the time prescribed; and understand that the quantities of work as shown herein are approximate only and are subject to increase or decrease, and further understand that all quantities of work are to be performed at the quoted prices.

To execute the form of contract and begin work within 15 (fifteen) days after the notice to proceed has been received or otherwise delivered to the contractor and to prosecute said work until its completion.

It is further proposed:

To furnish a contract bond in the amount of one hundred percent (100%) of the contract award, if the contract award is Seventy-five thousand dollars (\$75,000) or more, as security for the completion of the contract in accordance with the plans and specifications and contract documents. The form of bond shall be that provided for by the Department, and the surety shall be acceptable to the Commissioner. No contract bond shall be required on contract awards of less than Seventy-five thousand dollars (\$75,000).

To guarantee all of the work performed under this contract to be done in accordance with the plans and specifications and contract documents.

The undersigned acknowledges receipt of the following addenda, issued during the bidding time, and states that these have been incorporated in the proposal:

Addendum #1 dated _____

Addendum #2 dated _____

Addendum #3 dated _____

Dated _____

SCHEDULE OF VALUES PROJECT # CAP-2139

BIDDERS MUST INDICATE DOLLAR AMOUNT OF CONTRACT SUM ALLOCATED TO EACH CATEGORY OF WORK AS DESIGNATED BELOW: Failure to Complete This Table May Render your Bid Unresponsive.

Metal and Asphalt Shingle Roof Replacement Tramway Summit Building	
Category	Cost
General Conditions	
Demolition Metal Roof	
Demolition Asphalt Shingle Roof	
Carpentry	
Metal Roof	
Asphalt Shingle roofs	
Chimney repointing	
Stainless Steel Chimney Cap	
Allowance # 1 Unanticipated Modifications and/or additions to contract items	\$50,000
Allowance #2 EPDM Membrane Replacement Allowance	
Enter the Total Lump Sum Including Allowances #1 >	

This Schedule of values must be filled out completely or your bid may not be considered unresponsive.

ALLOWANCE #1: Unanticipated Modification and/or Additions to Contract Items:

Include in the Contract, a stipulated sum/price of **\$50,000** for use upon the Project Managers instruction. This Allowance will make money available for modifications and/or additions to contract items due to owner-initiated changes, or for unknown, latent or differing existing conditions, or for the removal of hazardous materials that are encountered by construction.

- a. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, equipment rental, overhead and profit will be included in Change Orders authorizing expenditure of funds from this Allowance. The cost of the bond for the amount of Allowance shall be included as part of the lump sum base bid.
- b. Funds will be drawn from an Allowance only by Change Order. Contractor can proceed with Change Order Work against Allowance with direction from the Project Manager. The Contractor shall not proceed with any work that will exceed the amount of Allowance remaining.
- c. Credits can only be added to an Allowance by Alteration Order. The Contractor may not use a credit until an Alteration Order is fully executed.
- d. Notwithstanding the Contractors objection, the Project Manager may at any time reduce the funds remaining in the Allowance by Alteration Order.
- e. At Final Payment of the Contract, funds remaining in the Allowance will be credited to the State.

ALLOWANCE #2: EPDM MEMBRANE REPLACEMENT: Include 1540 SF of EPDM Membrane at \$_____per Square foot for a total amount of \$_____. The allowance is to be included in the Lump Sum Bid. The Project Manager will certify the actual amount of EPDM replacement on site. If the amount is less than 1540 square feet the contract price will be reduced at the rate per square foot bid by the contractor. If the Amount is over 1540 square feet the Allowance #2 will be increased and the Allowance #1 shall be decreased and equal amount.

ALLOWANCE #3: EPDM MEMBRANE REPAIR: Include 100 SF of EPDM Membrane repair at \$_____per Square foot for a total amount of \$_____. The allowance is to be included in the Lump Sum Bid. The Project Manager will certify the actual amount of EPDM replacement on site. If the amount is less than 100 square feet the contract price will be reduced at the rate per square foot bid by the contractor. If the Amount is over 100 square feet the Allowance #3 will be increased and the Allowance #1 shall be decreased and equal amount.

Total Lump Sum of Contract (Including All Allowances).....

NOTE: Both Pages of the Schedule of values must be completely filled out in order for the bid proposal to be considered responsive.

SIGNATURE PAGE

Company Name _____

Address _____

Phone _____

Fax _____

Email Address _____

Signature of Authorized Bidder _____

Print _____

Title _____

Address of Bidder _____

(if different than company)

Names and Addresses of Members of the Firm/Corporation

Name _____ address _____

Name _____ address _____

Name _____ address _____

Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS**1. IDENTIFICATION.**

1.1 State Agency Name		1.2 State Agency Address	
1.3 Contractor Name		1.4 Contractor Address	
1.5 Contractor Phone Number	1.6 Account Number	1.7 Completion Date	1.8 Price Limitation
1.9 Contracting Officer for State Agency		1.10 State Agency Telephone Number	
1.11 Contractor Signature Date:		1.12 Name and Title of Contractor Signatory	
1.13 State Agency Signature Date:		1.14 Name and Title of State Agency Signatory	
1.15 Approval by the N.H. Department of Administration, Division of Personnel <i>(if applicable)</i> By: _____ Director, On: _____			
1.16 Approval by the Attorney General (Form, Substance and Execution) <i>(if applicable)</i> By: _____ On: _____			
1.17 Approval by the Governor and Executive Council <i>(if applicable)</i> G&C Item number: _____ G&C Meeting Date: _____			

2. SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT B which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.

3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement as indicated in block 1.17, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.13 ("Effective Date").

3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed. Contractor must complete all Services by the Completion Date specified in block 1.7.

4. CONDITIONAL NATURE OF AGREEMENT.

Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds affected by any state or federal legislative or executive action that reduces, eliminates or otherwise modifies the appropriation or availability of funding for this Agreement and the Scope for Services provided in EXHIBIT B, in whole or in part. In no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to reduce or terminate the Services under this Agreement immediately upon giving the Contractor notice of such reduction or termination. The State shall not be required to transfer funds from any other account or source to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/PAYMENT.

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT C which is incorporated herein by reference.

5.2 The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete

compensation to the Contractor for the Services. The State shall have no liability to the Contractor other than the contract price.

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.

5.4 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/ EQUAL EMPLOYMENT OPPORTUNITY.

6.1 In connection with the performance of the Services, the Contractor shall comply with all applicable statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal employment opportunity laws. In addition, if this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all federal executive orders, rules, regulations and statutes, and with any rules, regulations and guidelines as the State or the United States issue to implement these regulations. The Contractor shall also comply with all applicable intellectual property laws.

6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination.

6.3. The Contractor agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders, and the covenants, terms and conditions of this Agreement.

7. PERSONNEL.

7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.

7.2 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this Agreement. This provision shall survive termination of this Agreement.

7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event of any dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

8. EVENT OF DEFAULT/REMEDIES.

8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"):

8.1.1 failure to perform the Services satisfactorily or on schedule;

8.1.2 failure to submit any report required hereunder; and/or

8.1.3 failure to perform any other covenant, term or condition of this Agreement.

8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely cured, terminate this Agreement, effective two (2) days after giving the Contractor notice of termination;

8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 give the Contractor a written notice specifying the Event of Default and set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or

8.2.4 give the Contractor a written notice specifying the Event of Default, treat the Agreement as breached, terminate the Agreement and pursue any of its remedies at law or in equity, or both.

8.3. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.

9. TERMINATION.

9.1 Notwithstanding paragraph 8, the State may, at its sole discretion, terminate the Agreement for any reason, in whole or in part, by thirty (30) days written notice to the Contractor that the State is exercising its option to terminate the Agreement.

9.2 In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall, at the State's discretion, deliver to the Contracting Officer, not later than fifteen (15) days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. The form, subject matter, content, and number of copies of the Termination Report shall be identical to those of any Final Report described in the attached EXHIBIT B. In addition, at the State's discretion, the Contractor shall, within 15 days of notice of early termination, develop and

submit to the State a Transition Plan for services under the Agreement.

10. DATA/ACCESS/CONFIDENTIALITY/PRESERVATION.

10.1 As used in this Agreement, the word "data" shall mean all information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

10.2 All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

10.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data requires prior written approval of the State.

11. CONTRACTOR'S RELATION TO THE STATE. In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

12. ASSIGNMENT/DELEGATION/SUBCONTRACTS.

12.1 The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written notice, which shall be provided to the State at least fifteen (15) days prior to the assignment, and a written consent of the State. For purposes of this paragraph, a Change of Control shall constitute assignment. "Change of Control" means (a) merger, consolidation, or a transaction or series of related transactions in which a third party, together with its affiliates, becomes the direct or indirect owner of fifty percent (50%) or more of the voting shares or similar equity interests, or combined voting power of the Contractor, or (b) the sale of all or substantially all of the assets of the Contractor.

12.2 None of the Services shall be subcontracted by the Contractor without prior written notice and consent of the State. The State is entitled to copies of all subcontracts and assignment agreements and shall not be bound by any provisions contained in a subcontract or an assignment agreement to which it is not a party.

13. INDEMNIFICATION. Unless otherwise exempted by law, the Contractor shall indemnify and hold harmless the State, its officers and employees, from and against any and all claims, liabilities and costs for any personal injury or property damages, patent or copyright infringement, or other claims asserted against the State, its officers or employees, which arise out of (or which may be claimed to arise out of) the acts or omission of the

Contractor, or subcontractors, including but not limited to the negligence, reckless or intentional conduct. The State shall not be liable for any costs incurred by the Contractor arising under this paragraph 13. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

14. INSURANCE.

14.1 The Contractor shall, at its sole expense, obtain and continuously maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 commercial general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$1,000,000 per occurrence and \$2,000,000 aggregate or excess; and

14.1.2 special cause of loss coverage form covering all property subject to subparagraph 10.2 herein, in an amount not less than 80% of the whole replacement value of the property.

14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than ten (10) days prior to the expiration date of each insurance policy. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference.

15. WORKERS' COMPENSATION.

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A ("*Workers' Compensation*").

15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. The Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

17. AMENDMENT. This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire unless no such approval is required under the circumstances pursuant to State law, rule or policy.

18. CHOICE OF LAW AND FORUM. This Agreement shall be governed, interpreted and construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party. Any actions arising out of this Agreement shall be brought and maintained in New Hampshire Superior Court which shall have exclusive jurisdiction thereof.

19. CONFLICTING TERMS. In the event of a conflict between the terms of this P-37 form (as modified in EXHIBIT A) and/or attachments and amendment thereof, the terms of the P-37 (as modified in EXHIBIT A) shall control.

20. THIRD PARTIES. The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.

21. HEADINGS. The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

22. SPECIAL PROVISIONS. Additional or modifying provisions set forth in the attached EXHIBIT A are incorporated herein by reference.

23. SEVERABILITY. In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

24. ENTIRE AGREEMENT. This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire agreement and understanding between the parties, and supersedes all prior agreements and understandings with respect to the subject matter hereof.

GENERAL CONDITIONS

GENERAL

This contract is to be governed by all the applicable provisions of these specifications.

This project consists of removing existing metal roofing panels and asphalt shingle roofing, installing new Metal Roofing Panels and Asphalt Shingle roofing at the Tramway Summit Building in Franconia, NH 03580, as indicated on the attached plans and these specifications.

BIDDING REQUIREMENTS

Bids shall only be accepted on the official Bid Proposal Forms, attached to these specifications. **Any bids submitted that are not on the official bid proposal forms will not be accepted.**

CONDITIONS AT SITE OR BUILDING

Bidders shall visit the site during the mandatory pre-bid meeting and be responsible for having ascertained pertinent local conditions such as: location, accessibility, general character of the site or building, the character and extent of existing work within or adjacent to the site, and any other work being performed thereon at the time of the submission of this bid.

PERFORMANCE AND PAYMENT BOND

In the event the bid is \$75,000 or more, the contractor shall furnish security by bond or otherwise in an amount equal to 100% of the contract guaranteeing performance and payment. The payment security shall meet the requirements of RSA 447:16. The performance and payment bond must be returned with the signed contract within 15 days after the contract has been mailed or otherwise delivered to the bidder.

PROPOSAL GUARANTEE

A 5% Proposal Guarantee is due at the time of the bid opening. Such **Proposal Guarantee** shall be in the form of a Bid Bond, Irrevocable Letter of Credit, Certified Check or a Cashier's Check, drawn by the Bidder to the "Treasurer State of New Hampshire or Bidders Name".

BUILDING PERMIT REQUIRED

The contractor shall obtain a building permit through the State Fire Marshalls office at their own expense before beginning any new construction work, or any renovations on any State Owned building.

RIGHT TO WORK IN N.H.

All bidders must be registered and have a certificate of existence from the New Hampshire Secretary of State, Corporate Division (telephone 603-271-3244) in order to do business with the State of New Hampshire.

PROPOSAL SELECTION

In most cases the proposal submitted by the qualified bidder with the lowest base bid price shall be selected. However, the Department of Natural and Cultural Resources reserves the right to reject any or all proposals, or advertise for new proposals as it judges to be in the best interest of the state.

CONTRACTORS QUALIFICATIONS

The successful bidder shall provide evidence upon request that they have been in the Roofing business successfully performing this type, scale, and quality of work for a minimum of five years. A comprehensive list of all projects worked on involving Roofing work in the past two years by the contractor shall be submitted with references.

EXECUTION OF CONTRACT

The Contractor's attention is called to the following:

EXECUTION AND APPROVAL OF CONTRACT. The contract shall be signed by the successful Bidder and returned, together with the contract bond, if applicable, within 15 days after the contract has been mailed or otherwise delivered to the Bidder. No contract shall be considered as in effect until it has been fully executed by all the parties thereto and, when the contract amount is more than \$10,000, the award has been concurred in by the Governor and Council.

FAILURE TO EXECUTE CONTRACT. Failure to execute the contract within 15 days after the contract has been mailed or otherwise delivered to the successful Bidder shall be just cause for the cancellation of the award. Award may then be made to the next lowest Bidder, or the work may be re-advertised as the Commissioner may decide.

STARTING DATE

The Contractor shall start work after notice to proceed is received. The notice to proceed shall be issued immediately upon contract approval by the Governor and Council, and shall establish the actual construction start date. Failure to start work within 15 calendar days after the start date shall be considered a default of the contract. If the actual start date is later than the advertised start date, the completion date shall be extended by an equivalent number of working days.

WORKSITE ACCOUNTABILITY

Per RSA 21-I:81-b At the onset of work on any state construction project, the general contractor or designated project construction manager, if any, shall provide to the Department Project Manager a current list of all subcontractors and independent contractors that the general contractor has agreed to use on the job site, with a record of the entity to whom that subcontractor is insured for worker's compensation purposes. This list shall be posted on the jobsite and updated as needed to reflect any new subcontractors or independent contractors.

If it is determined that a subcontractor or independent contractor is present on a state construction site without the contractor's name and direct contracting relationship being posted in a visible location at the worksite, the general contractor or designated project manager shall require the subcontractor or independent contractor to provide the information within 36 hours and to post the information in a visible location at the worksite. If the information is not provided within 36 hours of its request, the general contractor shall suspend the contractor until the information is provided and posted.

PROTECTION OF EXISTING PROPERTY

It shall be the responsibility of the contractor to protect existing property from damage. Any damage caused by the contractor in the performance of the work shall be repaired or replaced at his expense to the satisfaction of the Department Project Manager.

CODES

All work performed shall meet the provisions, if applicable, of the 2015 IBC, and any local codes that may apply.

WORKMANSHIP

All work shall be performed in a neat workmanlike manner by skilled workmen who have been actively engaged in performing the type of work specified under this contract for the last two years.

CLEAN-UP

All debris from the project shall be cleaned up daily and removed from the site at least on a weekly basis. The contractor shall take all necessary precautions to prevent old roofing material, wrappings, shingle pieces, or any other kind of debris from blowing into other surrounding areas.

DEFAULT AND TERMINATION OF CONTRACT

If the Contractor...

- (a) Fails to begin the work under the contract within the time specified in the contract, or
- (b) Fails to perform the work with sufficient workmen and equipment or with sufficient materials to assure the prompt completion of said work, or
- (c) Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or
- (d) Discontinues the prosecution of work, or
- (e) Fails to resume work which has been discontinued, within reasonable time after notice to do so, or
- (f) Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or
- (g) Makes an assignment for the benefit of creditors, or
- (h) For any other cause whatsoever, fails to carry on the work in an acceptable manner...

The Commissioner will give notice in writing to the Contractor of such delay, neglect, or default.

If the Contractor or Surety does not proceed in accordance with the Notice, then the Commissioner will, upon written notification from the Project Manager of the fact of such delay, neglect or default, and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the prosecution of the work out of the hands of the Contractor. The Commissioner may enter into an agreement for the completion of said contract according to the terms and conditions thereof, or use such other methods as in his opinion will be required for the completion of said contract in an acceptable manner.

All extra costs and charges incurred by the Department as a result of such delay, neglect or default, together with the cost of completion of the work under the contract will be deducted from any monies due or which may become due said Contractor. If such expenses exceed the sum which would have been payable under the contract, then the Contractor and the Surety shall be liable and shall pay to the Department, the amount of such excess.

FAILURE TO COMPLETE THE WORK ON TIME

If the Contractor fails to complete all of the work or sections of the Project, within the time specified in the Contract, the sum given in the schedule that follows will be deducted from any money due the Contractor. This deduction will be made, not as a penalty, but as fixed, agreed liquidation damages for inconvenience to the State and for reimbursing the Department the cost of the Administration of the Contract, including engineering and inspection. Should the amount of money otherwise due the Contractor be less than the amount of such liquidated damages, the Contractor and his Surety shall be liable to the State for such deficiency.

Permitting the Contractor to continue and finish the work after the time fixed for its completion, shall in no way obligate the State to waive any of its rights under the Contract.

When the final acceptance has been duly made by the Project Manager, any liquidated damage charges shall end.

The fixed, agreed, liquidated damages shall be assessed in accordance with the following schedule.

<u>ORIGINAL CONTRACT AMOUNT</u>		<u>AMOUNT OF LIQUIDATED DAMAGES</u>
		<u>PER WORKING DAY</u>
From more than:	to and including:	
0.	25,000.	\$ 200.00
25,000.	50,000.	\$ 300.00
50,000.	100,000.	\$ 400.00
100,000.	500,000.	\$ 500.00

SUBSTANTIAL COMPLETION & FINAL INSPECTION

When the work is substantially complete, the Contractor shall submit to the Project Manager, a list of items of work to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all work in accordance with the Contract Documents. On the basis of an inspection by the Project Manager which determines that the work is substantially complete, a Certificate of Substantial Completion shall establish the date of substantial completion and state the responsibilities for any damage to the work and insurance, and fix the time limit within which the Contractor shall complete the items listed herein. Warranties required by the Contract documents shall commence on the date of Substantial Completion unless otherwise provided in the Certificate of Substantial Completion.

If the Contractor fails to proceed to complete the items on the "punch list", then in addition to the corrective measures listed in the Certificate of Substantial Completion, the Commissioner may use the monies still due the Contractor to have such items completed and the Contractor shall lose any claim to the monies used.

Upon written notice that the Work is ready for final inspection and acceptance, the Project manager shall promptly make such inspection, and when he finds the Work acceptable under the Contract documents and the Contract fully performed, a Certificate of Final Payment will be issued.

Final inspection will be made by the Project Manager. Incomplete items necessary to complete the project, shall be completed prior to final payment. The completion date for this project is August 30, 2022.

GUARANTEE OF WORK

- a) Except as otherwise specified, all work shall be guaranteed by the Contractor against defects resulting from the use of inferior materials, equipment or workmanship for two years from the date of substantial completion of the work.
- b) If, within any guarantee period, repairs or changes are required in connection with guaranteed work, which in the opinion of the Project Manager, is rendered necessary as a result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the Contract, the Contractor shall, promptly upon receipt of notice from the Commissioner, and at his own expense:
 - 1) Place in satisfactory condition in every particular, all of such guaranteed work, correct all defects therein, and...
 - 2) Make good all damage to the building or site, or equipment or contents thereof, which in the opinion of the Project Manager, is the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the Contract, and...
 - 3) Make good any work or material, or the equipment and contents of said building or site disturbed in fulfilling any such guarantee.
- c) In any case, wherein fulfilling the requirements of the Contract or of any guarantee, embraced in or required thereby, the Contractor disturbs any work guaranteed under another contract, he shall restore such disturbed work to a condition satisfactory to the Project Manager and guarantee such restored work to the same extent as it was guaranteed under such other contracts.
- d) If the Contractor, after notice, fails to proceed promptly to comply with the terms of the guarantee, the Commissioner may have the defects corrected and the Contractor and his Surety shall be liable for all expense incurred.
- e) All special guarantees applicable to definite parts of the work that may be stipulated in the specifications or other papers forming a part of the Contract shall be subject to the terms of this paragraph during the first year of the life of such special guarantee.

PROSECUTION OF WORK

Upon starting the work within the 15 days set forth by this contract, the Contractor shall prosecute the work a minimum of 8 hours daily per working day until completion, excluding breakdowns or inclement weather. If the Contractor finds it impossible to start the work as stated above, he may make a written request to the Project Manager for an extension of time. Any such request shall be made prior to expiration of the allowable 15 days, and shall contain reasons which the Contractor believes will justify the granting of his request. In his request, the Contractor shall submit his proposed starting date.

CHANGES IN THE WORK

The Project Manager may at any time, by a written order, and without notice to the Sureties, make changes in the Drawings and Specifications and completion date of this contract and within the general scope thereof.

In making any change, the additional cost or credit for the change shall be determined as follows:

- The order shall stipulate the mutually agreed upon lump sum price which shall be added to or deducted from the contract price. The contractor shall furnish an itemized breakdown of the prices used in computing the value of any change that might be ordered.
- If the price change is an addition to the contract price and the work is performed by the general contractor and not a subcontractor, it shall include the contractor's indirect costs as follows: Workmen's Compensation and Employee Liability, Unemployment and Social Security Taxes.
- In addition to the above indirect costs, the general contractor shall be allowed a markup not to exceed ten percent (10%). Said ten percent (10%) shall be all inclusive for overhead, supervision, and profit. In addition to this, an allowance shall be made for performance and payment bond additional premium.
- If the price change is an addition to the contract price and involves the work of the general contractor and subcontractor, the general contractor would be allowed ten percent (10%) on that part of the work performed by him and five percent (5%) on that part of the work performed by the subcontractor. The same percentages shall apply to subcontractors.
- On any change which involves a net credit to the Owner, no allowance for overhead and profit shall be figured.

INSURANCE REQUIREMENTS

No operations under this contract shall commence unless and until certification of insurance attesting to the below listed requirements have been filed with the Commissioner, approved by the Attorney General, and the Contract approved by the Governor and Council and a Notice to Proceed is issued.

Insurance requirements by paragraphs 1-4 below shall be the responsibility of the Prime Contractor. The Prime Contractor, at his discretion, may make similar requests of any subcontractor.

Following is the summary of minimum insurance requirements:

1. Workmen's Compensation Insurance (In accordance with RSA 281-A.)
 - a. Employers' Liability
 - 1.) \$100,000 each accident
 - 2.) \$500,000 Disease-policy limit
 - 3.) \$100,000 Disease-each employee
2. Commercial General Liability Insurance: Occurrence Form Policy: Include full Contractual Liability (see Indemnification Clause 9), Explosion, Collapse, and Underground coverage's:
 - a. Limits of Liability:
 - 1.) \$1,000,000 Each Occurrence Bodily injury & Property Damage.
 - 2.) \$2,000,000 General Aggregate-Include per Project Aggregate Endorsement.
 - 3.) \$2,000,000 Products/Completed Operations Aggregate.
 - 4.) State shall be named as an additional named insured.
3. If blasting and/or demolition is required by the Contract, the Contractor or subcontractor shall obtain the respective coverage for those activities, and shall furnish to the Commissioner a certificate of Insurance evidencing the required coverage's prior to commencement of any operations involving blasting and/or demolition.
4. Owner's Protective Liability coverage for the benefit of the State of New Hampshire Department of NATURAL AND CULTURAL RESOURCES.
 - a. Limits of Liability:
 - 1.) \$2,000,000 Each Occurrence
 - 2.) \$3,000,000 Aggregate
5. Commercial Automobile Liability covering all motor vehicles including owned, hired, borrowed, and non-owned vehicles.
 - a. Limits of Liability:
 - 1.) \$1,000,000 Combined Single Limit for Bodily injury & Property Damage
6. Commercial Umbrella Liability
 - a. Limits of Liability:
 - 1.) \$1,000,000 Each Occurrence
 - 2.) 1,000,000 Aggregate

7. Builder's Risk Insurance (Fire and Extended Coverage):

The Contractor shall insure the work included in the Contract, including extras and change orders, on an "All Risk" basis, on a one hundred percent (100%) completed value basis of the Contract, as modified. Builder's Risk coverage shall include materials located at the Contractor's premises, on-site, in-transit, and at any temporary site. The policy by its own terms or by endorsement shall specifically permit partial or beneficiary occupancy prior to completion or acceptance of the entire work. The policies shall be in the names of the State of New Hampshire Department of Natural and Cultural Resources and the Contractor. The policies shall provide for the inclusion of the names of all other Contractors, Subcontractors, and others employed on the premises as insureds. The policies shall stipulate that the insurance companies shall have no right of subrogation against any Contractors, Subcontractors or other parties employed on the premises.

8. General Insurance Conditions

- a. Each policy shall contain a clause prohibiting cancellation or modifications of the policy earlier than thirty (30) days or ten (10) in cases of non-payment of premium after written notice thereof has been received by the State.

9. Indemnification:

- a. The Contractor shall indemnify, defend, and hold harmless the State of New Hampshire, its Agencies, and its agents and employees from and against any and all claims, liabilities, suits or penalties arising out of (or which may be claimed to arise out of) acts of omissions of the Contractor or subcontractors in the performance of work covered by the Contract. This covenant shall survive the termination of the Contract. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved by the State.

NOTE:

In articles 1 - 14 of the General Conditions references to "the Project Manager" shall be understood to mean the Department Project Manager designated by the Operations, Planning and Project Management office of the New Hampshire Department of Natural and Cultural Resources.

Corporate Resolution

I, _____, hereby certify that I am duly elected Clerk/Secretary/Officer
(Name)
of _____. I hereby certify the following is a true of a vote taken at a
(Name of Corporation)
meeting of the Board of Directors/shareholders, duly called and held on _____, 20____,
at which a quorum of the directors/shareholders were present and voting.

Voted: That _____ (may list more than one person) is duly
(Name and Title)

authorized to enter into contracts or agreements on behalf of _____
(Name of Corporation)

with the State of New Hampshire and any of its agencies and departments and further is
authorized to execute any documents which may in his/her judgement to be desirable or
necessary to affect the purpose of this vote.

I hereby certify that said vote has not been amended or repealed and remains in full force
and effect as the date of the contract to which this certificate is attached. This authority **shall**
remain valid for thirty (30) days from the date of this Corporate Resolution. I further certify
that it is understood the State of New Hampshire will rely on this certificate as evidence the
person(s) listed above currently occupy the positions(s) indicated and that they have full
authority to bind the corporation. To the extent that there are limits on the authority of any listed
individual to bind the corporation in contracts with the State of New Hampshire, all such
limitations are expressly stated herein.

DATED: _____

ATTEST: _____
(Name & Title)

STATE OF _____
COUNTY OF _____

On the ____ day of _____, before me _____,
the undersigned officer personally appeared _____, known to me
or satisfactorily proven to be the person whose name is subscribed to the within instrument and
acknowledged that he/she executed the same for purposes therein contained. In witness whereof,
I hereunto set me hand and official seal:

Justice of the Peace / Notary Public

My Commission Expires:

Corporate Bylaws

I, _____, hereby certify that I am duly elected Clerk/Secretary/Officer
(Name)
of _____. I hereby certify the following is a true copy of the current
(Name of Corporation)
Bylaws or Articles of Incorporation of Corporation and that the Bylaws or Articles of
Incorporation authorize the following officers or positions to bind the Corporation for contractual
obligations _____.
(List officer titles or position)

I further certify that the following individuals currently hold the office or positions
authorized: _____.
(List individuals holding positions authorized)

I hereby certify that it is understood that the State of New Hampshire will rely on this
certificate as evidence the person listed above currently occupies the position indicated and they
have full authority to bind the corporation. This authority **shall remain valid for thirty (30)**
days from the date of this certificate.

DATED: _____

ATTEST: _____
(Name & Title)

STATE OF _____
COUNTY OF _____

On the ____ day of _____, before me _____ the undersigned officer personally
appeared _____, known to me or satisfactorily proven to be the person whose name is
subscribed to the within instrument and acknowledged that he/she executed the same for purposes therein
contained. In witness whereof, I hereunto set me hand and official seal:

Justice of the Peace / Notary Public

My Commission Expires: _____

Limited Partnership or LLC Certificate of Authority

I, _____, hereby certify that I am a Partner, Member or Manager
(Name)
of _____ a limited liability partnership under RSA 304-B, a limited
(Name of Partnership or LLC)
liability professional partnership under RSA 304-D, or a limited liability company under
RSA 304-C.

I certify that _____ is authorized to bind the partnership or LLC. I
(P-37 Signatory)*
further certify that it is understood that the State of New Hampshire will rely on this
certificate as evidence that the person listed above currently occupies the position indicated
and that they have full authority to bind the partnership or LLC and that this authorization
shall remain valid for thirty (30) days from the date of this Corporate Resolution

DATE: _____

ATTEST: _____
(Name)

(Title)

STATE OF _____
COUNTY OF _____

On the ____ day of _____, before me _____, the undersigned officer
personally appeared _____, known to me or satisfactorily proven to be the person
whose name is subscribed to the within instrument and acknowledged that he/she executed the same for
purposes therein contained. In witness whereof, I hereunto set me hand and official seal:

Justice of the Peace / Notary Public

My Commission Expires:

*** Note:** The signatory to this Certificate of Authority and the signatory to the P-37 may not be
the same individual.

Partnership Certification of Authority

I, _____, hereby certify that I am the General Partner
(Name)
of _____ a general partnership under RSA 304-A.
(Name of Partnership)

I certify I am authorized to bind the partnership.

I hereby certify that it is understood that the State of New Hampshire will rely on this certificate as evidence the person listed above currently occupies the position indicated and they have full authority to bind the partnership and the authority has not expired or been revoked. This authority **shall remain valid for thirty (30) days** from the date of this Corporate Resolution.

DATED: _____

ATTEST: _____
(Name & Title)

STATE OF _____
COUNTY OF _____

On the ____ day of _____, before me _____, the undersigned officer personally appeared _____, known to me or satisfactorily proven to be the person whose name is subscribed to the within instrument and acknowledged that he/she executed the same for purposes therein contained. In witness whereof, I hereunto set me hand and official seal:

Justice of the Peace / Notary Public

My Commission Expires:

Sole Proprietor Certification of Authority

I, _____, hereby certify that I am the Sole Proprietor
(Name)
of _____ which is a tradename registered with the Secretary of State
(Name of Business)
under RSA 349. I certify that I am the sole owner of my business and tradename.

I further certify that it is understood that the State of New Hampshire will rely on this certificate as evidence the person listed above currently occupies the position indicated and they have full authority to bind the business. This authority **shall remain valid for thirty (30) days** from the date of this Corporate Resolution.

DATED: _____

ATTEST: _____
(Name & Title)

STATE OF _____
COUNTY OF _____

On the ____ day of _____, before me _____, the undersigned officer personally appeared _____, known to me or satisfactorily proven to be the person whose name is subscribed to the within instrument and acknowledged that he/she executed the same for purposes therein contained. In witness whereof, I hereunto set my hand and official seal:

Justice of the Peace / Notary Public

My Commission Expires: _____

Corporate Resolution

I, _____ hereby certify that I am duly elected Clerk/Secretary/Officer
(Name)
of _____. I hereby certify the following is a true of a vote taken at a
(Name of Corporation)
meeting of the Board of Directors/shareholders duly called and held on _____ 20____,
at which a quorum of the directors/shareholders were present and voting.

Voted: That _____ is duly
(Name and Title)
authorized to enter into contracts on behalf of _____ a limited
(Name of Corporation)
partnership with the _____, State of New Hampshire
(Name of State Agency)
and further is authorized to execute any documents which may in his/her judgement to be
desirable or necessary to affect the purpose of this vote.

I hereby certify that said vote has not been amended or repealed and remains in full force
and affect as the _____, 20____. I further certify that it is understood the State of
New Hampshire will rely on this certificate as evidence the person listed above currently
occupies the position indicated and that they have full authority to bind the corporation and the
corporation as the general partner has full authority to bind the limited partnership to the specific
contract indicated. This authority **shall remain valid for thirty (30) days** from the date of this
Corporate Resolution.

DATED: _____

ATTEST: _____
(Name & Title)

STATE OF _____
COUNTY OF _____

On the ____ day of _____, before me _____, the undersigned officer
personally appeared _____, known to me or satisfactorily proven to be the person whose
name is subscribed to the within instrument and acknowledged that he/she executed the same for purposes
therein contained. In witness whereof, I hereunto set me hand and official seal:

Justice of the Peace / Notary Public

My Commission Expires:



State of New Hampshire
VENDOR APPLICATION

Rev 10/12/20

VENDOR # _____
(Assigned by Purchase & Property)

BUSINESS NAME/ADDRESS LOCATION

Legal Entity Name: _____

Doing Business As Name: _____

Payment Address: _____

City/Town: _____ STATE: _____ ZIP: _____ COUNTRY: _____

Business Address: _____

City/Town: _____ STATE: _____ ZIP: _____ COUNTRY: _____

Telephone #: _____ Cell Phone #: _____ FAX #: _____

Contact Person: _____ Website: _____ E-Mail (Main Office): _____

Electronic Payment Option: Please contact Treasury at ACHProcessing@treasury.state.nh.us or visit their website at <https://www.nh.gov/treasury/state-vendors/index.htm> for further information on this option.

TYPE OF BUSINESS

(Note: Registration with the NH Secretary of State MUST be done prior to the awarding of any contracts) <https://sos.nh.gov/corporation-ucc-securities/corporation/online-business-services/> (603) 271-3244

Registered with NH Secretary of State? YES ☐ NO ☐ State Incorporated In: _____

Service Provider ☐ Product/Merchandise Provider ☐ Other Provider ☐

Select the appropriate designations for your Entity:

Minority Institutions	<input type="checkbox"/>	Minority Owned Large Business	<input type="checkbox"/>	Minority Owned Small Business	<input type="checkbox"/>
Disabled Veteran Business	<input type="checkbox"/>	Svs Disabled Veteran Owned	<input type="checkbox"/>	Veteran Owned Small Business	<input type="checkbox"/>
Physically Challenged Bus	<input type="checkbox"/>	SBA Cert Fin Disadvantaged Bus	<input type="checkbox"/>	SBA Cert Hist Underutilized Bus	<input type="checkbox"/>
Historically Black Colleges	<input type="checkbox"/>	Women Owned Sm Bus	<input type="checkbox"/>	Women Owned Large Businesses	<input type="checkbox"/>
Small Business	<input type="checkbox"/>	SBA Cert Sm Disadvantaged Bus	<input type="checkbox"/>		

SIGNATURE BLOCK

I certify the above information to be correct and grant authorization to the State of New Hampshire to investigate any and all facts contained therein, including facility visitation.

Name and Title (print or type): _____

Signature: _____ Date: _____

RETURN ADDRESS

(Phone) 603-271-2201
(Fax) 603-271-2700
prch.web@das.nh.gov
<http://das.nh.gov/purchasing>

DIVISION OF PROCUREMENT & SUPPORT SERVICES
BUREAU OF PURCHASE AND PROPERTY
STATE HOUSE ANNEX, ROOM 102
25 CAPITOL STREET
CONCORD NH 03301-6398



STATE OF NEW HAMPSHIRE ALTERNATE W-9 FORM

PLEASE USE THIS FORM TO PROVIDE THE REQUESTED INFORMATION

Pursuant to IRS Regulations, you must furnish your Taxpayer Identification Number (TIN) to the State whether or not you are required to file tax returns. If this number is not provided, you may be subject to a 24% withholding on each payment made to you. To avoid this 24% withholding & to ensure that accurate tax information is reported to the IRS, A RESPONSE IS REQUIRED.

Legal Entity Name: _____

Doing Business As Name: _____

Payment Address: _____

City/Town: _____ STATE: _____ ZIP: _____ COUNTRY: _____

Business Address: _____

City/Town: _____ STATE: _____ ZIP: _____ COUNTRY: _____

Telephone #: _____ Cell Phone #: _____ FAX #: _____

Contact Person: _____ Website: _____ E-Mail (Main Office): _____

TAXPAYER IDENTIFICATION NUMBER (TIN) as used on IRS tax return

Social Security # (SSN): _____ Fed ID # (EIN/FIN): _____

PRINCIPAL ACTIVITY

☐ Service Provider ☐ Product/Merchandise Provider ☐ Other Provider

List the principal type of service, product or other that is provided: _____

☐ Medical/Health Care Services ☐ Legal Services ☐ 1099 Grant Reportable

DESIGNATION (select ONLY THOSE which apply to you/your organization as provided to the IRS)

<input type="checkbox"/> Individual/Sole-Proprietor	<input type="checkbox"/> Corporation (S)	<input type="checkbox"/> Government
<input type="checkbox"/> Single Member LLC	<input type="checkbox"/> Corporation (C)	<input type="checkbox"/> Travel/Intern
<input type="checkbox"/> LLC (C Corporation)	<input type="checkbox"/> Partnership	<input type="checkbox"/> Refund/Reimbursement
<input type="checkbox"/> LLC (S Corporation)	<input type="checkbox"/> Estate or Trust	<input type="checkbox"/> Tax-Exempt
<input type="checkbox"/> LLC (P Partnership)		

EXEMPTIONS: _____ Exemption from FATCA reporting: _____

Under penalty of perjury, I declare that the information provided is true, correct & complete, to the best of my knowledge & belief.

NAME & TITLE (print or type): _____

TELEPHONE #: _____ CELL PHONE #: _____ FAX #: _____

SIGNATURE: _____ DATE: _____

E-Mail (Main Office): _____ Website: _____

PLEASE RETURN WHEN COMPLETED TO:

Email: PRCH.WEB@DAS.NH.GOV

(Phone) 603-271-2201

(FAX) 603-271-2700

<http://das.nh.gov/purchasing>

DIVISION OF PROCUREMENT & SUPPORT SERVICES
BUREAU OF PURCHASE & PROPERTY
STATE HOUSE ANNEX - ROOM 102
25 CAPITOL ST
CONCORD NH 03301

APPLICATION AND CERTIFICATE FOR PAYMENT

AIA DOCUMENT G702 PAGE 1 OF 2 PAGES

TO (OWNER):

PROJECT:

APPLICATION NO:

Distribution to:

OWNER

ARCHITECT

CONTRACTOR

FROM:

VIA (ARCHITECT):

Period to:

ARCHITECT'S

PROJECT NO:

CONTRACT DATE:

CONTRACT FOR:

Application is made for Payment, as shown below, in connection with the Contract.
Continuation Sheet, AIA Document G703, is attached.

CONTRACTOR'S APPLICATION FOR PAYMENT

CHANGE ORDER SUMMARY			
Change Orders approved in previous months by Owner		ADDITIONS	DEDUCTIONS
TOTAL		-	
Approved this Month			
Number	Date Approved		
TOTALS		-	
Net change by Change Orders			\$0.00

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By:

Date:

State of:

County of:

Subscribed and sworn to before me this _____ day of _____, 20____

Notary Public:

My Commission expires:

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the contractor is entitled to payment of the AMOUNT CERTIFIED.

AIA DOCUMENT G702 • APPLICATION AND CERTIFICATE FOR PAYMENT • MAY 1983 EDITION • AIA • 1983

THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVENUE, N.W., WASHINGTON, D.C. 20006

AMOUNT CERTIFIED\$

(Attach explanation if amount certified differs from the amount applied for.)

ARCHITECT:

By:

Date:

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract

CONTINUATION SHEET

AIA DOCUMENT G703

PAGE 2 OF 2 PAGES

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing

Contractor's signed Certification is attached.

In tabulations below, amounts are stated to the nearest dollar.

Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NUMBER:

APPLICATION DATE:

PERIOD TO:

ARCHITECTS PROJECT NO:

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D		E WORK COMPLETED THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G		H BALANCE TO FINISH (C - G)	I RETAINAGE
			FROM PREVIOUS APPLICATION (D+E)	WORK COMPLETED THIS PERIOD			TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G÷C)		
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
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CONSTRUCTION SPECIFICATIONS

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SECTION 01010 - GENERAL REQUIREMENTS

PART 1 GENERAL

- 1.1 **RELATED DOCUMENTS:** The general provisions of the contract, including General and Supplementary Conditions, and all Division 1 sections of the specifications apply to the work specified in all sections of the Construction Specifications. The photos, sketches and the specifications together comprise the construction documents. Any note in one shall apply to the other. The contractor shall report any discrepancies between the drawings and specifications to the Project Manager for resolution before proceeding with the work involved.
- 1.2 **SUMMARY OF THE WORK:** The intent of the contract is to provide the State with a new Metal Roof and Asphalt Shingle Roof on the Cannon Mtn. Tramway Summit Building in Franconia NH. The Roof shall be watertight and completely finished. The following work items give a general summary of the extent of the work but are not intended to be a complete itemization of the work.
- a) Repoint field stone masonry chimney from roofline up. Replace all lead flashing and counter flashing. Install stainless steel chimney cap.
 - b) Strip and dispose of all existing metal roof panels and asphalt shingles as indicated on the plans.
 - c) Patch and repair deteriorated sheathing if necessary.
 - d) Replace the fascia, trim and rake boards if necessary.
 - e) Install ice and watershield where required.
 - f) Install drip edges.
 - g) Install MBCI 7.2 Metal Roofing Panels or approved equal.
 - h) Inspect EPDM roofing and repair or replace as required by Project Manager.
 - h) Install Asphalt Shingle roofing system.
 - i) Provide the following Warranties at the completion of the job:
 - 1. 2 Year Installers Warranty.
 - 2. Provide 20 year Metal Roof Manufacturers warranties.
 - 3. Provide Metal Roof Manufacturers Wind Warranty 90 mph.
 - 4. Provide Asphalt shingle manufacturer's warranty (50 year).
- 1.3 **LOCATION:** The Cannon Mtn. Tramway Summit Building is located at the Summit of Cannon Mtn. in Franconia, NH. The mandatory pre-bid meeting will be held outside of the Tramway Base Station. Contractors Must coordinate their work with the Cannon Mtn. Tramway Staff to accommodate materials, demolition materials and personnel to and from the summit via the Aerial Tramway. Construction materials and demolition materials may also be air lifted by helicopter at the contractor's expense.

1.4 ACCESS TO SITE:

General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings and as indicated by requirements of this Section.

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

Access: The construction site is located at approximately 4,000 feet of elevation with no vehicular road access to the summit. Special consideration and coordination with the State Park and its Employees will be necessary to facilitate movement of materials, equipment and manpower from the base station to the mountain station for construction operations.

Access: General access to the site will occur via the Cannon Mountain tramway or utility task vehicle (UTV) access on designated trails. Materials will be conveyed up the mountain, slung below the tramway car and deposited below the mountain station tramway facility, after which they will need to be moved from the drop point to the construction site. Equipment will be conveyed in a similar manner or driven up designated trails with the Owners and Park Managements express written authorization.

Deliveries: Delivery of construction material will be coordinated with Park Management. Deliveries will be timed to limit the amount of time they must be staged at the base of the mountain prior to being conveyed to the summit. Movement of materials to the summit will occur in the mornings no later than 7:00 A.M., and must be coordinated and scheduled with Park Management in advance.

Limits: Confine construction operations to summit area within tight proximity to the building site. Construction activities, staging and material access routes shall be done to limit impact to active hiking trails by the use of construction fencing and barricades.

Trails and Entrances: Keep trails, loading areas and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for equipment parking or storage of materials.

Schedule deliveries to minimize use of tramway and entrances by construction operations. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

1.5 COORDINATION WITH OCCUPANTS

Owner Occupancy: Owner will occupy the premises during the entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.

Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.

1.6 CONTRACTOR'S USE OF SITE AND PREMISES

Time Restrictions for Performing Interior and Exterior Work: Normal working hours of 7:00 am to 5:00 pm, Monday through Friday with the following restrictions:

No access during the following observed holidays:

- a) New Year's Day.
- b) Martin Luther King Jr. Civil Rights Day.
- c) Washington's Birthday.
- d) Memorial Day.
- e) Independence Day.
- f) Labor Day.
- g) Veterans' Day.
- h) Thanksgiving Day.
- i) Day after Thanksgiving.
- j) Christmas Day.

Access for work outside of normal working hours shall be requested in writing to the Project Manager, at least one week in advance. The Project Manager may accept or reject the request.

Access to the Tramway: 7 am to 8 am and 4 pm to 5 pm. The Tramway operates from 8 am to 4 pm daily. The Contractor will use the Tramway when the public is not using it.

Utility Outages and Shutdown: Shall be coordinated with the building users to minimize disruption of services, and may require work to take place outside of normal working hours.

- 1.7 **BUILDING PERMIT REQUIRED:** The Contractor shall obtain a fully executed Building Permit through the NH Division of Fire Safety (State Fire Marshalls) Office <https://www.nh.gov/safety/divisions/firesafety/building/state-building-permit-system.html> and post a copy of the Permit on site before beginning any new construction work or renovation work on any state owned building.
- 1.8 **PUBLIC ACCESS AND PROTECTION:** The grounds around the Buildings will be open to the public and staff during the time the work is in progress. The contractor shall be responsible for roping off or barricading sufficient area around the work site to keep visitors and state personnel safe from construction hazards.
- 1.9 **COORDINATION WITH THE CANNON MTN. MAINTENANCE SUPERVISOR:** The contractor shall coordinate in advance with the Cannon mountain Maintenance Supervisor Mr. George Lemerise. Office Phone No. (603) 823 – 7722 ext. 703 or by e-mail: George.lemerise@dncr.nh.gov to arrange mutually acceptable times for closing off areas normally accessible to the staff and public, and to insure that suitable alternate access is made available.

END OF SECTION 01010

SECTION 01020 - TEMPORARY UTILITIES & JOB CONDITIONS

PART 1 GENERAL

- 1.1 **TEMPORARY FACILITIES AND SERVICES:** The Contractor shall be responsible for arranging and providing temporary facilities necessary to facilitate his work. The location of same shall be coordinated with and approved by the Project Manager and or the Park Manager. All such services and facilities shall comply with applicable Federal, State and Municipal regulations.
- 1.2 **TEMPORARY ELECTRICITY:** Temporary electrical power is not available. The contractor shall provide portable generators and all labor and materials necessary to provide electrical power and lighting for construction purposes.
- 1.3 **FIRE PROTECTION:**
- a) The Contractor shall provide and maintain adequate fire protection in the form of fire extinguishers, or other effective means of extinguishing fire, ready for instant use, distributed around the project sites and in and about temporary inflammable structures during construction of work.
 - b) Gasoline and other flammable liquids shall be stored in and dispensed from UL listed safety containers in conformance with National Board of Fire Underwriters' recommendations. Storage shall not be within any DNCR owned buildings.
 - c) Torch-cutting and welding operations performed by subcontractors shall have approval of the general contractor before such work is started, and a chemical extinguisher shall be available on location where such work is in progress.
 - d) **No Smoking within 25 feet of any State Owned Building.**
 - e) Do not light fires in or about premises.
- 1.4 **PROTECTION OF PROPERTY AND THE PUBLIC:** The Contractor shall construct all fences, barricades and protection facilities required for the protection of the public to the satisfaction of the Project Manager. Furnish and install all signs, lights, reflectors, and all such protection facilities as may be required by the Project Manager.
- Keep all access roads and walks clear of debris, materials, and construction equipment. Repair streets, drives, curbs, sidewalks, fences, poles and the like where disturbed by construction to the satisfaction of the Project Manager.
- 1.5 **TEMPORARY STORAGE:** Delivery and storage locations shall be coordinated with and approved by the Project Manager.
- The contractor shall provide at the site, where directed and maintain in good condition, suitable and substantial weather-tight storage as required for his materials that may be damaged by storage in the open.
- 1.6 **STAGING AND SCAFFOLDING:** Except as otherwise indicated, the Contractor shall

furnish, erect and maintain all staging and scaffolding for use during the work of the project. Staging and scaffolding shall be of approved design, erected and removed by experienced stage builders and shall have all accident prevention devices required by state and local laws.

Above facilities shall be constructed and maintained in accordance with the applicable requirements of local and state authorities and of the Standard Safety Code for Building Construction published by ANSI, and be removed after they have served their purpose.

1.7 **TEMPORARY FIELD OFFICE:** Not Applicable

1.8 **TOILETS:** The Contractor may utilize the Public Restrooms.

1.9 **CONTRACTORS AND SUBCONTRACTORS MEETINGS:** The Project Manager shall have the right to call together at reasonable times designated by him, representatives of the contractor and subcontractors who shall meet at the at the job site, to report as to the condition of the work under their charges, or on any other matters pertinent to the conduct of the work.

Such representatives shall be empowered to make at these meetings, definite decisions binding upon their respective employers, regarding all matters pertaining to the work under this contract.

The Contractor shall furnish the Project Manager in writing, the names, addresses and telephone numbers of subcontractors' personnel to be contacted in the event of an out-of-hours emergency at the building sites.

1.10 **MEASUREMENTS:** Before ordering any material or doing any work, the Contractor shall verify all measurements and shall be responsible for the correctness of same. No extra charge or compensation will be allowed on account of difference between actual dimensions and the measurements indicated on the drawings; any difference which may be found shall be submitted to the Project manager in writing for consideration before proceeding with the work.

Responsibility for work fabricated accurately to field measurements to properly fit the new construction shall be solely that of the contractor, who shall pay all costs involved in correcting any miss-fitting work as fabricated.

1.11 **CUTTING AND PATCHING:** The Contractor shall do all cutting, fitting and patching of his work that may be required to make its several parts come together properly. Expense caused by defective or ill-timed work shall be borne by the contractor. Where field cutting is authorized or directed, provide adequate reinforcement of the weakened area in such form as is approved by the Project Manager.

1.12 **OCCUPATIONAL HEALTH AND SAFETY:** These contract documents, and the construction hereby contemplated shall be governed at all times by applicable provisions of all federal laws, including but not limited to the following:

- a) Williams-Steiger occupational Safety and Health Act of 1970, Public Law 91-596
- b) Part 1910 - Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of

Federal Regulations

- c) Part 1926 - Safety and Health Regulations for Construction , Chapter XIII of Title 29, Code of Federal Regulations

- 1.13 **PARKING:** Space will be allocated at the buildings sites, or in the parking lots to accommodate vehicles, deliveries and limited storage. (additional storage areas may be made available through arrangements with the SCA Program Manager on an as-needed basis).
- 1.14 **CLEANING:** As property under the stewardship of the Division of Parks and Recreation, the grounds surrounding the project site will be open to the public and staff during all or part of the course of the work. Consequently, the sites must be kept clean, safe and presentable to the public. Construction debris shall be picked up at the end of each day's work and removed from the sites on at least a weekly basis. At the conclusion of the project, all scaffolding, barricades, equipment, and debris shall be promptly removed from the sites.

END OF SECTION 01020

SECTION 02080 - SELECTIVE DEMOLITION

PART 1 GENERAL

- 1.1 **DESCRIPTION OF WORK:** This work shall consist of the selective demolition, removal and satisfactory disposal of building components. Scope of the demolition work includes:
- a) Removal of the existing metal roof panels.
 - b) Removal of the existing asphalt shingle roof.
 - c) Inspect for damaged purlins, trusses, nailers etc.. Immediately notify the Project manager of the extent of damage. Replace damaged purlins per the allowance.
 - d) Provide documentation of the areas where purlins are replaced by photographing the full extent of the replacement.
- 1.2 **PROTECTION**
- a) Provide temporary barricades and other forms of protection as required to protect the state's personnel and the general public from injury due to demolition work.
 - b) Protect from damage existing finish work that is to remain.
 - c) Provide temporary weather protection during the interval between demolition and installation of new construction to insure that no further water leakage or damage occurs to the structure or interior areas of the existing building.

(PART 2 : not applicable)

PART 3 EXECUTION

- 3.1 **INSPECTION:** Inspect existing conditions in areas in which work will be performed. Prior to starting work, notify Project Manager of any conditions which could be misconstrued as damage resulting from selective demolition work.
- 3.2 **SALVAGE ITEMS:** Historic artifacts and articles of historic significance remain the property of the State. Notify the Project Manager if such items are encountered and obtain approval regarding method of removal and salvage for the State.
- 3.3 **DISPOSAL OF DEMOLISHED MATERIALS**
- a) Dispose of debris, rubbish, and other materials resulting from demolition operations from the site in compliance with all state and municipal laws.
 - b) If hazardous materials are encountered during demolition operations, notify the project manager immediately and comply with applicable regulations, laws and ordinances concerning removal, handling and protection against exposure or environmental pollution.

3.4 CLEAN-UP AND REPAIR

- a) Upon completion of demolition work, remove tools and equipment. Remove protections and leave areas clean.
- b) Repair demolition performed in excess of that required. Return structures and surfaces to remain to conditions existing prior to commencement of selective demolition work. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.

END OF SECTION 02080

SECTION 06100 - C A R P E N T R Y

PART 1 GENERAL

- 1.1 **DESCRIPTION OF WORK:** Types of work in this section include rough carpentry for:
- a) Miscellaneous wood framing repairs.
 - b) Plywood roof deck over areas indicated on the roofing plan.
 - c) Patching, repairing, replacing and re-securing rake trim and eave trim, if necessary.
- 1.2 **PRODUCT HANDLING**
- a) **Delivery and Storage:** Keep materials under cover and dry. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber and provide for air circulation within and around stacks and under temporary coverings including polyethylene and similar materials.
- 1.3 **COORDINATION:** Fit carpentry work to other work; scribe and cope as required for accurate fit. Coordinate location of furring, nailers, blocking, grounds and similar supports to allow attachment of other work.

PART 2 PRODUCTS

- 2.1 **LUMBER STANDARDS:** Manufacture lumber to comply with PS 20 "American Softwood Lumber Standard" and with applicable grading rules of inspection agencies certified by American Lumber Standards Committee's (ALSC) Board of Review.
- 2.2 Provide seasoned lumber with 19 percent maximum moisture content at time of dressing and shipment for sizes 2" or less in nominal thickness, unless otherwise specified.
- 2.3 **SHEATHING BOARDS:** The design intent is to match the size and type of sheathing that is being replaced. Provide lumber of 19 percent maximum moisture content (S-DRY), and of following species and grade:
- a) No. 2 Eastern White Pine. If existing sheathing boards are rough cut, provide replacement rough cut boards of the same thickness.
- 2.4 **PLYWOOD ROOF DECK:** Install 23/32" RTD Plywood over the area where indicated on the roofing plan.
- 2.5 **FRAMING:** For structural framing (2" to 4" thick, 5" and wider), provide the following grade and species:
- a) Select Structural grade. No. 2 grade minimum.
 - b) Any species of specified grade.

c) Any species and grade which meets or exceeds the following values:

- 1) Fb (minimum extreme fiber stress in bending); 1,100 psi.
- 2) E (minimum modulus of elasticity); 1,300,000 psi.

2.6 **EXPOSED BOARDS:** Where sheathing boards will be exposed, provide the following:

- a) Moisture Content: 19 percent maximum, "S-DRY".
- b) Match width of existing sheathing boards.
- c) Match milling characteristics of existing sheathing boards.
- d) Match wood species of existing sheathing boards.

2.7 **CONCEALED BOARDS:** Where boards will be concealed by other work, provide lumber of 19 percent maximum moisture content (S-DRY), and of the following species and grade:

- a) No. 2 Eastern white pine.
- b) Any species graded Construction Boards per WCLIB or WWPA rules.

2.8 **MISCELLANEOUS LUMBER:** Provide wood for support or attachment of other work including cant strips, bucks, nailers, blocking, furring, and similar members. Provide lumber of sizes indicated, worked into shapes shown, and as follows:

- a) Moisture Content: 19 percent maximum for lumber items not specified to receive wood preservative treatment.
- b) Grade: Standard Grade light framing size lumber of any species or board size lumber as required. No. 3 Common or Standard Grade boards per WCLIB or WWPA rules or No. 3 Boards per SPIB rules.

2.9 **FASCIA, RAKE AND TRIM::** Cellular PVC trimboard.

Acceptable Manufacturers/Products:

1. Edge Building Products, Inc. "Perma Trim"
460 Route 101 –Suite 8
Bedford, NH 03110
Phone: 603-472-7171

2. Vycom Corporation "Azek"
801 Corey Street,
Scranton, PA 18504
Phone: 877-ASK-AZEK (877-275-2935)

- 2.10 **FASTENERS AND ANCHORAGES:** Provide fasteners and anchorages with a hot-dipped zinc coating (ASTM A 153).

PART 3 EXECUTION

3.1 INSTALLATION - GENERAL

- a) Discard units of material with defects which might impair quality of work, and units which are too small to use in fabricating work with minimum joints or optimum joint arrangement.
- b) Set carpentry work to required levels and lines, with members plumb and true and cut and fitted.
- c) Securely attach carpentry work to substrate by anchoring and fastening as shown and as required by recognized standards.

3.2 WOOD FRAMING - GENERAL

- a) Provide framing members of sizes and on spacings shown to comply with recommendations of "Manual for House Framing" of National Forest Products Association (N.F.P.A.). Do not splice structural members between supports.
- b) Anchor and nail to comply with "Recommended Nailing Schedule" of "Manual for House Framing" and "National Design Specifications for Wood Construction" published by N.F.P.A.

3.3 SHEATHING: Make all butt joints over rafters.

3.4 RE-SECURE EAVE AND RAKE TRIM: Where fascias, rake boards, and ornamental brackets have been disturbed in order to remove the deteriorated batten boards or for other reasons re-secure them maintaining the original eave and rake lines as closely as possible. Use hot dipped galvanized nails set below the level of the finished surface. Make tight connections between members. Install fasteners without splitting the PVC trim boards, pre-drill for nails if necessary. Countersink and fill exposed nail heads.

END OF SECTION 06100

SECTION 07311 - ASPHALT SHINGLES

PART 1 GENERAL

- 1.1 **DESCRIPTION OF WORK:** Provide new asphalt shingle roofing over all areas of the roofs as indicated on the plan. The scope of work includes asphalt shingle roofing, related accessories, valleys, ridges, eaves, corners, rakes, miscellaneous flashings and attaching devices.
- 1.2 **QUALITY ASSURANCE**
- a) **UL Listing:** Provide labeled materials which have been tested and listed by UL for Class and Rating indicated for each shingle type required.
- 1.3 **SUBMITTALS**
- a) **Samples:** Submit full range of samples for color and texture selection. After selection, submit 2 full-size shingles for verification of each color/style/texture selected.
- 1.4 **MAINTENANCE STOCK:** At the completion of the job the contractor is to provide 2 Bundles of each type/color/texture shingle used in the work, in original unopened labeled bundles, to the Project Manager.
- 1.5 **DELIVERY, STORAGE AND HANDLING**
- a) Deliver materials in manufacturer's unopened, labeled bundles, rolls or containers.
- b) Store materials to avoid water damage, and store rolled goods on end. Comply with manufacturer's recommendations for job-site storage and protection.
- 1.6 **JOB CONDITIONS**
- a) **Substrate:** Proceed with shingle work only after substrate construction and penetrating work have been completed.
- b) **Weather Conditions:** Proceed with shingle work only when weather conditions are in compliance with manufacturer's recommendations and when substrate is completely dry.
- 1.7 **SPECIFIED PRODUCT WARRANTY:** Provide shingle manufacturer's warranty on installed work, agreeing to pay for repair or replacement of defective shingles as necessary to eliminate leaks. Period of warranty is 50 (Fifty) years from date of substantial completion.
- 1.8 **WIND WARRANTY:** Provide shingle manufactures wind warranty on installed work agreeing to pay for repair or replacement of defective shingles as necessary to eliminate leaks. Wind warranty is (130) Mph.

PART 2 PRODUCTS

2.1 ASPHALT SHINGLE MATERIALS:

a) Laminated fiberglass – asphalt composition shingles shall meet the following standards:

- ASTM D3018 Type I
- ASTM D3462
- ASTM D7158 Class H
- ASTM E108 Class A Fire Resistance
- ASTM D3161 Class F 130 mph wind resistance
- Exposure 5-5/8"
- Bundles/Square ~ 4
- 6 Nails per shingle
- Weight per square min. 235 lbs.

b) Acceptable Products: Products which may be incorporated in the work are limited to the following :

- i. GAF "Timberline UHD Dual Shadow Line in "Charcoal"

2.2 **BITUTHENE UNDERLAYMENT:** Ice and watershield by GCP Applied Technologies Inc., Weather Watch Ice and Water Barrier by GAF-ELK, WinterGuard by CertainTeed, GoldShield Ice and Water Protector by IKO or approved equal.

2.3 **SHINGLE UNDERLAYMENT:** Asphalt impregnated underlayments shall meet the following standards:

- b. ASTM D226 Type II
- c. ASTM D4869 Type II

a) Acceptable Products: Products which may be incorporated in the work include but are not limited to the following :

- i. CertainTeed "Roofers Select"
- ii. GAF "Shingle-Mate"

2.4 **ASPHALT PLASTIC CEMENT:** For use as shingle tab adhesive. Must conform to ASTM D4586 Type I or II.

2.5 **GUNNABLE SEALANT:** Shall be "Black Jack" no. 2172 Tab Seal Cement, SBS modified sealant for sealing down tabs of shingles.

2.6 **NAILS:** Nails are to be hot-dipped galvanized, or corrosion-resistant 10-12 gauge, sharp-pointed, conventional roofing nails with barbed shanks, 3/8" – 7/16" diameter head, and at least 1" in length to penetrate 3/4" into solid decking. Fasteners must be driven flush with the surface of the shingle. Overdriving will damage the shingle. Raised fasteners will

interfere with the sealing of the shingles and can back out. Pneumatic Nail Guns shall use galvanized smooth shank 1 to 1-3/4" 15° coil roofing nails.

- 2.7 **ALUMINUM DRIP EDGE:** At the Rake and Eave edges provide custom aluminum drip edge, brake-formed to provide 5" roof deck flange, and 2+" fascia flange with 3/8" drip at the lower edge. Apply drip edges on top of underlayment along rake edges and directly to the roof deck along the eaves.
- 2.8 **RIDGE CAP SHINGLES:** Incorporate into the work Manufacturers standard ridge cap shingles to match new asphalt shingle work.
 - 1. GAF "Timbertex"

PART 3 EXECUTION

- 3.1 Roofing contractor shall examine substrate and conditions under which shingling work is to be performed and notify Architect in writing of unsatisfactory conditions. Do not proceed with shingling work until unsatisfactory conditions have been corrected.
- 3.2 **PREPARATION OF SUBSTRATE**
 - a) Clean substrate of any projections and substances detrimental to shingling work. Cover knotholes or other minor voids in substrate with sheet metal flashing secured with roofing nails.
 - b) Coordinate installation of shingles with flashing and other adjoining work to ensure proper sequencing. Do not install shingle roofing until all vent stacks and other penetrations through roofing have been installed and are securely fastened against movement.
- 3.3 **GENERAL:** Comply with the instructions and recommendations of shingle manufacturer, except to the extent more stringent requirements are indicated in the contract documents.
- 3.4 **BITUTHENE MEMBRANE:** Install continuous bituthene ice protection underlayment along eaves, (2) 3' wide strips, 18" wide strips around all roof penetrations, and where indicated on the roof plan. Provide 2" side laps and 4" end laps minimum where required.
- 3.5 **ASPHALT IMPREGNATED SHINGLE UNDERLAYMENT:** Apply one layer horizontally over the entire roof deck without wrinkles. Lapping 4" over ice & watershield protection underlayments and side lapping succeeding courses 2" minimum and end lapping 4" minimum, fastening with sufficient nails to hold in place until shingle application.
- 3.6 **SHINGLES:** Install starter shingles as recommended by the manufacturer. Fasten shingles in pattern, weather exposure and number of fasteners per shingle as recommended by manufacturer for high wind conditions. Use "hurricane nailing pattern". Use horizontal and vertical chalk lines to ensure straight coursing.
 - a) Comply with installation details and recommendations of shingle manufacturer and NRCA Steep Roofing Manual.

b) To insure immediate sealing, apply 4 quarter-sized dabs of shingle tab adhesive on the back of the shingle 1" (25mm) and 13" in from each side and 1" up from bottom of the shingle. Press shingle firmly into the adhesive. For maximum wind resistance along rakes, install Starter Strip Shingles with shingle manufacturers sealant or cement shingles to underlayment and each other in a 4" width of asphalt plastic cement. Caution: Apply ONLY a thin uniform layer of asphalt plastic cement less than 1/8" (3mm) thick. Excess amounts can cause blistering of the shingles and may soften the asphalt in certain underlayments, resulting in the asphalt flowing, dripping and staining.

3.7 **HIP AND RIDGE SHINGLES:** Hand Seal using ¼" beads of BASF MasterSeal (formerly Sonolastic) NP1 or Henkel PL Polyurethane Roof & Flashing Cement.

3.8 **FLASHING INSTALLATION:** Where metal flashing is required or indicated install the flashing in full compliance with the details and recommendations of the NRCA Steep Roofing Manual.

END OF SECTION 07311

SECTION 07 41 13 – EXPOSED FASTENER METAL ROOF PANELS

PART 1 GENERAL

1.1 SECTION INCLUDES

Snap joint-seamed, standing seam metal roof panels, with related metal trim and accessories.

1.2 REFERENCES

American Architectural Manufacturer's Association (AAMA): www.aamanet.org:

AAMA 621 - Voluntary Specifications for High Performance Organic Coatings on Coil Coated Architectural Hot Dipped Galvanized (HDG) & Zinc-Aluminum Coated Steel Substrates.

AAMA 809.2 - Voluntary Specification Non-Drying Sealants.

American Society of Civil Engineers (ASCE): www.asce.org/codes-standards:

ASCE 7 - Minimum Design Loads for Buildings and Other Structures.

ASTM International (ASTM): www.astm.org:

ASTM A 653 - Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

ASTM A 755 - Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products.

ASTM A 792/A 792M - Standard Specification for Steel Sheet, 55 % Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.

ASTM A 980 - Standard Specification for Steel, Sheet, Carbon, Ultra High Strength Cold Rolled.

ASTM C 645 - Specification for Nonstructural Steel Framing Members.

ASTM C 920 - Specification for Elastomeric Joint Sealants.

ASTM D 226 - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.

ASTM D 2244 - Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates.

ASTM D 4214 - Test Methods for Evaluating Degree of Chalking of Exterior Paint Films.

ASTM E 1592 - Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference.

ASTM E 1980 - Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.

Underwriters Laboratories, Inc. (UL): www.ul.com:

UL 580 - Tests for Uplift Resistance of Roof Assemblies

1.3 QUALITY ASSURANCE

- a) Manufacturer/Source: Provide metal roof panel assembly and accessories from a single manufacturer providing fixed-base roll forming, and accredited under IAS AC 472 Part B.
- b) Manufacturer Qualifications: Approved manufacturer listed in this Section with minimum five years experience in manufacture of similar products in successful use in similar applications.
- c) Approval of Comparable Products: Submit the following in accordance with project substitution requirements, within time allowed for substitution review:
 - 1. Product data, including certified independent test data indicating compliance with requirements.
 - 2. Samples of each component.
 - 3. Sample submittal from similar project.
 - 4. Project references: Minimum of five installations not less than five years old, with Owner and Architect contact information.
 - 5. Sample warranty.
- d) Substitutions following award of contract are not allowed except as stipulated in Division 01 General Requirements.
- e) Approved manufacturers must meet separate requirements of Submittals Article.
- f) Installer Qualifications: Experienced Installer [certified by metal panel manufacturer] with minimum of five years experience with successfully completed projects of a similar nature and scope.
- g) Installer's Field Supervisor: Experienced mechanic [certified by metal panel manufacturer] supervising work on site whenever work is underway.

1.4 ACTION SUBMITTALS

- a) Product Data: Manufacturer's data sheets for specified products.
- b) Shop Drawings: Show layouts of metal panels. Include details of each condition of installation, panel profiles, and attachment to building. Provide details at a minimum scale 1-1/2-inch per foot showing edge conditions, joints, fastener and sealant placement, flashings, openings, penetrations, roof accessories, lightning arresting equipment, and special details. Make distinctions between factory and field assembled work.
- c) Indicate points of supporting structure that must coordinate with metal panel system installation.

- d) Include data indicating compliance with performance requirements.
- e) Include structural data indicating compliance with requirements of authorities having jurisdiction.
- f) Samples for Initial Selection: For each exposed product specified including sealants. Provide representative color charts of manufacturer's full range of colors.
- g) Samples for Verification: Provide 12-inch- (305 mm-) long section of each metal panel profile. Provide color chip verifying color selection.

1.5 INFORMATIONAL SUBMITTALS

- a) Product Test Reports: Indicating compliance of products with requirements, witnessed by a professional engineer.
- b) Qualification Information: For Installer firm and Installer's field supervisor.
- c) IAS Accreditation Certificate: Indicating that manufacturer is accredited under provisions of IAS AC 472.
- d) **Buy American Certification:** Manufacturers' letters of compliance acceptable to authorities having jurisdiction, indicating that products comply with requirements.
- e) Manufacturer's Warranty: Sample copy of manufacturer's standard warranty.

1.6 CLOSEOUT SUBMITTALS

- a) Maintenance data.
- b) Manufacturer's Warranty: Executed copy of manufacturer's standard warranty.

1.7 DELIVERY, STORAGE, AND HANDLING

- a) Protect products of metal panel system during shipping, handling, and storage to prevent staining, denting, deterioration of components or other damage. Protect panels and trim bundles during shipping.
- b) Deliver, unload, store, and erect metal panel system and accessory items without misshaping panels or exposing panels to surface damage from weather or construction operations.
- c) Store in accordance with Manufacturer's written instructions. Provide wood collars for stacking and handling in the field.

- 1.8 **COORDINATION:** Coordinate sizes, profiles, and locations of roof curbs and other roof-mounted equipment and roof penetrations, based upon sizes of actual selected equipment.
- 1.9 **WARRANTY**
- a) **Special Manufacturer's Warranty:** On manufacturer's standard form, in which manufacturer agrees to repair or replace metal panel assemblies that fail in materials and workmanship within one year from date of Substantial Completion.
 - b) **Special Weathertightness Warranty:** On manufacturer's standard form, in which manufacturer agrees to repair or replace metal panel assemblies that fail to remain weathertight, including leaks, without monetary limitation within 20 years from date of Substantial Completion.
 - c) **Special Panel Finish Warranty:** On Manufacturer's standard form, in which Manufacturer agrees to repair or replace metal panels that evidence deterioration of factory-applied finish within [25] years from date of Substantial Completion, including:
 - d) **Fluoropolymer Two- Coat System:**

Color fading in excess of [10] Hunter units per ASTM D 2244.
Chalking in excess of No. [6] rating per ASTM D 4214.
Failure of adhesion, peeling, checking, or cracking.

PART 2 PRODUCTS

2.1 MANUFACTURER

Basis of Design Manufacturer: **MBCI Metal Roof and Wall Systems, Division of NCI Group, Inc.**; Houston TX. Tel: (877) 713-6224; Email: info@mbci.com; Web: www.mbc.com.

Provide basis of design product, or comparable product approved by Project Manager prior to bid.

2.2 PERFORMANCE REQUIREMENTS

- a) **General:** Provide metal roof panel system meeting performance requirements as determined by application of specified tests by a qualified testing facility on manufacturer's standard assemblies.
- b) **Structural Performance:** Provide metal panel assemblies capable of withstanding the effects of indicated loads and stresses within limits and under conditions indicated:
- c) **Wind Loads:** Determine loads based on uniform pressure, importance factor, exposure category, and basic wind speed indicated on drawings.

Wind Uplift Testing: Certify capacity of metal panels by actual testing of proposed assembly per ASTM E 1592.

- d) **Snow Loads:** 80 lbf/sq. ft.
- e) **Deflection Limits:** Withstand inward and outward wind-load design pressures in accordance with applicable building code with maximum deflection of [1/120] of the span with no evidence of failure.
- f) **Seismic Performance:** Comply with ASCE 7, Section 9, "Earthquake Loads."
- g) **Wind Uplift Resistance:** Comply with UL 580 for wind-uplift class [UL-90].
- h) **Florida State Building Code Compliance:** Comply with requirements of Florida State Building Code. www.floridabuilding.org/pr/pr_app_srch.aspx
- i) **Thermal Movements:** Allow for thermal movements from variations in both ambient and internal temperatures. Accommodate movement of support structure caused by thermal expansion and contraction. Allow for deflection and design for thermal stresses caused by temperature differences from one side of the panel to the other.
- j) **Self-Adhering, High-Temperature Underlayment:** Cold-applied sheet underlayment minimum 30 mils (0.76 mm) thick, consisting of slip-resistant, polyethylene-film top surface laminated to a layer of butyl or SBS-modified asphalt adhesive, with release-paper backing. Provide primer when recommended by underlayment manufacturer for substrate.

2.3 METAL ROOF PANEL MATERIALS:

- a) **Aluminum-Zinc Alloy-Coated Steel Sheet:** ASTM A 792/A 792M, structural quality, Grade 50, Coating Class AZ50 (Grade 340, Coating Class AZM150), prepainted by the coil-coating process per ASTM A 755/A 755M.

2.4 METAL ROOF PANELS

- a) **Tapered-Rib-Profile, Exposed Fastener Metal Roof Panels:** Structural metal roof panel consisting of formed metal sheet with trapezoidal ribs, installed by lapping edges of adjacent panels.

1. **Basis of Design:** MBCI, 7.2 Panel, www.mbc.com/72.html.
2. **Coverage Width:** 36 inches (914 mm).
3. **Continuous Rib Spacing:** 7.2 inches (183 mm) on center.
4. **Rib Height:** 1-1/2 inch (38.1 mm).
5. **Nominal Coated Thickness:** [0.034 inch/22 gage (0.86 mm)].
6. **Yield:** 50,000 PSI
7. **Panel Surface:** [Smooth]

8. Exterior Finish: [Fluoropolymer two-coat system].

9. Color: [Brownstone].

2.5 METAL ROOF PANEL ACCESSORIES

a) General: Provide complete metal roof panel assembly incorporating ridge, eave, rake, valley, and parapet trims, copings, fascias, gutters and downspouts, and miscellaneous flashings, in [manufacturer's standard profiles] [profiles as indicated]. Provide required fasteners, closure strips, support plates, and sealants as indicated in manufacturer's written instructions.

b) Flashing and Trim: Match material, thickness, and finish of metal panel face sheet.

c) Panel Fasteners: Self-tapping screws and other acceptable fasteners recommended by roof panel manufacturer.

Exposed Fasteners: Long life fasteners with EPDM or neoprene gaskets, with heads matching color of metal panels by means of factory-applied coating.

d) Joint Sealers: Manufacturer's standard or recommended liquid and preformed sealers and tapes, and as follows:

1. Tape Sealers: Manufacturer's standard non-curing butyl tape, AAMA 809.2.

2. Concealed Joint Sealantst: Non-curing butyl, AAMA 809.2.

3. Exposed Joint Sealants: Urethane, single component, ASTM C 920.

e) Factory-Applied Seam Sealant: Manufacturer's standard hot-melt type.

f) **Steel Sheet Miscellaneous Framing Components:** ASTM C 645, with ASTM A 653/A 653M, G60 (Z180) hot-dip galvanized zinc coating.

g) **Steel Sheet Miscellaneous Framing Components:** ASTM C 645, with ASTM A 653/A 653M, G60 (Z180) hot-dip galvanized zinc coating.

2.6 FABRICATION

a) General: Provide factory fabricated and finished metal panels and accessories meeting performance requirements, indicated profiles, and structural requirements.

b) Fabricate metal panel joints configured to accept factory-applied sealant providing weathertight seal and preventing metal-to-metal contact and minimizing noise resulting from thermal movement.

c) Form panels in continuous lengths for full length of detailed runs, except where otherwise indicated on approved shop drawings.

d) Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's written instructions, approved shop drawings, and project drawings. Form from materials matching metal panel substrate and finish.

2.7 FINISHES

Finishes, General: Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

Fluoropolymer Two-Coat System: 0.2 – 0.3 mil primer with 0.7 - 0.8 mil 70 percent PVDF fluoropolymer color coat, AAMA 621

Basis of Design: **MBCI, Signature 300.**

Interior Finish: 0.5 mil total dry film thickness consisting of primer coat and wash coat of manufacturer's standard light-colored acrylic or polyester backer finish.

PART 3 EXECUTION

3.1 EXAMINATION

- a) Examine metal panel system substrate and supports with Installer present. Inspect for erection tolerances and other conditions that would adversely affect installation of metal panel installation.
- b) Inspect metal panel support substrate to determine if support components are installed as indicated on approved shop drawings. Confirm presence of acceptable supports at recommended spacing to match installation requirements of metal panels.
- c) Panel Support Tolerances: Confirm that panel supports are within tolerances acceptable to metal panel system manufacturer but not greater than the following:
 - 1/4 inch (6 mm) in 20 foot (6.1 m) in any direction.
 - 3/8 inch (9 mm) over any single roof plane.
- d) Correct out-of-tolerance work and other deficient conditions prior to proceeding with metal roof panel system installation.

3.2 PREPARATION

Miscellaneous Supports: Install subframing, girts, furring, and other miscellaneous panel support members according to ASTM C 754 and manufacturer's written instructions.

3.3 METAL PANEL INSTALLATION

- a. Exposed Fastener Metal Roof Panels: Install weathertight metal panel system in accordance with manufacturer's written instructions, approved shop drawings, and project drawings. Install metal roof panels in orientation, sizes, and locations indicated, free of waves, warps, buckles, fastening stresses, and distortions. Anchor panels and other components securely in place. Provide for thermal and structural movement.
- b. Panel Sealants: Install manufacturer's recommended tape sealant at panel sidelaps and endlaps.

- c. **Panel Fastening:** Attach panels to supports using screws, fasteners, and sealants recommended by manufacturer and indicated on approved shop drawings.
 - 1. Fasten metal panels to supports at each location indicated on approved shop drawings, with spacing and fasteners recommended by manufacturer.
 - 2. Provide weatherproof jacks for pipe and conduit penetrating metal panels of types recommended by manufacturer.
 - 3. **Dissimilar Materials:** Where elements of metal panel system will come into contact with dissimilar materials, treat faces and edges in contact with dissimilar materials as recommended by manufacturer.

3.4 ACCESSORY INSTALLATION

- a) **General:** Install metal panel trim, flashing, and accessories using recommended fasteners and joint sealers, with positive anchorage to building, and with weather tight mounting. Provide for thermal expansion. Coordinate installation with flashings and other components.
- b) Install components required for a complete metal panel assembly, including trim, copings, flashings, sealants, closure strips, and similar items. Comply with details of assemblies utilized to establish compliance with performance requirements and manufacturer's written installation instructions. Provide concealed fasteners except where noted on approved shop drawings. Set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently weather resistant.
- c) **Joint Sealers:** Install joint sealers where indicated and where required for weathertight performance of metal panel assemblies, in accordance with manufacturer's written instructions.
- d) Prepare joints and apply sealants per requirements of Division 07 Section "Joint Sealants." Per metal roof panel manufacture's requirements.

3.5 FIELD QUALITY CONTROL

- a) **Testing Agency:** Contractor Shall Engage an independent testing and inspecting agency acceptable to Project Manager to perform field tests and inspections and to prepare test reports.

3.6 CLEANING AND PROTECTION

Remove temporary protective films immediately in accordance with metal roof panel manufacturer's instructions. Clean finished surfaces as recommended by metal roof panel manufacturer.

Replace damaged panels and accessories that cannot be repaired to the satisfaction of the Architect.

END OF SECTION 074113

SECTION 07500 - EPDM MEMBRANE ROOFING

PART 1 GENERAL

1.1 DESCRIPTION OF WORK:

Carefully Inspect the existing EPDM roofing membrane and repair in kind or if directed by the project manager replace the entire EPDM Membrane roof area with a 75 Mil Reinforced Fully Adhered and Mechanically fastened EPDM Membrane

- a) Install new 75 Mil Reinforced Fully Adhered and Mechanically Fastened EPDM Membrane roofing System, paying particular attention to all seams as necessary to provide a water tight roof.
- b) Provide new EPDM walkpads over the roof areas as indicated on the plans, and in accordance with the EPDM walkpads Manufacturers recommendations.

1.2 QUALITY ASSURANCE

- a) UL Listing: Provide labeled materials which have been tested and listed by UL for Class and Rating indicated for the EPDM roof system required.

1.3 DELIVERY, STORAGE AND HANDLING

- a) Deliver materials in manufacturers unopened, labeled rolls or containers.
- b) Job site storage temperatures in excess of 90°F (32°C) may affect shelf life of curable materials (i.e., uncured flashing, adhesives, sealants, primers, splice tape, pourable sealers and pressure-sensitive flashings) Store material in a cool shaded area.
- c) When liquid adhesives and sealants are exposed to lower temperatures, restore them to 60°F (16°C) before use.
- d) Do not store adhesive containers with open lids due to loss of solvent which occurs from flashoff.
- e) Store materials to avoid water damage and store rolled goods on end. Comply with manufacturer's recommendations for job-site storage and protection.

1.4 JOB CONDITIONS

- a) Weather Conditions: Proceed with EPDM roofing work only when weather conditions are in compliance with manufacturer's recommendations and when substrate is completely dry.

PART 2 PRODUCTS

- 2.1 **EPDM SHEET MEMBRANE MATERIALS:** EPDM fully adhered/mechanically fastened Roofing system .075" (mm) thick, black in color. Reinforced.

2.2 INSULATION/UNDERLAYMENT:

- a). When applicable, insulation shall be installed in multiple layers. The first and second layer of insulation shall be mechanically fastened to the substrate in accordance with the manufacturer's published specifications.
- b). Insulation shall be Polyiso – A foam core insulation board covered on both sides with a medium weight fiber-reinforced felt facer meeting ASTM C 1289-06, Type II, Class 1, Grade 3 (25 psi).

2.2 **OSB COVER BOARD:** Provide 7/16" OSB Coverboard over insulation and mechanically fasten with 32 Fasteners per 4'x 8' sheet.

2.3 **METAL FASTENING BAR:** Provide Metal Fastening Bar Galvalume Coated to mechanically fasten EPDM membrane.

2.4 **TERMINATION BARS:** Provided extruded aluminum bar designed for securing and sealing compression type flashing terminations.

2.5 RELATED MATERIALS:

- a) Bonding adhesive, splice Adhesive, splice cleaner, splicing cement, in-seam sealant, lap sealant, primer, cured EPDM flashing, uncured EPDM flashing, water base adhesive etc... as specified by the EPDM membrane manufacturer are required for use with this roofing system.
- 2.6 Listed below are the materials that may be specified for use in this roof system and the ASTM, Rubber Manufacturers Association (RMA), or other standards to which they should conform.

Reinforced EPDM Sheet Membrane Material ASTM D4637 TYPE II

- a) Available Products: Subject to compliance with requirements, manufacturers products which may be incorporated in the work include, but are not limited to, the following:

1) Carlisle Syntec Inc. "Sure-Tough"

2) Versico Roofing Systems

PART 3 EXECUTION

3.1 Roofing contractor shall examine substrate and conditions under which roofing work is to be performed and notify in writing of unsatisfactory conditions. Do not proceed with roofing work until unsatisfactory conditions have been corrected.

3.2 **GENERAL:** Comply with the instructions and recommendations of EPDM Membrane manufacturer, except to the extent more stringent requirements are indicated in the contract documents.

- a) When feasible, begin the application at the highest point of the highest roof level and work to the lowest point to prevent moisture infiltration and to minimize construction traffic on completed sections. This will include completion of all flashing and terminations.
- b) Follow criteria of manufacturers manual to prepare the roof deck or the substrate prior to the application of the new roofing system. Wet insulation must be removed and replaced.

3.3 PREPARATION OF EXISTING SUBSTRATE:

- a) Substrates for roofing materials shall be dry and free of oil, dirt, grease, sharp edges and debris. Clean substrate of any projections and substances detrimental to EPDM roofing work. Areas with deteriorated decking or wet insulation or other failed materials shall have those affected materials removed and replaced.
- b) Coordinate installation of EPDM membrane with flashing and other adjoining work to ensure proper sequencing.

3.4 EPDM MEMBRANE: Adhesive application quantities, mechanical fasteners spacing, lap dimensions, and other minimum installation requirements vary depending on the manufacturer selected.

- a) Comply with installation details and recommendations of EPDM Membrane manufacturer and NRCA Roofing & Waterproofing Manual.

b) Membrane Placement and Attachment

1. A minimum of one 6-1/2' wide perimeter membrane sheet or 9" wide Pressure-Sensitive RUSS (positioned beneath the field sheets) shall be installed at the perimeter of each roof level and 6-1/2', 8' or 10' wide sheets shall be installed over the field of the roof.
2. Membrane shall be fully adhered to insulation and mechanically fastened with the appropriate Fasteners and Seam Fastening Plates spaced 6" on center, within the membrane splice.
3. Fastening Bars must be used for membrane securement in conjunction with HP-X Fasteners.
4. Overlap adjacent EPDM membrane sheets a minimum of 6 inches at fastener locations (along the length of the membrane sheet) and 3" at end roll sections (the width of the membrane).
5. Membrane Splicing with SecurTAPE (membrane is available with Factory-Applied Tape).
 - a. Apply Sure-Seal Primer to the splice area. When tape is not Factory-Applied, position SecurTAPE onto bottom membrane sheet with the edge of the release film along a line marked 1/2" out from the top sheet.

Press tape onto sheet using hand pressure, overlapping tape roll ends a minimum of 1". Remove the release film and press top sheet onto tape using hand pressure. Roll the splice with a 2" wide steel roller or Carlisle's Stand-Up Seam Roller.

- b. Install a Pressure-Sensitive T-Joint Cover or a 6" wide section of Pressure-Sensitive Elastoform Flashing over all field splice intersections. The use of Lap Sealant with tape splices is required except at tape overlaps and cut edges of reinforced membrane.

3.5 FLASHING AND EDGE PROTECTION: Install new copper flashing, cured elastomeric membrane flashing, uncured elastomeric membrane flashing, vent flashing and drip edge protection as indicated and in compliance with details and recommendations of the NRCA Roofing And Waterproofing Manual.

- a) Flashing seams must be carefully inspected. Unsealed areas, voids, and fishmouths must be repaired. Exposed membrane edges must be finished with a sealant.

END OF SECTION 07500

SECTION 07620 - FLASHING AND SHEET METAL

PART 1 GENERAL

1.1 SUMMARY

a) This section includes the following:

1. Chimney Cap.

PART 2 PRODUCTS

2.1 **STAINLESS STEEL FIXED CHIMNEY CAP:** Stainless Steel fixed chimney Cap Top shall be fabricated with gauge 408 stainless steel. Chimney Cap Base Shall be 20 ounce. Stainless steel. Expanded Stainless steel mesh 5/8" shall be 16 gauge stainless steel.

a) Acceptable Products include but are not limited to:

2. GAF Masterflow Stainless Steel Fixed Chimney Cap

PART 3 EXECUTION

3.1 **GENERAL:** Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations, and with SMACNA "Architectural Sheet Metal Manual". Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints and seams which will be permanently watertight and weatherproof.

3.2 Clean exposed metal surfaces, removing substances which might cause corrosion of metal or deterioration of finishes.

END OF SECTION 07620

**PROJECT: CAP-2139 METAL & ASPHALT SHINGLE ROOFING REPLACEMENTS CANNON MTN
TRAMWAY SUMMIT BUILDING FRANCONIA, NH**

S.5.1

