

**NCDOT Division 3 Castle Hayne  
Traffic Services Building  
Roof Repairs**

5504 Barbados Blvd  
Castle Hayne, NC 28429



Prepared For  
**DEPARTMENT OF TRANSPORTATION**

1 South Wilmington Street  
RALEIGH, NC 27699

SCO#: 21-23718-01A  
GL: 52199012; CC: 150538; WBS#: 51233.01D

Prepared By  
**RAYMOND ENGINEERING-GEORGIA, INC.**  
RALEIGH, NORTH CAROLINA  
C.O.A. C-4282

License #: 53143 RAYMOND ENGINEERING PROJECT NO. RAL1004.022



**April 19th, 2022  
Pricing Set**



Jason Mobraten, RA, RRC, REWC, LEED AP

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**DIVISION 0**  
**PROCUREMENT AND CONTRACTING REQUIREMENTS**

# STATE OF NORTH CAROLINA STANDARD FORM OF INFORMAL CONTRACT AND GENERAL CONDITIONS

FOR

NCDOT Division 3 Castle Hayne Traffic Services Building (Roof Repairs)  
North Carolina Department of Transportation  
5504 Barbados Blvd  
Castle Hayne, NC 28429  
phone # 910-341-2200; fax # 910-602-7079

GL: 52199012

Cost Center: 150538

WBS#: 51233.01D

SCO ID#: 21-23718-01A

## SCOPE OF WORK

The project involves roof repairs to the existing standing seam metal roof on the NCDOT Division 3 Castle Hayne Traffic Services building that were identified in a previous investigation. The project will involve replacing missing and damaged sealants, replacing fasteners, removing the existing metal roof hip and ridge panels, sealing existing penetrations within the assembly, and reinstalling the hip and ridge panels and applying a sealant. Alternates in the project include using a silicone coating in lieu of sealant on the exposed visible surfaces of the roof areas that require the repairs. Other alternates include repairs to copings using sealant, wall panels and masonry cleaning in select areas.

## NOTICE TO BIDDERS

Sealed bid for this work will be received by:

Mark D. Gibson RA  
Architect  
Facilities Management Unit  
North Carolina Department of Transportation  
1 South Wilmington Street, 27601  
Raleigh, NC 27699-1557  
Office: 919-707-4550

up to 2:00 PM, on 6/2/2022 and immediately thereafter publicly opened and read aloud.  
Complete electronic plans and specification and contract documents can be obtained from

Mark D. Gibson RA  
Architect  
Facilities Management Unit  
North Carolina Department of Transportation  
1 South Wilmington Street, 27601  
Raleigh, NC 27699-1557  
Office: 919-707-4550  
Email: mdgibson1@ncdot.gov

Contractors are hereby notified that they must have proper license under the State laws governing their respective trades and that North Carolina General Statute 87 will be observed in receiving and awarding contracts. General Contractors must have general license classification for S-Roofing.

No bid may be withdrawn after the opening of bids for a period of 30 days. The Owner reserves the right to reject any or all bids and waive informalities. Bids shall be made only on the BID/ACCEPTANCE form provided herein with all blank spaces for bids properly filled in and all signatures properly executed.

Please note on the envelope – **Bid: Attn:**

Mark D. Gibson RA  
Architect  
Facilities Management Unit  
State of North Carolina Department of Transportation  
1 South Wilmington Street, 27601  
Raleigh, NC 27699-1557

GL: 52199012      Cost Center: 150538      WBS#: 51233.01D  
SCO ID#: 21-23718-01 Day, Date, at 2:00 PM

(Contractor)  
(License Number)

A **mandatory** pre-bid meeting will be held at project site, **5504 Barbados Blvd, Castle Hayne, NC 28429** at **Thursday, 5/5 at 2:00 PM**. The meeting will address project specific questions, issues, bidding procedures and bid forms.

Each proposal shall be accompanied by the appropriate Minority Business Forms.

**SILICONE COATING MANUFACTURER'S CERTIFICATE**  
**for**  
**NCDOT Division 3 Castle Hayne Traffic Services Building**

TO: The State of North Carolina  
Through the North Carolina Department of Transportation

The undersigned manufacturer of the specified roof system and related roof system materials is familiar with local weather and climate; is aware of the current interior and exterior environmental conditions to which the roof coating and related roof system materials will be subjected; has reviewed the plans and technical specifications for this project; and hereby certifies that:

- (1) their roof system(s) and component materials are suitable for the roofs of this project,
- (2) their roof coating and related roof system materials are suitable for use with each other and that the new roof coating and new roof system materials specified will be included in the coating manufacturer's warranty, as part of alternate 9, as specified (see specification section 01 78 36),
- (3) the roofing contractor named below is an authorized applicator of their roof system and related roof system materials, has been trained by the manufacturer in the installation of the roof system specified and, subject to the Owner's award of construction contract, is authorized to install said system,
- (4) the roof coating manufacturer will provide bi-weekly inspection and additional training (if needed) to the roofing contractor until completion of the roof system.

Contractor:

\_\_\_\_\_ Name

\_\_\_\_\_ Address

Manufacturer:

\_\_\_\_\_ Name

\_\_\_\_\_ Address

\_\_\_\_\_ Authorized Signature

\_\_\_\_\_ Date

# BID/ACCEPTANCE FORM

for

State of North Carolina Department of Transportation  
1 South Wilmington Street, 27601  
Raleigh, NC 27699-1557

We are in receipt of Addendum \_\_\_\_\_ 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3

The undersigned, as bidder, proposes and agrees if this bid is accepted to contract with the State of North Carolina through the North Carolina Department of Transportation for the furnishing of all materials, equipment, and labor necessary to complete the construction of the work described in these documents in full and complete accordance with plans, specifications, and contract documents, and to the full and entire satisfaction of the State of North Carolina and the North Carolina Department of Transportation for the sum of:

**BASE BID:** \_\_\_\_\_

**TOTAL BASE BID)** \_\_\_\_\_

\_\_\_\_\_

Dollars (\$) \_\_\_\_\_ )

**ALTERNATES:** \_\_\_\_\_

Should any of these alternates as described in the contract documents be accepted, the amount written shall be the amount to be "added to" or "deducted from" the base bid.

**Alternate 1A:** Coating and Sealant repair work associated with the hip and ridge of the standing seam metal roof.

(Add) \_\_\_\_\_ Dollars (\$) \_\_\_\_\_

**Alternate 1B:** NOT USED

**Alternate 2A:** Sealant repair work associated with the hip and ridge of the standing seam metal roofs.

(Add) \_\_\_\_\_ Dollars (\$) \_\_\_\_\_

**Alternate 2B:** Coating and Sealant repair work associated with the hip and ridge of the standing seam metal roofs.

(Add) \_\_\_\_\_ Dollars (\$) \_\_\_\_\_

**Alternate 3:** NOT USED

**Alternate 4:** Review existing standing seam metal roof seams, apply coating on damaged seams, allowance of 800LF.

(Add) \_\_\_\_\_ Dollars (\$) \_\_\_\_\_

**Alternate 5:** Secure loose metal wall panels and seal penetrations, allowance of 50 SF per location, 2 locations.

(Add) \_\_\_\_\_ Dollars (\$) \_\_\_\_\_

**Alternate 6:** NOT USED

**Alternate 7:** Clean masonry at select locations as indicated on roof plan. 2 Locations total, Allowance of 200SF at one location and 100SF at the other location.

(Add) \_\_\_\_\_ Dollars (\$) \_\_\_\_\_

**Alternate 8:** NOT USED

**Alternate 9:** Install coating on roof in its entirety to achieve a 10 year no dollar limit warranty.

(Add) \_\_\_\_\_ Dollars (\$) \_\_\_\_\_

**UNIT PRICES**

This work is being bid based upon the Contractor's lump sum prices, unit prices, and the quantity allowance amounts noted. Unit prices quoted and accepted shall apply throughout the life of the contract, except as otherwise specifically noted. Unit prices shall be applied, as appropriate, to compute the total value of changes in the base bid quantity of the work all in accordance with the contract documents.

(Alternate 4) Apply coating on damaged metal standing seams \$ \_\_\_\_\_ / s.f. (UP#2) .....= \$ \_\_\_\_\_

(Alternate 5) Secure loose metal wall panels and seal penetrations \$ \_\_\_\_\_ / s.f. (UP#3) .....= \$ \_\_\_\_\_

(Alternate 7) Clean masonry at select locations as indicated on roof plan \$ \_\_\_\_\_ / s.f. (UP#4) .....= \$ \_\_\_\_\_

In the event of a discrepancy in the mathematical extensions of unit prices, the extended price shall be corrected per the unit price shown. In the event of a discrepancy in the addition of extended and lump sum prices, the subtotal shall be corrected based on the extended and lump sum prices shown.



Respectively submitted this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

*(Contractor's Name)*

Federal ID#: \_\_\_\_\_

By: \_\_\_\_\_

Witness: \_\_\_\_\_

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

*(Owner, partner, corp. Pres. Or Vice President)*

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

*(Proprietorship or Partnership)*

Attest: *(corporation)*

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

*(Corporate Seal)*

By: \_\_\_\_\_ License #: \_\_\_\_\_

Title: \_\_\_\_\_  
*(Corporation, Secretary./Ass't Secretary.)*

**ACCEPTED by the STATE OF NORTH CAROLINA**  
through the \_\_\_\_\_ Department of Transportation \_\_\_\_\_

Total amount accepted by the owner, including base bid and bid alternates: \_\_\_\_\_

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

# GENERAL CONDITIONS

## 1. GENERAL

It is understood and agreed that by submitting a bid that the Contractor has examined these contract documents, drawings and specifications and has visited the site of the Work, and has satisfied himself relative to the Work to be performed.

## 2. DEFINITIONS

**Owner:** "Owner" shall mean, The State of North Carolina through the Department of Transportation.

**Contractor:** "Contractor" shall mean the entity that will provide the services for the Owner.

**Designer:** The **designer(s)** are those referred to within this contract, or their authorized representatives. The Designer(s), as referred to herein, shall mean architect and/or engineer responsible for preparing the project plans and specifications. They will be referred to hereinafter as if each were of the singular number, masculine gender.

**Contract Documents:** "Contract Documents" shall consist of the Notice to Bidders; General Conditions of the Contract; special conditions if applicable; Supplementary General Conditions; the drawing and specifications, including all bulletins, addenda or other modifications of the drawings and specifications incorporated into the documents prior to their execution; the bid; the contract; the performance bond if applicable; and insurance certificates. All of these items together form the contract.

## INTENT AND EXECUTION OF DOCUMENTS

The drawings and specifications are complementary, one to the other. That which is shown on the drawings or called for in the specifications shall be as binding as if it were both called for and shown. The intent of the drawings and specifications is to establish the scope of all labor, materials, transportation, equipment, and any and all other things necessary to provide a complete job. In case of discrepancy or disagreement in the Contract Documents, the order of precedence shall be: Form of Contract, specifications, large-scale detail drawings, small-scale drawings.

In such cases where the nature of the work requires clarification by the Designer/ Owner, the Designer/ Owner shall furnish such clarification. Clarifications and drawings shall be consistent with the intent of the Contract Documents, and shall become a part thereof.

## 4. AS-BUILT MARKED-UP CONSTRUCTION DOCUMENTS

Contractor shall provide one complete set of legible "as-built" marked-up construction drawings and specifications recording any and all changes made to the original design during the course of construction. In the event no changes occurred, submit construction drawings and specifications set with notation "No Changes." The Designer/Owner must receive "As-built" marked-up construction drawings and specifications before the final pay request can be processed.

## 5. SUBMITTAL DATA

The Contractor awarded the contract shall submit all specified submittals to the Owner/Designer. A minimum number of copies as specified by the owner, of all required submittal data pertaining to construction, performance and general dimensional criteria of the components listed in the technical specifications shall be submitted. No material or equipment shall be ordered or installed prior to written approval of the submittals by the Designer/Owner. Failure to provide submittal data for review on equipment listed in the technical specifications will

result in removal of equipment by the Contractor at his expense if the equipment is not in compliance with the specifications.

## 6. SUBSTITUTIONS

In accordance with the provisions of G.S. 133-3, material, product, or equipment substitutions proposed by the bidders to those specified herein can only be considered during the bidding phase until five (5) days prior to the receipt of bids or by the date specified in the pre-bid conference, when submitted to the Designer with sufficient data to confirm material, product, or equipment equality. Proposed substitutions submitted after this time will be considered only as potential change order.

Submittals for proposed substitutions shall include the following information:

- a. Name, address, and telephone number of manufacturer and supplier as appropriate.
- b. Trade name, model or catalog designation.
- c. Product data including performance and test data, reference standards, and technical descriptions of material, product, or equipment. Include color samples and samples of available finishes as appropriate.
- d. Detailed comparison with specified products including performance capabilities, warranties, and test results.
- e. Other pertinent data including data requested by the Designer to confirm product equality.

If a proposed material, product, or equipment substitution is deemed equal by the Designer to those specified, all bidders of record will be notified by Addendum.

## 7. WORKING DRAWINGS AND SPECIFICATIONS AT THE JOB SITE

The contractor shall maintain, in readable condition at his job site one complete set of working drawings and specifications for his work including all shop drawings. Such drawings and specifications shall be available for use by the owner, designer or his authorized representative.

The contractor shall maintain at the job site, a day-to-day record of work-in-place that is at variance with the contract documents. Such variations shall be fully noted on project drawings by the contractor and submitted to the designer upon project completion and no later than 30 days after acceptance of the project.

## 8. MATERIALS, EQUIPMENT, EMPLOYEES

- a. The contractor shall, unless otherwise specified, supply and pay for all labor, transportation, materials, tools, apparatus, lights, power, fuel, heat, sanitary facilities, water, scaffolding and incidentals necessary for the completion of his work, and shall install, maintain and remove all equipment of the construction, other utensils or things, and be responsible for the safe, proper and lawful construction, maintenance and use of same, and shall construct in the best and most workmanlike manner, a complete job and everything incidental thereto, as shown on the plans, stated in the specifications, or reasonably implied therefrom, all in accordance with the contract documents.
- b. All materials shall be new and of quality specified, except where reclaimed material is authorized herein and approved for use. Workmanship shall at all times be of a grade accepted as the best practice of the particular trade involved, and as stipulated in written standards of recognized organizations or institutes of the respective trades except as exceeded or qualified by the specifications.

- c. Upon notice, the contractor shall furnish evidence as to quality of materials.
- d. Products are generally specified by ASTM or other reference standard and/or by manufacturer's name and model number or trade name. When specified only by reference standard, the Contractor may select any product meeting this standard, by any manufacturer. When several products or manufacturers are specified as being equally acceptable, the Contractor has the option of using any product and manufacturer combination listed. However, the contractor shall be aware that the cited examples are used only to denote the quality standard of product desired and that they do not restrict bidders to a specific brand, make, manufacturer or specific name; that they are used only to set forth and convey to bidders the general style, type, character and quality of product desired; and that equivalent products will be acceptable. Request for substitution of materials, items, or equipment shall be submitted to the designer for approval or disapproval; the designer prior to the opening of bids shall make such approval or disapproval. Alternate materials may be requested after the award if it can clearly be demonstrated that it is an added benefit to the owner and the designer and owner approves.
- e. The designer is the judge of equality for proposed substitution of products, materials or equipment.
- f. If at any time during the construction and completion of the work covered by these contract documents, the language, conduct, or attire of any workman of the various crafts be adjudged a nuisance to the owner or designer, or if any workman be considered detrimental to the work, the contractor shall order such parties removed immediately from grounds.
- g. The Contractor shall cooperate with the designer and the owner in coordinating construction activities.
- h. The Contractor shall maintain qualified personnel and effective supervision at the site at all times during the project, and exercise the appropriate quality control program to ensure compliance with the project drawings and specifications. The designer is responsible for determining compliance with the drawings and specifications.

## 9. CODES, PERMITS AND INSPECTIONS

The Contractor shall obtain the required permits, if required, give all notices, and comply with all laws, ordinances, codes, rules and regulations bearing on the conduct of the work under this contract. If the Contractor observes that the drawings and specifications are at variance therewith, he shall promptly notify the Designer in writing. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, codes, rules and regulations, and without such notice to the Owner, he shall bear all cost arising there from.

All work under this contract shall conform to the current North Carolina Building Code and other state and national codes as are applicable.

Projects constructed by the State of North Carolina or by any agency or institution of the State are not subject to county or municipal building codes and may\* not be subject to inspection by county or municipal authorities. Where appropriate, the Contractor shall, cooperate with the county or municipal authorities by obtaining building permits. The contractor at no cost may obtain permits to the owner.

All fire alarm work shall be in accordance with the latest State Construction Office (SCO) *Guidelines for Fire Alarm Installation* (NFPA72). Where the contract documents are in conflict with the SCO guidelines, the SCO guidelines shall govern. The Contractor shall be responsible for all the costs for the correction of the work where he installs it in conflict with the latest edition of the SCO *Guidelines for Fire Alarm Installation*.

\*Inspection and certification of compliance by local authorities is necessary if an architect or engineer was not employed on the project, or if the plans and specifications were not approved and the construction inspected by the State Construction Office.

**10. PROTECTION OF WORK, PROPERTY, THE PUBLIC AND SAFETY**

- a. The contractors shall be jointly responsible for the entire site and the building or construction of the same and provide all the necessary protections, as required by the owner or designer, and by laws or ordinances governing such conditions. They shall be responsible for any damage to the owner's property or of that of others on the job, by them, their personnel, or their subcontractors, and shall make good such damages. They shall be responsible for and pay for any damages caused to the owner. All contractors shall have access to the project at all times, except as indicated in the Supplemental General Conditions.
- b. The contractor shall provide cover and protect all portions of the structure when the work is not in progress, provide and set all temporary roofs, covers for doorways, sash and windows, and all other materials necessary to protect all the work on the building, whether set by him, or any of the subcontractors. Any work damaged through the lack of proper protection or from any other cause, shall be repaired or replaced without extra cost to the owner.
- c. No fires of any kind will be allowed inside or around the operations during the course of construction without special permission from the designer and owner.
- d. The contractor shall protect all trees and shrubs designated to remain in the vicinity of the operations by building substantial boxes around it. He shall barricade all walks, roads, etc., as directed by the designer to keep the public away from the construction. All trenches, excavations or other hazards in the vicinity of the work shall be well barricaded and properly lighted at night.
- e. The contractor shall provide all necessary safety measures for the protection of all persons on the job, including the requirements of the A.G.C. *Accident Prevention Manual in Construction*, as amended, and shall fully comply with all state laws or regulations and North Carolina State Building Code requirements to prevent accident or injury to persons on or about the location of the work. He shall clearly mark or post signs warning of hazards existing, and shall barricade excavations, elevator shafts, stairwells and similar hazards. He shall protect against damage or injury resulting from falling materials and he shall maintain all protective devices and signs throughout the progress of the work.
- f. The contractor shall adhere to the rules, regulations and interpretations of the North Carolina Department of Labor relating to Occupational Safety and Health Standards for the Construction Industry (Title 29, Code of Federal Regulations, Part 1926, published in Volume 39, Number 122, Part II, June 24, 1974, *Federal Register*), and revisions thereto as adopted by General Statutes of North Carolina 95-126 through 155.
- i. In the event of emergency affecting the safety of life, the protection of work, or the safety of adjoining properties, the contractor is hereby authorized to act at his own discretion, without further authorization from anyone, to prevent such threatened injury or damage. Any compensation claimed by the contractor on account of such action shall be determined as provided for under Article 13(b).
- j. Any and all costs associated with correcting damage caused to adjacent properties of the construction site or staging area shall be borne by the contractor. These costs shall include but not be limited to flooding, mud, sand, stone, debris, and discharging of waste products.

**11. SUBCONTRACTS AND SUBCONTRACTORS**

The Contractor is and remains fully responsible for his own acts or omissions as well as those of any subcontractor or of any employee of either. The Contractor agrees that no contractual relationship exists between the

subcontractor and the Owner in regard to the contract, and that the subcontractor acts on this work as an agent or employee of the Contractor.

## 12. CONTRACTOR-SUBCONTRACTOR RELATIONSHIPS

The Contractor agrees that the terms of these Contract Documents shall apply equally to each Subcontractor as to the Contractor, and the Contractor agrees to take such action as may be necessary to bind each Subcontractor to these terms. The Contractor further agrees to conform to the Code of Ethical Conduct as adopted by the Associated General Contractors of America, Inc., with respect to Contractor-Subcontractor relationships. The Owner reserves the right to limit the amount of portions of work to be subcontracted as hereinafter specified.

## 13. CHANGES IN THE WORK AND CLAIMS FOR EXTRA COST

- a. The owner may have changes made in the work covered by the contract. These changes will not invalidate and will not relieve or release the contractor from any guarantee given by him pertinent to the contract provisions. These changes will not affect the validity of the guarantee bond and will not relieve the surety or sureties of said bond. All extra work shall be executed under conditions of the original contract.
- b. Except in an emergency endangering life or property, no change shall be made by the contractor except upon receipt of approved change order from the designer, countersigned by the owner authorizing such change. No claim for adjustments of the contract price shall be valid unless this procedure is followed. Should a claim for extra compensation by the contractor be denied by the designer or the owner, the contractor may pursue his claim in accordance with G.S. 143-135.3.

In the event of emergency endangering life or property, the contractor may be directed to proceed on a time and material basis whereupon the contractor shall proceed and keep accurately on such form as specified by the designer or owner, a correct account of costs together with all proper invoices, payrolls and supporting data. Upon completion of the work the change order will be prepared as outlined under either Method "c(1)" or Method "c(2)" or both.

- c. In determining the values of changes, either additive or deductive, contractors are restricted to the use of the following methods:
  1. Where the extra work involved is covered by unit prices quoted in the proposal, or subsequently agreed to by the Contractor, Designer, Owner and State Construction Office the value of the change shall be computed by application of unit prices based on quantities, estimated or actual as agreed of the items involved, except in such cases where a quantity exceeds the estimated quantity allowance in the contract by one hundred percent (100%) or more. In such cases, either party may elect to proceed under subparagraph c (2) herein. If neither party elects to proceed under c (2), then unit prices shall apply.
  2. The contracting parties shall negotiate and agree upon the equitable value of the change prior to issuance of the change order, and the change order shall stipulate the corresponding lump sum adjustment to the contract price.
- d. Under Paragraph "b" and Methods "c(2)" above, the allowances for overhead and profit combined shall be as follows: all contractors (the single contracting entity (prime), his subcontractors(1<sup>st</sup> tier subs), or their sub-subcontractors (2<sup>nd</sup> tier subs, 3<sup>rd</sup> tier subs, etc.) shall be allowed a maximum of 10% on work they each self-perform; the prime contractor shall be allowed a maximum of 5% on contracted work of his 1<sup>st</sup> tier sub; 1<sup>st</sup> tier, 2<sup>nd</sup> tier, 3<sup>rd</sup> tier, etc. contractors shall be allowed a maximum of 2.5% on the contracted work of their subs. ; Under Method "c(1)", no additional

allowances shall be made for overhead and profit. In the case of deductible change orders, under Method "c(2)" and Paragraph (b) above, the contractor shall include no less than five percent (5%) profit, but no allowances for overhead.

- e. The term "net cost" as used herein shall mean the difference between all proper cost additions and deductions. The "cost" as used herein shall be limited to the following:
1. The actual costs of materials and supplies incorporated or consumed as part of the work;
  2. The actual costs of labor expended on the project site; labor expended in coordination, change order negotiation, record document maintenance, shop drawing revision or other tasks necessary to the administration of the project are considered overhead whether they take place in an office or on the project site.
  3. The actual costs of labor burden, limited to the costs of social security (FICA) and Medicare/Medicaid taxes; unemployment insurance costs; health/dental/vision insurance premiums; paid employee leave for holidays, vacation, sick leave, and/or petty leave, not to exceed a total of 30 days per year; retirement contributions; worker's compensation insurance premiums; and the costs of general liability insurance when premiums are computed based on payroll amounts; the total of which shall not exceed thirty percent (30%) of the actual costs of labor;
  4. The actual costs of rental for tools, excluding hand tools; equipment; machinery; and temporary facilities required for the work;
  5. The actual costs of premiums for bonds, insurance, permit fees and sales or use taxes related to the work.

Overtime and extra pay for holidays and weekends may be a cost item only to the extent approved by the owner.

- f. Should concealed conditions be encountered in the performance of the work below grade, or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the contract documents, the contract sum and time for completion may be equitably adjusted by change order upon claim by either party made within thirty (30) days after the condition has been identified. The cost of such change shall be arrived at by one of the foregoing methods. All change orders shall be supported by a unit cost breakdown showing method of arriving at net cost as defined above.
- g. Change orders shall be submitted by the contractor in writing to the owner/designer for review and approval. The contractor will provide such proposal and supporting data in suitable format. The designer shall verify correctness. Delay in the processing of the change order due to lack of proper submittal by the contractor of all required supporting data shall not constitute grounds for a time extension or basis of a claim. Within fourteen (14) days after receipt of the contractor's accepted proposal including all supporting documentation required by the designer, the designer shall prepare the change order and forward to the contractor for his signature or otherwise respond, in writing, to the contractor's proposal. Within seven (7) days after receipt of the change order executed by the contractor, the designer shall, certify the change order by his signature, and forward the change order and all supporting data to the owner for the owner's signature. The owner shall execute the change order, within seven (7) days of receipt.

At the time of signing a change order, the contractor shall be required to certify as follows:

"I certify that my bonding company will be notified forthwith that my contract has been changed by the amount of this change order, and that a copy of the approved change order will be mailed upon receipt by me to my surety."

- h. A change order, when issued, shall be full compensation, or credit, for the work included, omitted or substituted. It shall show on its face the adjustment in time for completion of the project as a result of the change in the work.
- i. If, during the progress of the work, the owner requests a change order and the contractor's terms are unacceptable, the owner, may require the contractor to perform such work on a time and material basis whereupon the contractor shall proceed and keep accurately on such form as specified by the Designer or owner, a correct account of cost together with all proper invoices, payrolls and supporting data. Upon completion of the work a change order will be prepared with allowances for overhead and profit per paragraph d. above and "net cost" and "cost" per paragraph e. above. Without prejudice, nothing in this paragraph shall preclude the owner from performing or to have performed that portion of the work requested in the change order.

#### **14. ANNULMENT OF CONTRACT**

If the contractor fails to begin the work under the contract within the time specified, or the progress of the work is not maintained on schedule, or the work is not completed within the time specified, or fails to perform the work with sufficient workmen and equipment or with sufficient materials to ensure the prompt completion of said work, or shall perform the work unsuitably or shall discontinue the prosecution of the work, or if the contractor shall become insolvent or be declared bankrupt or commit any act of bankruptcy or insolvency, or allow any final judgment to stand against him unsatisfied for a period of forty-eight (48) hours, or shall make an assignment for the benefit of creditors, or for any other cause whatsoever shall not carry on the work in an acceptable manner, the owner may give notice in writing, sent by certified mail, return receipt requested, to the contractor and his surety (if applicable) of such delay, neglect or default, specifying the same, and if the contractor within a period of seven (7) days after such notice shall not proceed in accordance therewith, then the owner shall, declare this contract in default, and, thereupon, the surety shall promptly take over the work and complete the performance of this contract in the manner and within the time frame specified. In the event the contractor, or the surety (if applicable) shall fail to take over the work to be done under this contract within seven (7) days after being so notified and notify the owner in writing, sent by certified mail, return receipt requested, that he is taking the same over and stating that he will diligently pursue and complete the same, the owner shall have full power and authority, without violating the contract, to take the prosecution of the work out of the hands of said contractor, to appropriate or use any or all contract materials and equipment on the grounds as may be suitable and acceptable and may enter into an agreement, either by public letting or negotiation, for the completion of said contract according to the terms and provisions thereof or use such other methods as in his opinion shall be required for the completion of said contract in an acceptable manner. All costs and charges incurred by the owner, together with the costs of completing the work under contract, shall be deducted from any monies due or which may become due said contractor and surety (if applicable). In case the expense so incurred by the owner shall be less than the sum which would have been payable under the contract, if it had been completed by said contractor, then the said contractor and surety (if applicable) shall be entitled to receive the difference, but in case such expense shall exceed the sum which would have been payable under the contract, then the contractor and the surety (if applicable) shall be liable and shall pay to the owner the amount of said excess.

#### **15. TERMINATION FOR CONVENIENCE**

- a. Owner may at any time and for any reason terminate Contractor's services and work at Owner's convenience, after notification to the contractor in writing via certified mail. Upon receipt of such notice, Contractor shall, unless the notice directs otherwise, immediately discontinue the work and placing of orders for materials, facilities and supplies in connection with the performance of this Agreement.



- b. Upon such termination, Contractor shall be entitled to payment only as follows: (1) the actual cost of the work completed in conformity with this Agreement; plus, (2) such other costs actually incurred by Contractor as approved by Owner; (3) plus ten percent (10%) of the cost of the balance of the work to be completed for overhead and profit. There shall be deducted from such sums as provided in this subparagraph the amount of any payments made to Contractor prior to the date of the termination of this Agreement. Contractor shall not be entitled to any claim or claim of lien against Owner for any additional compensation or damages in the event of such termination and payment.

## 16. OWNER'S RIGHT TO DO WORK

If, during the progress of the work or during the period of guarantee, the contractor fails to prosecute the work properly or to perform any provision of the contract, the owner, after seven (7) days' written notice sent by certified mail, return receipt requested, to the contractor from the designer, may perform or have performed that portion of the work. The cost of the work may be deducted from any amounts due or to become due to the contractor, such action and cost of same having been first approved by the designer. Should the cost of such action of the owner exceed the amount due or to become due the contractor, then the contractor or his surety, or both, shall be liable for and shall pay to the owner the amount of said excess.

## 17. REQUESTS FOR PAYMENT

Contractor shall refer to the Supplemental General Conditions for specific directions on payment schedule, procedures and the name and address where to send applications for payments for this project. It is imperative that invoices be sent only to the above address in order to assure proper and timely delivery and handling.

The Designer/Owner will process all Contractor pay requests as the project progresses. The Contractor shall receive payment within thirty (30) consecutive days after Designer/Owner's approval of each pay request. Payment will only be made for work performed as determined by the Designer/Owner.

### Retainage:

- a. Retainage withheld will not exceed 5% at any time.
- b. The same terms apply to general contractor and subcontractors alike.
- c. Following 50% completion of the project no further retainage will be withheld if the contractor/subcontractor has performed their work satisfactorily.
- d. Exceptions:
  1. Owner/Contractor can reinstate retainage if the contractor/subcontractor does not continue to perform satisfactorily.
  2. Following 50% completion of the project, the owner is authorized to withhold additional retainage from a subsequent periodic payment if the amount of retainage withheld falls below 2.5%.

Final payment will be made within forty-five (45) consecutive days after acceptance of the work, receipt of marked-up "as-built" drawings and specifications and the submission both of notarized Contractor's affidavit and final pay request. All pay requests shall be submitted to the Designer/Owner for approval.

**THE CONTRACTOR'S FINAL PAYMENT AFFIDAVIT SHALL STATE:** "THIS IS TO CERTIFY THAT ALL COSTS OF MATERIALS, EQUIPMENT, LABOR, SUBCONTRACTED WORK, AND ALL ELSE ENTERING INTO THE ACCOMPLISHMENT OF THIS CONTRACT, INCLUDING PAYROLLS, HAVE BEEN PAID IN FULL."

## 18. PAYMENTS WITHHELD

The designer with the approval of the Owner may withhold payment for the following reasons:

- a. Faulty work not corrected.

- b. The unpaid balance on the contract is insufficient to complete the work in the judgment of the designer.
- c. To provide for sufficient contract balance to cover liquidated damages that will be assessed.
- d. The secretary of the Department of Administration may authorize the withholding of payment for the following reasons:
  - i. Claims filed against the contractor or evidence that a claim will be filed.
  - ii. Evidence that subcontractors have not been paid.

When grounds for withholding payments have been removed, payment will be released. Delay of payment due the contractor without cause will make owner liable for payment of interest to the contractor as provided in G.S. 143-134.1. As provided in G.S. 143-134.1(e), the owner shall not be liable for interest on payments withheld by the owner for unsatisfactory job progress, defective construction not remedied, disputed work, or third-party claims filed against the owner or reasonable evidence that a third-party claim will be filed.

## 19. MINIMUM INSURANCE REQUIREMENTS

The work under this contract shall not commence until the contractor has obtained all required insurance and verifying certificates of insurance have been approved in writing by the owner. These certificates shall document that coverages afforded under the policies will not be cancelled, reduced in amount or coverages eliminated until at least thirty (30) days after mailing written notice, by certified mail, return receipt requested, to the insured and the owner of such alteration or cancellation. If endorsements are needed to comply with the notification or other requirements of this article copies of the endorsements shall be submitted with the certificates.

### a. **Worker's Compensation and Employer's Liability**

The contractor shall provide and maintain, until final acceptance, workmen's compensation insurance, as required by law, as well as employer's liability coverage with minimum limits of \$100,000.

### b. **Public Liability and Property Damage**

The contractor shall provide and maintain, until final acceptance, comprehensive general liability insurance, including coverage for premises operations, independent contractors, completed operations, products and contractual exposures, as shall protect such contractors from claims arising out of any bodily injury, including accidental death, as well as from claims for property damages which may arise from operations under this contract, whether such operations be by the contractor or by any subcontractor, or by anyone directly or indirectly employed by either of them and the minimum limits of such insurance shall be as follows:

Bodily Injury:	\$500,000 per occurrence
Property Damage:	\$100,000 per occurrence / \$300,000 aggregate

In lieu of limits listed above, a \$500,000 combined single limit shall satisfy both conditions.

Such coverage for completed operations must be maintained for at least two (2) years following final acceptance of the work performed under the contract.

c. **Property Insurance (Builder's Risk/Installation Floater)**

The contractor shall purchase and maintain property insurance until final acceptance, upon the entire work at the site to the full insurable value thereof. This insurance shall include the interests of the owner, the contractor, the subcontractors and sub-subcontractors in the work and shall insure against the perils of fire, wind, rain, flood, extended coverage, and vandalism and malicious mischief. If the owner is damaged by failure of the contractor to purchase or maintain such insurance, then the contractor shall bear all reasonable costs properly attributable thereto; the contractor shall effect and maintain similar property insurance on portions of the work stored off the site when request for payment per articles so includes such portions.

d. **Deductible**

Any deductible, if applicable to loss covered by insurance provided, is to be borne by the contractor.

e. **Other Insurance**

The contractor shall obtain such additional insurance as may be required by the owner or by the General Statutes of North Carolina including motor vehicle insurance, in amounts not less than the statutory limits.

f. **Proof of Carriage**

The contractor shall furnish the owner with satisfactory proof of carriage of the insurance required before written approval is granted by the owner.

## 20. ASSIGNMENT

No assignment of the Contractor's obligations or the Contractor's right to receive payment hereunder shall be permitted. However, upon written request approved by the Owner and solely as a convenience to the Contractor, the Owner may: (1) forward the Contractor's payment check directly to any person or entity designated by the Contractor, and (2) include any person or entity designated by Contractor as a joint payee on the Contractor's payment check. In no event shall such approval and action obligate the Owner to anyone other than the Contractor, and the Contractor shall remain responsible for fulfillment of all contract obligations.

## 21. CLEANING UP AND RESTORATION OF SITE

The Contractor shall keep the sites and surrounding area reasonably free from rubbish at all times and shall remove debris from the site from time to time or when directed to do so by the Owner. Before final inspection and acceptance of the project, the Contractor shall thoroughly clean the sites, and completely prepare the project and site for use by the Owner.

At the end of construction, the contractor shall oversee and implement the restoration of the construction site to its original state. Restoration includes but not limited to walks, drives, lawns, trees and shrubs, corridors, stairs and other elements shall be repaired, cleaned or otherwise restored to their original state.

## 22. GUARANTEE

The contractor shall unconditionally guarantee materials and workmanship against patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve (12) months following the final acceptance of the work and shall replace such defective materials or workmanship without cost to the owner.

Where items of equipment or material carry a manufacturer's warranty for any period in excess of twelve (12) months, then the manufacturer's warranty shall apply for that particular piece of equipment or material. The contractor shall replace such defective equipment or materials, without cost to the owner, within the manufacturer's warranty period.

Additionally, the owner may bring an action for latent defects caused by the negligence of the contractor, which is hidden or not readily apparent to the owner at the time of beneficial occupancy or final acceptance, whichever occurred first, in accordance with applicable law.

Guarantees for roofing workmanship and materials shall be stipulated in the specifications sections governing such roof, equipment, materials, or supplies.

### **23. STANDARDS**

All manufactured items and/or fabricated assemblies subject to operation under pressure, operation by connection to an electric source, or operation involving a connection to a manufactured, natural, or LP gas source shall be constructed and approved in a manner acceptable to the appropriate State inspector which customarily requires the label or re-examination listing or identification marking of appropriate safety standard organization, such as the American Society of Mechanical Engineers for pressure vessels; the Underwriters Laboratories and/or National Electrical Manufacturers Association for electrically operated assemblies; or the American Gas Association for gas operated assemblies, where such approvals of listings have been established for the type of device offered and furnished. Further, all items furnished shall meet all requirements of the Occupational Safety and Health Act (OSHA), and State and federal requirements relating to clean air and water pollution. All equipment and products must be independent third party tested and labeled (UL, FM, or CTS) before final connections to Owner services or utilities.

### **24. TAXES**

- a. Federal excise taxes do not apply to materials entering into state work (Internal Revenue Code, Section 3442(3)).
- b. Federal transportation taxes do not apply to materials entering into state work (Internal Revenue Code, Section 3475(b) as amended).
- c. North Carolina sales tax and use tax, as required by law, do apply to materials entering into state work and such costs shall be included in the bid proposal and contract sum.
- d. Local option sales and use taxes, as required by law, do apply to materials entering into state work as applicable and such costs shall be included in the bid proposal and contract sum.
- e. **Accounting Procedures for Refund of County Sales & Use Tax**

Amount of county sales and use tax paid per contractor's statements:

Contractors performing contracts for state agencies shall give the state agency for whose project the property was purchased a signed statement containing the information listed in G.S. 105-164.14(e).

The Department of Revenue has agreed that in lieu of obtaining copies of sales receipts from contractors, an agency may obtain a certified statement as of April 1, 1991 from the contractor setting forth the date, the type of property and the cost of the property purchased from each vendor, the county in which the vendor made the sale and the amount of local sales and use taxes paid thereon. If the property was purchased out-of-state, the county in which the property was

delivered should be listed. The contractor should also be notified that the certified statement may be subject to audit.

In the event the contractors make several purchases from the same vendor, such certified statement must indicate the invoice numbers, the inclusive dates of the invoices, the total amount of the invoices, the counties, and the county sales and use taxes paid thereon.

Name of taxing county: The position of a sale is the retailer's place of business located within a taxing county where the vendor becomes contractually obligated to make the sale. Therefore, it is important that the county tax be reported for the county of sale rather than the county of use. When property is purchased from out-of-state vendors and the county tax is charged, the county should be identified where delivery is made when reporting the county tax.

Such statement must also include the cost of any tangible personal property withdrawn from the contractor's warehouse stock and the amount of county sales or use tax paid thereon by the contractor.

Similar certified statements by his subcontractors must be obtained by the general contractor and furnished to the claimant.

Contractors are not to include any tax paid on supplies, tools and equipment which they use to perform their contracts and should include only those building materials, supplies, fixtures and equipment which actually become a part of or annexed to the building or structure.

## **25. EQUAL OPPORTUNITY CLAUSE**

The non-discrimination clause contained in Section 202 (Federal) Executive Order 11246, as amended by Executive Order 11375, relative to equal employment opportunity for all persons without regard to race, color, religion, sex or national origin, and the implementing rules and regulations prescribed by the secretary of Labor, are incorporated herein.

The contractor(s) agree not to discriminate against any employee or applicant for employment because of physical or mental disabilities in regard to any position for which the employee or applicant is qualified. The contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified individuals with such disabilities without discrimination based upon their physical or mental disability in all employment practices.

## **26. MINORITY BUSINESS PARTICIPATION**

GS 143-128.2 establishes a ten percent (10%) goal for participation by minority business in total value of work for each State building project.

For construction contracts with a value of less than \$300,000, the Owner has the responsibility to make a good faith effort to solicit minority bids and to attain the goal. The contractor shall include with his bid a completed Identification of HUB Certified/Minority Business Participation form. Contractor shall submit completed Appendix E MBE Documentation for Contract Payments form with final payment request.

For construction contracts with a value of \$300,000 or greater, the contractor shall comply with the document *Guidelines for Recruitment and Selection of Minority Businesses for Participation in State Construction Contracts* including Identification of Minority Business Participation, Affidavits A, B, C, and D, and Appendix E. These forms provided herein are hereby incorporated and made a part of this contract.

## **27. ACCESS TO PERSONS AND RECORDS**

The State Auditor shall have access to persons and records as a result of all contracts or grants entered into by the Owner in accordance with General Statute 147-64.7. The Owner's internal auditors shall also have the right to access and copy the Contractor's records relating to the Contract and Project during the term of the Contract and within two years following the completion of the Project/close-out of the Contract to verify accounts, accuracy, information, calculations and/or data affecting and/or relating to Contractor's requests for payment, requests for change orders, change orders, claims for extra work, requests for time extensions and related claims for delay/extended general conditions costs, claims for lost productivity, claims for lost efficiency, claims for idle equipment or labor, claims for price/cost escalation, pass-through claims of subcontractors and/or suppliers, and/or any other type of claim for payment or damages from Owner and/or its project representatives.

## **28. GOVERNING LAWS**

This contract is made under and shall be governed by and construed in accordance with the laws of the State of North Carolina. The Contractor shall comply with all applicable federal, State and local laws, statutes, ordinances and regulations including, but not limited to, the Omnibus Transportation Act of 1991 and its implementing regulations.

## **29. CONTRACTOR EVALUATION**

The contractor's overall work performance on the project shall be fairly evaluated in accordance with the State Building Commission policy and procedures, for determining qualifications to bid on future State projects. In addition to final evaluation, an interim evaluation may be prepared during the progress of project. The owner may request the contractor's comments to evaluate the designer.

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## **SUPPLEMENTARY GENERAL CONDITIONS**

### **TIME OF COMPLETION**

The Contractor shall commence work to be performed under this Contract on a date to be specified in written order from the Designer/Owner and shall fully complete all work hereunder within ( 45 ) consecutive calendar days from the Notice to Proceed. For each day in excess of the above number of days, the Contractor shall pay the Owner the amount of Two Hundred Dollars ( \$ 200.00 ) as liquidated damages reasonably estimated in advance to cover the losses to be incurred by the Owner should the Contractor fail to complete the Work within the time specified.

Raymond Engineering-Georgia, Inc.

NCDOT Division 3 Castle Hayne  
Traffic Services Building  
Roof RepairsProject No. RAL1004.022  
SCO#21-23718-01

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If the Contractor is delayed at any time in the progress of his work by any act or negligence of the Owner, his employees or his separate contractor, by changes ordered in the work; by abnormal weather conditions; by any causes beyond the Contractor's control or by other causes deemed justifiable by Owner, then the contract time may be reasonably extended in a written order from the Owner upon written request from the contractor within ten days following the cause for delay. Time extensions for weather delays, acts of God, labor disputes, fire, delays in transportation, unavoidable casualties or other delays which are beyond the control of the Owner do not entitle the Contractor to compensable damages for delays. Any contractor claim for compensable damages for delays is limited to delays caused solely by the owner or its agents.

### **UTILITIES**

Owner may provide certain utilities such as power or water with connections and extensions by the Contractor. Contractor shall provide temporary toilet facilities to be utilized by their own personnel.

### **SECURITY**

At all times the contractor and their employees and/or subcontractors must maintain lawful and appropriate conduct. Concealed weapons, alcohol, and illegal drugs are prohibited. Contractor shall be responsible for maintaining security of project resources and materials.

### **USE OF SITE**

There are restricted areas of the construction site that will be defined by the Owner during the Pre-Bid Meeting. Work hours are limited, but may allow for flexibility.

### **UNIT PRICES**

Unit prices quoted and accepted shall apply throughout the life of the contract, except as otherwise specifically noted. Unit prices shall be applied, as appropriate, to compute the total value of changes in the scope of work in accordance with the contract documents. Unit prices are complete for labor, equipment, material, overhead, and profit. The cost of any unused amount will be credited to the Owner by Change Order at the end of the job.

### **PERFORMANCE AND PAYMENT BONDS**

Contractor shall furnish a Performance Bond and Payment Bond executed by a surety company authorized to do business in North Carolina. The bonds shall be in the full contract amount. Bonds shall be executed in the form bound with these specifications (Forms 307 & 308). An authorized agent of the bonding company who is licensed to do business in North Carolina shall countersign all bonds.

## **PROPOSAL AND CONTRACT**

The Base Bid shall include the cost of all work not specifically listed in the bid breakdown, i.e. all general construction costs.

## **CONTRACTOR-SUBCONTRACTOR RELATIONSHIPS**

The Contractor agrees that the terms of these contract documents shall apply equally to a subcontractor as to the Contractor, and that the subcontractor is bound by those terms as an employee of the Contractor.

The general contractor awarded the contract shall within fourteen (14) days after the award of the contract submit copies of any subcontracts. Roofing subcontractor shall have the contractor license classification for "S-Roofing".

## **MINORITY BUSINESS PARTICIPATION**

Each bidder shall follow the Guidelines for Recruitment and Selection of Minority Businesses for Participation in State Construction Contracts.



## **GUIDELINES FOR RECRUITMENT AND SELECTION OF MINORITY BUSINESSES FOR PARTICIPATION IN STATE CONSTRUCTION CONTRACTS**

In accordance with G.S. 143-128.2 (effective January 1, 2002) these guidelines establish goals for minority participation in single-prime bidding, separate-prime bidding, construction manager at risk, and alternative contracting methods, on State construction projects in the amount of \$300,000 or more. The legislation provides that the State shall have a verifiable ten percent (10%) goal for participation by minority businesses in the total value of work for each project for which a contract or contracts are awarded. These requirements are published to accomplish that end.

### **SECTION A: INTENT**

It is the intent of these guidelines that the State of North Carolina, as awarding authority for construction projects, and the contractors and subcontractors performing the construction contracts awarded shall cooperate and in good faith do all things legal, proper and reasonable to achieve the statutory goal of ten percent (10%) for participation by minority businesses in each construction project as mandated by GS 143-128.2. Nothing in these guidelines shall be construed to require contractors or awarding authorities to award contracts or subcontracts to or to make purchases of materials or equipment from minority-business contractors or minority-business subcontractors who do not submit the lowest responsible, responsive bid or bids.

### **SECTION B: DEFINITIONS**

1. Minority - a person who is a citizen or lawful permanent resident of the United States and who is:
  - a. Black, that is, a person having origins in any of the black racial groups in Africa;
  - b. Hispanic, that is, a person of Spanish or Portuguese culture with origins in Mexico, South or Central America, or the Caribbean Islands, regardless of race;
  - c. Asian American, that is, a person having origins in any of the original peoples of the Far East, Southeast Asia and Asia, the Indian subcontinent, the Pacific Islands;
  - d. American Indian, that is, a person having origins in any of the original peoples of North America; or
  - e. Female
2. Minority Business - means a business:
  - a. In which at least fifty-one percent (51%) is owned by one or more minority persons, or in the case of a corporation, in which at least fifty-one percent (51%) of the stock is owned by one or more minority persons or socially and economically disadvantaged individuals; and
  - b. Of which the management and daily business operations are controlled by one or more of the minority persons or socially and economically disadvantaged individuals who own it.
3. Socially and economically disadvantaged individual - means the same as defined in 15 U.S.C. 637. "Socially disadvantaged individuals are those who have been subjected to racial or ethnic prejudice or cultural bias because of their identity as a member of a group without regard to their individual qualities". "Economically disadvantaged individuals are those socially disadvantaged individuals whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same business area who are not socially disadvantaged".
4. Public Entity - means State and all public subdivisions and local governmental units.
5. Owner - The State of North Carolina, through the Agency/Institution named in the contract.
6. Designer – Any person, firm, partnership, or corporation, which has contracted with the State of North Carolina to perform architectural or engineering, work.
7. Bidder - Any person, firm, partnership, corporation, association, or joint venture seeking to be awarded a public contract or subcontract.

8. Contract - A mutually binding legal relationship or any modification thereof obligating the seller to furnish equipment, materials or services, including construction, and obligating the buyer to pay for them.
9. Contractor - Any person, firm, partnership, corporation, association, or joint venture which has contracted with the State of North Carolina to perform construction work or repair.
10. Subcontractor - A firm under contract with the prime contractor or construction manager at risk for supplying materials or labor and materials and/or installation. The subcontractor may or may not provide materials in his subcontract.

## **SECTION C: RESPONSIBILITIES**

1. Office for Historically Underutilized Businesses, Department of Administration (hereinafter referred to as HUB Office).

The HUB Office has established a program, which allows interested persons or businesses qualifying as a minority business under G.S. 143-128.2, to obtain certification in the State of North Carolina procurement system. The information provided by the minority businesses will be used by the HUB Office to:

- a. Identify those areas of work for which there are minority businesses, as requested.
- b. Make available to interested parties a list of prospective minority business contractors and subcontractors.
- c. Assist in the determination of technical assistance needed by minority business contractors.

In addition to being responsible for the certification/verification of minority businesses that want to participate in the State construction program, the HUB Office will:

- (1) Maintain a current list of minority businesses. The list shall include the areas of work in which each minority business is interested.
- (2) Inform minority businesses on how to identify and obtain contracting and subcontracting opportunities through the State Construction Office and other public entities.
- (3) Inform minority businesses of the contracting and subcontracting process for public construction building projects.
- (4) Work with the North Carolina trade and professional organizations to improve the ability of minority businesses to compete in the State construction projects.
- (5) The HUB Office also oversees the minority business program by:
  - a. Monitoring compliance with the program requirements.
  - b. Assisting in the implementation of training and technical assistance programs.
  - c. Identifying and implementing outreach efforts to increase the utilization of minority businesses.
  - d. Reporting the results of minority business utilization to the Secretary of the Department of Administration, the Governor, and the General Assembly.

2. State Construction Office

The State Construction Office will be responsible for the following:

- a. Furnish to the HUB Office a minimum of twenty-one days prior to the bid opening the following:
  - (1) Project description and location;
  - (2) Locations where bidding documents may be reviewed;
  - (3) Name of a representative of the owner who can be contacted during the advertising period to advise who the prospective bidders are;
  - (4) Date, time and location of the bid opening.
  - (5) Date, time and location of prebid conference, if scheduled.
- b. Attending scheduled prebid conference, if necessary, to clarify requirements of the general statutes regarding minority-business participation, including the bidders' responsibilities.

- c. Reviewing the apparent low bidders' statutory compliance with the requirements listed in the proposal, that must be complied with, if the bid is to be considered as responsive, prior to award of contracts. The State reserves the right to reject any or all bids and to waive informalities.
- d. Reviewing of minority business requirements at Preconstruction conference.
- e. Monitoring of contractors' compliance with minority business requirements in the contract documents during construction.
- f. Provide statistical data and required reports to the HUB Office.
- g. Resolve any protest and disputes arising after implementation of the plan, in conjunction with the HUB Office.

### 3. Owner

Before awarding a contract, owner shall do the following:

- a. Develop and implement a minority business participation outreach plan to identify minority businesses that can perform public building projects and to implement outreach efforts to encourage minority business participation in these projects to include education, recruitment, and interaction between minority businesses and non-minority businesses.
- b. Attend the scheduled prebid conference.
- c. At least 10 days prior to the scheduled day of bid opening, notify minority businesses that have requested notices from the public entity for public construction or repair work and minority businesses that otherwise indicated to the Office for Historically Underutilized Businesses an interest in the type of work being bid or the potential contracting opportunities listed in the proposal. The notification shall include the following:
  - 1. A description of the work for which the bid is being solicited.
  - 2. The date, time, and location where bids are to be submitted.
  - 3. The name of the individual within the owner's organization who will be available to answer questions about the project.
  - 4. Where bid documents may be reviewed.
  - 5. Any special requirements that may exist.
- d. Utilize other media, as appropriate, likely to inform potential minority businesses of the bid being sought.
- e. Maintain documentation of any contacts, correspondence, or conversation with minority business firms made in an attempt to meet the goals.
- f. Review, jointly with the designer, all requirements of G.S. 143-128.2(c) and G.S. 143-128.2(f) – (i.e. bidders' proposals for identification of the minority businesses that will be utilized with corresponding total dollar value of the bid and affidavit listing good faith efforts, or affidavit of self-performance of work, if the contractor will perform work under contract by its own workforce) - prior to recommendation of award to the State Construction Office.
- g. Evaluate documentation to determine good faith effort has been achieved for minority business utilization prior to recommendation of award to State Construction Office.
- h. Review prime contractors' pay applications for compliance with minority business utilization commitments prior to payment.
- i. Make documentation showing evidence of implementation of Owner's responsibilities available for review by State Construction Office and HUB Office, upon request

### 4. Designer

Under the single-prime bidding, separate prime bidding, construction manager at risk, or alternative contracting method, the designer will:

- a. Attend the scheduled prebid conference to explain minority business requirements to the prospective bidders.
- b. Assist the owner to identify and notify prospective minority business prime and subcontractors of potential contracting opportunities.
- c. Maintain documentation of any contacts, correspondence, or conversation with minority business firms made in an attempt to meet the goals.
- d. Review jointly with the owner, all requirements of G.S. 143-128.2(c) and G.S.143-128.2(f) – (i.e. bidders' proposals for identification of the minority businesses that will be utilized with

corresponding total dollar value of the bid and affidavit listing Good Faith Efforts, or affidavit of self-performance of work, if the contractor will perform work under contract by its own workforce) - prior to recommendation of award.

- e. During construction phase of the project, review “MBE Documentation for Contract Payment” – (Appendix E) for compliance with minority business utilization commitments. Submit Appendix E form with monthly pay applications to the owner and forward copies to the State Construction Office.
- f. Make documentation showing evidence of implementation of Designer’s responsibilities available for review by State Construction Office and HUB Office, upon request.

5. Prime Contractor(s), CM at Risk, and Its First-Tier Subcontractors

Under the single-prime bidding, the separate-prime bidding, construction manager at risk and alternative contracting methods, contractor(s) will:

- a. Attend the scheduled prebid conference.
- b. Identify or determine those work areas of a subcontract where minority businesses may have an interest in performing subcontract work.
- c. At least ten (10) days prior to the scheduled day of bid opening, notify minority businesses of potential subcontracting opportunities listed in the proposal. The notification will include the following:
  - (1) A description of the work for which the subbid is being solicited.
  - (2) The date, time and location where subbids are to be submitted.
  - (3) The name of the individual within the company who will be available to answer questions about the project.
  - (4) Where bid documents may be reviewed.
  - (5) Any special requirements that may exist, such as insurance, licenses, bonds and financial arrangements.

If there are more than three (3) minority businesses in the general locality of the project who offer similar contracting or subcontracting services in the specific trade, the contractor(s) shall notify three (3), but may contact more, if the contractor(s) so desires.

- d. During the bidding process, comply with the contractor(s) requirements listed in the proposal for minority participation.
- e. Identify on the bid, the minority businesses that will be utilized on the project with corresponding total dollar value of the bid and affidavit listing good faith efforts as required by G.S. 143-128.2(c) and G.S. 143-128.2(f).
- f. Make documentation showing evidence of implementation of PM, CM-at-Risk and First-Tier Subcontractor responsibilities available for review by State Construction Office and HUB Office, upon request.
- g. Upon being named the apparent low bidder, the Bidder shall provide one of the following: (1) an affidavit (Affidavit C) that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is equal to or more than the applicable goal; (2) if the percentage is not equal to the applicable goal, then documentation of all good faith efforts taken to meet the goal. Failure to comply with these requirements is grounds for rejection of the bid and award to the next lowest responsible and responsive bidder.
- h. The contractor(s) shall identify the name(s) of minority business subcontractor(s) and corresponding dollar amount of work on the schedule of values. The schedule of values shall be provided as required in Article 31 of the General Conditions of the Contract to facilitate payments to the subcontractors.
- i. The contractor(s) shall submit with each monthly pay request(s) and final payment(s), “MBE Documentation for Contract Payment” – (Appendix E), for designer’s review.
- j. During the construction of a project, at any time, if it becomes necessary to replace a minority business subcontractor, immediately advise the owner, State Construction Office, and the Director of the HUB Office in writing, of the circumstances involved. The prime contractor shall make a good faith effort to replace a minority business subcontractor with another minority business subcontractor.

- k. If during the construction of a project additional subcontracting opportunities become available, make a good faith effort to solicit subbids from minority businesses.
- l. It is the intent of these requirements apply to all contractors performing as prime contractor and first tier subcontractor under construction manager at risk on state projects.

6. Minority Business Responsibilities

While minority businesses are not required to become certified in order to participate in the State construction projects, it is recommended that they become certified and should take advantage of the appropriate technical assistance that is made available. In addition, minority businesses who are contacted by owners or bidders must respond promptly whether or not they wish to submit a bid.

**SECTION 4: DISPUTE PROCEDURES**

It is the policy of this state that disputes that involves a person's rights, duties or privileges, should be settled through informal procedures. To that end, minority business disputes arising under these guidelines should be resolved as governed under G.S. 143-128(g).

**SECTION 5:** These guidelines shall apply upon promulgation on state construction projects. Copies of these guidelines may be obtained from the Department of Administration, State Construction Office, (physical address) 301 North Wilmington Street, Suite 450, NC Education Building, Raleigh, North Carolina, 27601-2827, (mail address) 1307 Mail Service Center, Raleigh, North Carolina, 27699-1307, phone (919) 807-4100, Website: [www.nc-sco.com](http://www.nc-sco.com)

**SECTION 6:** In addition to these guidelines, there will be issued with each construction bid package provisions for contractual compliance providing minority business participation in the state construction program.

## MINORITY BUSINESS CONTRACT PROVISIONS (CONSTRUCTION)

### APPLICATION:

The **Guidelines for Recruitment and Selection of Minority Businesses for Participation in State Construction Contracts** are hereby made a part of these contract documents. These guidelines shall apply to all contractors regardless of ownership. Copies of these guidelines may be obtained from the Department of Administration, State Construction Office, (physical address) 301 North Wilmington Street, Suite 450, NC Education Building, Raleigh, North Carolina, 27601-2827, (mail address) 1307 Mail Service Center, Raleigh, North Carolina, 27699-1307, phone (919) 807-4100, Website: <http://www.nc-sco.com>

### MINORITY BUSINESS SUBCONTRACT GOALS:

The goals for participation by minority firms as subcontractors on this project have been set at 10%.

The bidder must identify on its bid, the minority businesses that will be utilized on the project with corresponding total dollar value of the bid and affidavit (Affidavit A) listing good faith efforts **or** affidavit (Affidavit B) of self-performance of work, if the bidder will perform work under contract by its own workforce, as required by G.S. 143-128.2(c) and G.S. 143-128.2(f).

The lowest responsible, responsive bidder must provide Affidavit C, that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is equal to or more than the applicable goal.

**OR**

Provide Affidavit D, that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, **with documentation of Good Faith Effort, if the percentage is not equal to the applicable goal.**

**OR**

Provide Affidavit B, which includes sufficient information for the State to determine that the bidder does not customarily subcontract work on this type project.

**The above information must be provided as required. Failure to submit these documents is grounds for rejection of the bid.**

## **MINIMUM COMPLIANCE REQUIREMENTS:**

All written statements, affidavits or intentions made by the Bidder shall become a part of the agreement between the Contractor and the State for performance of this contract. Failure to comply with any of these statements, affidavits or intentions, or with the minority business Guidelines shall constitute a breach of the contract. A finding by the State that any information submitted either prior to award of the contract or during the performance of the contract is inaccurate, false or incomplete, shall also constitute a breach of the contract. Any such breach may result in termination of the contract in accordance with the termination provisions contained in the contract. It shall be solely at the option of the State whether to terminate the contract for breach.

In determining whether a contractor has made Good Faith Efforts, the State will evaluate all efforts made by the Contractor and will determine compliance in regard to quantity, intensity, and results of these efforts. Good Faith Efforts include:

- (1) Contacting minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor or available on State or local government maintained lists at least 10 days before the bid or proposal date and notifying them of the nature and scope of the work to be performed.
- (2) Making the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bid or proposals are due.
- (3) Breaking down or combining elements of work into economically feasible units to facilitate minority participation.
- (4) Working with minority trade, community, or contractor organizations identified by the Office for Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
- (5) Attending any prebid meetings scheduled by the public owner.
- (6) Providing assistance in getting required bonding or insurance or providing alternatives to bonding or insurance for subcontractors.
- (7) Negotiating in good faith with interested minority businesses and not rejecting them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
- (8) Providing assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisting minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
- (9) Negotiating joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
- (10) Providing quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

**APPENDIX E**

**MBE DOCUMENTATION FOR CONTRACT PAYMENTS**

Prime Contractor/Architect: \_\_\_\_\_

Address & Phone: \_\_\_\_\_

Project Name: \_\_\_\_\_

Pay Application #: \_\_\_\_\_ Period: \_\_\_\_\_

The following is a list of payments made to Minority Business Enterprises on this project for the above-mentioned period.

MBE FIRM NAME	* INDICATE TYPE OF MBE	AMOUNT PAID THIS MONTH	TOTAL PAYMENTS TO DATE	TOTAL AMOUNT COMMITTED

\*Minority categories: Black, African American (B), Hispanic (H), Asian American (A), American Indian (I), Female (F), Social and Economically Disadvantage (D)

Date: \_\_\_\_\_ Approved/Certified By: \_\_\_\_\_

Name

\_\_\_\_\_ Title

\_\_\_\_\_ Signature

**SUBMIT WITH EACH PAY REQUEST & FINAL PAYMENT**



## Identification of HUB Certified/ Minority Business Participation

I, \_\_\_\_\_,  
(Name of Bidder)

do hereby certify that on this project, we will use the following HUB Certified/ minority business as construction subcontractors, vendors, suppliers or providers of professional services.

Firm Name, Address and Phone #	Work Type	*Minority Category	**HUB Certified (Y/N)

\*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**\*\* HUB Certification with the state HUB Office required to be counted toward state participation goals.**

**The total value of minority business contracting will be (\$)\_\_\_\_\_.**

# State of North Carolina AFFIDAVIT A – Listing of Good Faith Efforts

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

(Name of Bidder)

Affidavit of \_\_\_\_\_

I have made a good faith effort to comply under the following areas checked:

**Bidders must earn at least 50 points from the good faith efforts listed for their bid to be considered responsive.** (1 NC Administrative Code 30 I.0101)

- 1 – (10 pts)** Contacted minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor, or available on State or local government maintained lists, at least 10 days before the bid date and notified them of the nature and scope of the work to be performed.
- 2 --(10 pts)** Made the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bids are due.
- 3 – (15 pts)** Broken down or combined elements of work into economically feasible units to facilitate minority participation.
- 4 – (10 pts)** Worked with minority trade, community, or contractor organizations identified by the Office of Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
- 5 – (10 pts)** Attended prebid meetings scheduled by the public owner.
- 6 – (20 pts)** Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
- 7 – (15 pts)** Negotiated in good faith with interested minority businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
- 8 – (25 pts)** Provided assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisted minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
- 9 – (20 pts)** Negotiated joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
- 10 - (20 pts)** Provided quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

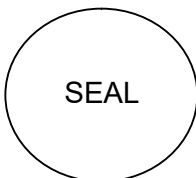
The undersigned, if apparent low bidder, will enter into a formal agreement with the firms listed in the Identification of Minority Business Participation schedule conditional upon scope of contract to be executed with the Owner. Substitution of contractors must be in accordance with GS143-128.2(d) Failure to abide by this statutory provision will constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of the minority business commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

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



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

Notary Public \_\_\_\_\_

My commission expires \_\_\_\_\_

# State of North Carolina --AFFIDAVIT B-- Intent to Perform Contract with Own Workforce.

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

Affidavit of \_\_\_\_\_  
(Name of Bidder)

I hereby certify that it is our intent to perform 100% of the work required for the \_\_\_\_\_ contract.  
(Name of Project)

In making this certification, the Bidder states that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform all elements of the work on this project with his/her own current work forces; and

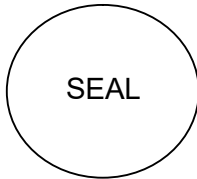
The Bidder agrees to provide any additional information or documentation requested by the owner in support of the above statement. The Bidder agrees to make a Good Faith Effort to utilize minority suppliers where possible.

The undersigned hereby certifies that he or she has read this certification and is authorized to bind the Bidder to the commitments herein contained.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

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



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_

Notary Public \_\_\_\_\_

My commission expires \_\_\_\_\_

# State of North Carolina - AFFIDAVIT C - Portion of the Work to be Performed by HUB Certified/Minority Businesses

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

**(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)**

If the portion of the work to be executed by HUB certified/minority businesses as defined in GS143-128.2(g) and 128.4(a),(b),(e) is equal to or greater than 10% of the bidders total contract price, then the bidder must complete this affidavit.  
 This affidavit shall be provided by the apparent lowest responsible, responsive bidder within **72 hours** after notification of being low bidder.

Affidavit of \_\_\_\_\_ I do hereby certify that on the \_\_\_\_\_  
 (Name of Bidder)

Project ID# \_\_\_\_\_ Amount of Bid \$ \_\_\_\_\_  
 (Project Name)

I will expend a minimum of \_\_\_\_\_% of the total dollar amount of the contract with minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below. Attach additional sheets if required

Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value

\*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**\*\* HUB Certification with the state HUB Office required to be counted toward state participation goals.**

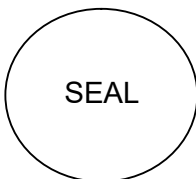
Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

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



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

Notary Public \_\_\_\_\_

My commission expires \_\_\_\_\_

# State of North Carolina AFFIDAVIT D – Good Faith Efforts

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

**(Note this form is to be submitted only by the apparent lowest responsible, responsive bidder.)**

If the goal of 10% participation by HUB Certified/ minority business **is not** achieved, the Bidder shall provide the following documentation to the Owner of his good faith efforts:

Affidavit of \_\_\_\_\_ I do hereby certify that on the \_\_\_\_\_  
(Name of Bidder)

Project ID# \_\_\_\_\_ (Project Name) Amount of Bid \$ \_\_\_\_\_

I will expend a minimum of \_\_\_\_\_% of the total dollar amount of the contract with HUB certified/ minority business enterprises. Minority businesses will be employed as construction subcontractors, vendors, suppliers or providers of professional services. Such work will be subcontracted to the following firms listed below. (Attach additional sheets if required)

Name and Phone Number	*Minority Category	**HUB Certified Y/N	Work Description	Dollar Value

\*Minority categories: Black, African American (**B**), Hispanic (**H**), Asian American (**A**) American Indian (**I**), Female (**F**) Socially and Economically Disadvantaged (**D**)

**\*\* HUB Certification with the state HUB Office required to be counted toward state participation goals.**

**Examples** of documentation that may be required to demonstrate the Bidder's good faith efforts to meet the goals set forth in these provisions include, but are not necessarily limited to, the following:

- A. Copies of solicitations for quotes to at least three (3) minority business firms from the source list provided by the State for each subcontract to be let under this contract (if 3 or more firms are shown on the source list). Each solicitation shall contain a specific description of the work to be subcontracted, location where bid documents can be reviewed, representative of the Prime Bidder to contact, and location, date and time when quotes must be received.
- B. Copies of quotes or responses received from each firm responding to the solicitation.
- C. A telephone log of follow-up calls to each firm sent a solicitation.
- D. For subcontracts where a minority business firm is not considered the lowest responsible sub-bidder, copies of quotes received from all firms submitting quotes for that particular subcontract.
- E. Documentation of any contacts or correspondence to minority business, community, or contractor organizations in an attempt to meet the goal.
- F. Copy of pre-bid roster
- G. Letter documenting efforts to provide assistance in obtaining required bonding or insurance for minority business.
- H. Letter detailing reasons for rejection of minority business due to lack of qualification.
- I. Letter documenting proposed assistance offered to minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letter of credit, including waiving credit that is ordinarily required.

Failure to provide the documentation as listed in these provisions may result in rejection of the bid and award to the next lowest responsible and responsive bidder.

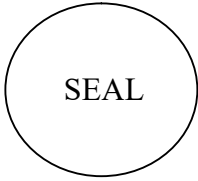
Pursuant to GS143-128.2(d), the undersigned will enter into a formal agreement with Minority Firms for work listed in this schedule conditional upon execution of a contract with the Owner. Failure to fulfill this commitment may constitute a breach of the contract.

The undersigned hereby certifies that he or she has read the terms of this commitment and is authorized to bind the bidder to the commitment herein set forth.

Date: \_\_\_\_\_ Name of Authorized Officer: \_\_\_\_\_

Signature: \_\_\_\_\_

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



State of \_\_\_\_\_, County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

Notary Public \_\_\_\_\_

My commission expires \_\_\_\_\_

STATE OF NORTH CAROLINA  
 COUNTY SALES AND USE TAX REPORT  
 SUMMARY TOTALS AND CERTIFICATION

CONTRACTOR: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_

PROJECT: \_\_\_\_\_

FOR PERIOD: \_\_\_\_\_

	TOTAL FOR COUNTY OF:	TOTAL FOR COUNTY OF:	TOTAL FOR COUNTY OF:	TOTAL FOR COUNTY OF:	TOTAL FOR COUNTY OF:	TOTAL FOR COUNTY OF:	TOTAL ALL COUNTIES
CONTRACTOR							
SUBCONTRACTOR(S)*							
COUNTY TOTAL							

\* Attach subcontractor(s) report(s)

\*\* Must balance with Detail Sheet(s)

I certify that the above figures do not include any tax paid on supplies, tools and equipment which were used to perform this contract and only includes those building materials, supplies, fixtures and equipment which actually became a part of or annexed to the building or structure. I certify that, to the best of my knowledge, the information provided here is true, correct, and complete.

Sworn to and subscribed before me,

This the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Signed

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Print or Type Name of Above

Seal

NOTE:  
This certified statement may be subject to audit

**STATE OF NORTH CAROLINA  
SALES AND USE TAX REPORT DETAIL**

CONTRACTOR: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_

SUBCONTRACTOR \_\_\_\_\_

FOR PERIOD: \_\_\_\_\_

PROJECT: \_\_\_\_\_

PURCHASE DATE	VENDOR NAME	INVOICE NUMBER	TYPE OF PROPERTY	INVOICE TOTAL	COUNTY TAX PAID	COUNTY OF SALE *
				\$	\$	
				TOTAL:	\$	

\* If this is an out-of-state vendor, the County of Sale should be the county to which the merchandise was shipped.



**DIVISION 1**  
**GENERAL REQUIREMENTS**

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**SECTION 01 11 00**  
**SUMMARY OF WORK****PART 1 - GENERAL**

- 1.1 Drawings and general provisions of the contract, including General Conditions, Supplementary Conditions and other Division 1 specification sections apply to work in this section.
- 1.2 Work Covered by Contract Documents:
- 1.2.1 Work under this Contract consists of furnishing all labor, materials, and equipment necessary to perform the roof repair work at the NCDOT Division 3 Castle Hayne at 5504 Barbados Blvd, Castle Hayne, NC 28429.
- 1.2.2 The work will include, but is not necessarily limited to, the following:
- 1.2.2.1 Base Bid:
- (a) Sealant repair work associated with the hip and ridge of the standing seam metal roof as indicated in the base bid legend and base bid roof plan.
    - (i) Careful removal of the metal hip and ridge roof panels for reuse.
    - (ii) Remove existing exposed butyl, sealant, and existing fasteners.
    - (iii) Preparing surfaces for new sealant.
    - (iv) New fasteners, sealant and butyl on interior hip and ridge flashings including on edges and fastener penetrations as indicated in the details. 15lb felt paper over interior ridge or hip panels.
    - (v) New fasteners and sealant on exterior hip and ridge flashings on edges and fastener penetrations and other intersections and junctions of standing seam metal roof as indicated in the details.
  - (b) Penetrations on all roof areas:
    - (i) Remove all flashing sealant and clamps at all penetrations on all roof areas as required. Prepare for new work.
    - (ii) Install new flashing, clamps and coatings at all penetrations.
  - (c) Secure loose section of metal coping, apply sealant over penetrations as required. Remove deteriorated sealant and apply new sealant as required.
  - (d) Remove and replace sealant at vent trim panel as indicated on roof plan.
  - (e) Install coating on the interior lining of all gutters.
- 1.2.2.2 Alternate 1A:
- (a) Coating and Sealant repair work associated with the hip and ridge of the standing seam metal roofs as indicated in the alternates legend and alternates roof plan.
    - (i) Careful removal of the metal hip and ridge roof panels for reuse.
    - (ii) Remove existing exposed butyl, sealant, and existing fasteners.
    - (iii) Preparing surfaces for coatings and sealant.
    - (iv) New fasteners, sealant and butyl on interior hip and ridge flashings including on edges and fastener penetrations as indicated in the details. 15lb felt paper over interior ridge or hip panels.
    - (v) New fasteners and coating on exterior hip and ridge flashings on edges, fastener penetrations and other intersections and junctions of standing seam metal roof as indicated in the details.
- 1.2.2.3 Alternate 1B: NOT USED
- 1.2.2.4 Alternate 2A:
- (a) Sealant repair work associated with the hip and ridge of the standing seam metal roofs as indicated in the alternates legend and alternates roof plan.

- (i) Careful removal of the metal hip and ridge roof panels for reuse.
- (ii) Remove existing exposed butyl, sealant, and existing fasteners.
- (iii) Preparing surfaces for new sealant.
- (iv) New fasteners, sealant and butyl on interior hip and ridge flashings including on edges and fastener penetrations as indicated in the details. 15lb felt paper over interior ridge or hip panels.
- (v) New fasteners and sealant on exterior hip and ridge flashings on edges and fastener penetrations and other intersections and junctions of standing seam metal roof as indicated in the details.

## 1.2.2.5 Alternate 2B:

- (a) Coating and Sealant repair work associated with the hip and ridge of the standing seam metal roof as indicated in the alternates legend and alternates roof plan.
  - (i) Careful removal of the metal hip and ridge roof panels for reuse.
  - (ii) Remove existing exposed butyl, sealant, and existing fasteners.
  - (iii) Preparing surfaces for coatings and sealant.
  - (iv) New fasteners, sealant and butyl on interior hip and ridge flashings including on edges and fastener penetrations as indicated in the details. 15lb felt paper over interior ridge or hip panels.
  - (v) New fasteners and coating on exterior hip and ridge flashings on edges, fastener penetrations and other intersections and junctions of standing seam metal roof as indicated in the details.

## 1.2.2.6 Alternate 3: NOT USED

## 1.2.2.7 Alternate 4: Review existing standing seam metal roof seams, apply coating on damaged seams, 800LF.

## 1.2.2.8 Alternate 5: Secure loose wall panels and seal penetrations, 50 SF per location, 2 total locations as indicated on roof plan.

## 1.2.2.9 Alternate 6: NOT USED

## 1.2.2.10 Alternate 7: Clean masonry at two locations, 300 SF total.

## 1.2.2.11 Alternate 8: NOT USED

## 1.2.2.12 Alternate 9: Install coating on roof (4400 SF VIF) in its entirety to achieve a 10 year no dollar limit warranty.

## 1.2.2.13 Furnish and install any miscellaneous items not specifically listed here.

## 1.2.3 Allowances of Unit Priced Items included in the Base Bid as described in the Unit Prices and Allowances Specification Section 01 22 13.

## 1.3 Description of the Existing Roof System:

1.3.1 Information in this Section is provided only to establish general description and is not necessarily accurate. The Contractor is responsible for visiting the site and satisfying himself as to the existing conditions, size of roof areas, etc. before submitting his Bid.

1.3.2 The existing roof assembly is composed of the following:

## 1.3.2.1 All Roofs

- (a) Standing Seam Metal Roof (4/12 pitch, panels are 16" o.c., 2" Rib)
- (b) Purlins on Metal Trusses
- (c) Perimeter Gutters (7" Deep at the rear, 5" deep at the front, 7" wide)

1.1 Contractor Behavior & Decorum:

- 1.1.1 Indecent language, harassing “cat” calls or whistles, etc., will not be tolerated. Violators will be removed from Owner’s property immediately; questions will be asked later.
- 1.1.2 Proper dress is required. Shirts, long pants and shoes will be worn at all times. Music is not permitted.
- 1.1.3 Contractor’s personnel are not permitted to use Owner’s Buildings / Facilities for eating or leisure activity. Contractor’s personnel are not permitted to use Owner’s restrooms.
- 1.1.4 Contractor’s personnel are prohibited from having firearms, alcoholic beverages, or drugs (except those prescribed by a physician) on the Owner’s property.
- 1.1.5 Smoking - Contractor shall comply with area designations as established by the Department of Administration and the Owner’s project manager.

**PART 1 - PRODUCTS**

- 1.1 Not used.

**PART 2 - EXECUTION**

- 2.1 Not used.

**END OF SECTION**

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**SECTION 01 14 00**  
**WORK RESTRICTIONS****PART 1 – GENERAL**

## 1. Related Documents

1.1. Drawings and general provisions of the contract, including General Conditions, Supplementary Conditions and other Division 01 specification sections, apply to this section.

## 1.2. Use of Premises

1.2.1. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the work is indicated. Contractor shall weekly update the designer and owner of planned upcoming future work activities and Phasing Work Plans and notify Owner/Designer of any required or desired deviations as soon as these are identified.

1.2.1.1.Limits: Confine construction operations to the area inside the construction limits, as indicated on the site Plans.

1.2.1.2.Owner occupancy: The owner will occupy the site during construction, until and after final acceptance.

## 1.2.1.3.Construction Time:

1.2.1.3.1. Installation of construction materials which are not noisy are not restricted and may be performed at any time.

1.2.1.3.2. All efforts shall be made to minimize disruption of functioning of the DMV complex. This includes minimizing noise and water intrusion affected by construction.

1.2.1.4. For any operation or activity that will disrupt, impact or inconvenience the DMV complex, a written notification shall be submitted to the owner at least 7 days prior to the required start of that operation or activity.

1.2.1.5. The contractor shall at all times protect the interior portions of the facility from damage due to weather, water intrusion or construction debris. Interior portions shall be water tight and secure at all times.

1.2.2. Owner occupancy: Owner reserves the right to occupy and to place and install equipment in completed areas of building, before final acceptance, provided such occupancy does not interfere with completion of work. Such placement of equipment and partial occupancy shall not constitute acceptance of the total work and will be coordinated with the Contractor.

1.2.2.1. Designer will prepare a certificate of final acceptance for each specific portion of the work completed and to be occupied before owner occupancy.

1.2.2.2. Obtain a certificate of occupancy from authorities having jurisdiction before owner occupancy.

1.2.2.3. Before partial owner occupancy, mechanical and electrical systems shall be fully operational, and required tests and inspections shall be successfully completed. On occupancy, owner will provide, operate and maintain mechanical and electrical systems serving occupied portions of building.

1.2.2.4. On occupancy, owner will assume responsibility for maintenance and custodial service for occupied portions of building.

**PART 2 – PRODUCTS**

Not used.

**PART 3 – EXECUTION**

Not used.

**END OF SECTION**

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**SECTION 01 22 13**  
**UNIT PRICES AND ALLOWANCES****PART 1 - GENERAL**

- 1.1 Work Included: All unit prices and allowances as listed in Bid Form.
- 1.2 Procedures:
- 1.2.1 Unit prices will be exercised at the option of the Owner.
  - 1.2.2 Modify and coordinate related activities as required to complete the work if, and when, acceptance is designated by the Owner in General Conditions and other Division 1 specifications.
  - 1.2.3 In the event unit prices are exercised, applicable sections of this Specification shall govern. Other sections may be modified as required to address the unit price.
  - 1.2.4 Cost associated with any anomalies identified on plans, on the roof, and/or in the Specification shall be included in the Base Bid.
  - 1.2.5 Cost associated with the repair of decking at removed abandoned penetrations identified on plans and/or marked on the roof shall be included in the Base Bid.
  - 1.2.6 Bidders shall provide a unit price for the items listed below and on the bid form. Bidder shall include a cash allowance in the Base Bid for each unit price in the quantity list below and on the bid form. Payment will be made for unit price work in excess of the cash allowance, which includes all overhead and profit. In the event it is necessary to replace fewer than quantity associated with the cash allowance, the Owner will take a credit at the unit price rate. The Design Professional shall be responsible for verifying the actual quantity and extent of the unit price work.

**PART 2 - PRODUCTS**

- 2.1 See applicable specification sections.

**PART 3 - EXECUTION**

- 3.1 **UNIT PRICE No. (1):** Apply coating on damaged metal standing seams. This unit price shall also reflect any power tools, fasteners, labor, safety harnesses, interior protections, overhead, and profit associated with accomplishing this work. Refer to Section 07 56 00 of the Specification.

Note: The Alternate 4 includes an allowance of 800 LF.

- 3.2 **UNIT PRICE No. (2):** Secure loose metal wall panels and seal penetrations. This unit price shall also reflect any power tools, fasteners, labor, safety harnesses, interior protections, overhead, and profit associated with accomplishing this work. Refer to Section 02 41 13 and 06 10 53 of the Specification.

Note: The Alternate 5 includes an allowance of 50SF per location, 2 locations noted.

- 3.3 **UNIT PRICE No. (3):** Clean masonry at select locations as indicated on roof plan. This unit price shall also reflect any power tools, fasteners, labor, safety harnesses, interior protections, overhead, and profit associated with

accomplishing this work. Refer to Section 04 01 00 of the Specification.

Note: The Alternate 7 includes an allowance of a total of 300 SF of masonry cleaning.

**END OF SECTION**



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**SECTION 01 23 00**  
**ALTERNATES****PART 1 - GENERAL**

- 1.1 Drawings and general provisions of the contract, including General Conditions of the Contract, Supplementary General Conditions, and other Division 1 specification sections apply to work of this section.
- 1.2 Work Included - All alternates as listed on the Bid Form.
- 1.3 Procedures
  - 1.3.1 Alternates will be exercised at the option of the Owner.
  - 1.3.2 Modify and coordinate related activities as required to complete the work if, and when, acceptance is designated by the Owner.
  - 1.3.3 In the event alternates are exercised, applicable sections of this Specification shall govern. Other sections may be modified as required to address the alternate.
  - 1.3.4 The Owner reserves the right to accept any alternate and to accept any combination of alternates.

**PART 2 - PRODUCTS**

- 2.1 See applicable specification sections.

**PART 3 - EXECUTION**

- 3.1 **Alternate 1A:** Coating and Sealant repair work associated with the hip and ridge of the standing seam metal roof as indicated in the base bid legend and base bid roof plan. Careful removal of the metal hip and ridge roof panels for reuse. Remove existing exposed butyl, sealant, and existing fasteners. Preparing surfaces for coatings and sealant. New fasteners, sealant and butyl on interior hip and ridge flashings including on edges and fastener penetrations as indicated in the details. 15lb felt paper over interior ridge or hip panels. New fasteners and coating on exterior hip and ridge flashings on edges, fastener penetrations and other intersections and junctions of standing seam metal roof as indicated in the details.
- 3.2 **Alternate 1B:** NOT USED
- 3.3 **Alternate 2A:** Coating and Sealant repair work associated with the hip and ridge of the standing seam metal roof as indicated in the alternates legend and alternates roof plan. Careful removal of the metal hip and ridge roof panels for reuse. Remove existing exposed butyl, sealant, and existing fasteners. Preparing surfaces for coatings and sealant. New fasteners, sealant and butyl on interior hip and ridge flashings including on edges and fastener penetrations as indicated in the details. 15lb felt paper over interior ridge or hip panels. New fasteners and coating on exterior hip and ridge flashings on edges, fastener penetrations and other intersections and junctions of standing seam metal roof as indicated in the details.
- 3.4 **Alternate 2B:** Coating and Sealant repair work associated with the hip and ridge of the standing seam metal roof as indicated outside of the base bid work area on the roof plan. Careful removal of the metal hip and ridge roof panels for reuse. Remove existing exposed butyl, sealant, and existing fasteners. Preparing surfaces for coatings and sealant. New fasteners, sealant and butyl on interior hip and ridge flashings including on edges and fastener penetrations as indicated in the details. 15lb felt paper over interior ridge or hip panels. New fasteners and coating on exterior hip and ridge flashings on edges, fastener penetrations and other intersections and junctions of standing seam metal roof as indicated in the details.

- 3.5 **Alternate 3:** NOT USED
- 3.6 **Alternate 4:** Review existing standing seam metal roof seams, apply coating on damaged seams, 800LF allowance.
- 3.7 **Alternate 5:** Secure loose metal wall panels and seal penetrations, allowance of 50 SF per location, 2 locations.
- 3.8 **Alternate 6:** NOT USED
- 3.9 **Alternate 7:** Clean masonry at select locations as indicated on roof plan. Two locations, Allowance of 200SF at one location and 100SF at the other location.
- 3.10 **Alternate 8:** NOT USED
- 3.11 **Alternate 9:** Install coating on roof in its entirety to achieve a 10 year no dollar limit warranty.

**END OF SECTION**

**SECTION 01 33 00  
SUBMITTALS**

**PART 1 - GENERAL**

- 1.1 Drawings and general provisions of the contract, including General Conditions, Supplemental Conditions and other Division 1 specification sections apply to work of this section.
- 1.2 Procedures
  - 1.2.1 Submit certain items with Bid and within 7 calendar days after receipt of signed Contract.
  - 1.2.2 Each transmitted document shall identify the project name and Contractor. Material submittals shall also identify the type and trade name of materials, material manufacturer, intended use and specification number. The successful bidder shall request an electronic copy of the attached "Submittal Checklist" to complete and include with each submittal. See Paragraph 1.7. Deviations from Contract Documents shall be identified.
  - 1.2.3 Submittals shall bear the Contractor's stamp and indicate approval and date.
  - 1.2.4 After Designer's review of materials, revise and resubmit, as required, identifying changes made since previous submittal.
  - 1.2.5 Upon approval by Designer, submittals will be forwarded to the Owner.
- 1.3 Bid Submittals
  - 1.3.1 Safety Plan (Generic)
- 1.4 Site Specific Safety Plan – Refer to Section 01 66 00.
- 1.5 Construction Schedules – Submit a construction schedule in a gantt or bar chart schedule showing critical path activities with dates for review. Update schedule bi-weekly and at each pay request, submit for review upon each update.
- 1.6 Foreman's Statement
  - 1.6.1 Submit on or before pre-construction conference.
- 1.7 Emergency phone number of principals, superintendent, foreman, project manager.
  - 1.7.1 Submit to Owner and Designer prior to the Pre-Construction Conference.
- 1.8 Pre-Construction Submittals
  - 1.8.1 Prior to the start of the project, the following items need to be submitted within 7 calendar days after the receipt of signed Contract. The contractor shall fill out the attached Submittal checklist form, ensuring that all items listed in this section, referenced for submittal in the specification, and/or items to be used on this project are properly submitted. Items submitted must conform to the standards and expectations of that material, detail, and/or procedure expressed in this specification. If not, that item may be rejected for use by the Engineer.

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- 1.8.2 The following literature shall be submitted.
- 1.8.2.1 Contractor's Letter of Good Standing with Manufacturer.
  - 1.8.2.2 Manufacturer's Sample 10 year warranty
  - 1.8.2.3 Contractor's 2 year warranty (within the specification)
  - 1.8.2.4 Contractor's Foreman's Statement
  - 1.8.2.5 Contractor's Construction Schedule
  - 1.8.2.6 Contractor's Schedule of Values (shall match the bid form)
  - 1.8.2.7 Coating Manufacturer's Letter of Approval of Product Use on Project
- 1.8.3 Submit all materials as outlined in Part 2 of the Specification sections. Group, label and number material submittals by Specification Section and submittal number.
- 1.8.4 Submit coating color charts.
- 1.8.5 Provide SDS or MSDS safety data sheets for all submittals.
- 1.8.6 Submit shop drawings in accordance to Section 01 33 23 and the submittal log or submittal checklist.
- 1.9 Close-out Submittals
- 1.9.1 At the end of the project and prior to final payment, the following documents shall be submitted to the Engineer (see also Specification 01 77 00 Project Closeout Procedures):
    - 1.9.1.1 Copies of all punch lists prepared by the Engineer and documentation of completion
    - 1.9.1.2 Contractor's Warranty to Owner
    - 1.9.1.3 Manufacturer's Guarantee
    - 1.9.1.4 Contractor's Final Payment Application
    - 1.9.1.5 Consent of Surety for Final Payment
    - 1.9.1.6 Final Lien Waiver
    - 1.9.1.7 Contractor's Affidavit of Payment of Debts and Claims
    - 1.9.1.8 Contractor's Affidavit of Release of Liens

## **PART 2 - PRODUCTS**

- 2.1 Coatings and associated coating flashings are to be manufactured and labeled by the coating materials manufacturer or, if supplied by a different manufacturer, approved for use by membrane manufacturer in

compliance with warranty requirements.

**PART 3 - EXECUTION**

3.1 Timing

3.1.1 Make all submittals in accordance with schedules specified herein.

3.1.2 Engineer will be allowed a minimum of 10 calendar days following receipt of submittals for review.

3.1.3 Delays caused by tardiness in receipt of submittals shall not be an acceptable basis for extension of the Contract completion date.

3.2 Review

3.2.1 The notations "No Exceptions Taken" or "Exceptions as Noted" shall authorize the Contractor to proceed with fabrication, purchase, or both subject to the revisions, if any, required by the Designer's review comments.

3.2.2 The Contractor shall make all revisions, as required. If the Contractor considers any revisions to constitute a change, he shall notify the Designer under the provisions of the General Conditions.

3.2.3 Only those revisions directed or approved by the Designer shall be shown on the re-submittal.

3.2.4 After a submittal has been approved by the Designer, substitution of materials, equipment and/or procedures shall not be considered unless accompanied by an acceptable explanation for the substitution.

3.3 Foreman's Statement – (to be signed and submitted by the contractor’s staff member who will be on site full time and have supervisory responsibility to direct the construction, this person shall also be present at the preconstruction meeting).

STATEMENT

Div 3 Traffic Service Building Roof Repairs

SCO #: 21-23718-01

I, \_\_\_\_\_ an employee of \_\_\_\_\_ hereby state that I  
(Name) (Contractor)  
have my own personal copy of the project specifications and drawings, have thoroughly read them and have visited the work site.

By \_\_\_\_\_

Date \_\_\_\_\_

**END OF SECTION**

# SUBMITTAL CHECKLIST

(Submittal Log)

NCDOT Division 3 Castle Hayne  
Traffic Services Building  
Roof Repairs  
SCO#: 21-23718-01  
GL: 52199012; CC: 150538; WBS#: 51233.01D

Date:

**Review is for general compliance with the contract documents. No responsibility is assumed for correctness of dimensions or details.**

**Review Status:**

**Reviewed: Purchase/fabrication/installation may be undertaken.**

**Reviewed as Noted: Purchase/fabrication/installation may be undertaken subject to Designer's comments.**

**Revise and Resubmit: Purchase/fabrication/installation may not be undertaken, revise per Designer's comments and resubmit.**

**Rejected: Purchase/fabrication/installation may not be undertaken.**

ITEM	DATE RECEIVED	REVIEW STATUS & DATE	COMMENTS
<b>General</b>			
1. Subcontractors			
2. Material suppliers			
3. Project Schedule			
4. Schedule of values (match form of proposal)			
<b>Section 01 33 00</b>			
5. Foreman's statement			
6. Emergency telephone numbers			
<b>Section 01 66 00</b>			
7. Site specific safety plan			
<b>Section 01 78 36</b>			
8. Example of coating manufacturer's ten (10) year NDL warranties			
<b>Section 04 01 00</b>			
9. Cleaner Product Data			
<b>Section 07 56 00</b>			
10. Primer Product Data			
11. Flashing Product Data			
12. Coating Product Data			
13. Reinforcement Fleece Product Data			
14. Butyl Product Data			
15. Sealant Product Data			
16. Fasteners			

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**SECTION 01 45 00**  
**QUALITY CONTROL****PART 1 - GENERAL**

- 1.1 Drawings and general provisions of the contract, including General Conditions, Supplemental Conditions and other Division 1 specification sections apply to work of this section.
- 1.2 Quality Control – General
- 1.2.1 Work found in violation of the Specifications, or not in conformance with acceptable roofing practices/standards, shall be subject to rejection including removal and replacement with new materials at Contractor's expense.
- 1.2.2 Failure of Owner or Engineer to discover or reject defective work, or work not in accordance with the Contract, shall not be deemed an acceptance thereof, nor a waiver of Owner's rights to Contractor's compliance with the Contract or performance of the work, or any part thereof. No partial or final payment, or partial or entire occupancy, by Owner shall be deemed to be an acceptance with the Contract, nor shall it be deemed a waiver by Owner or any of Owner's rights pursuant to this Contract or otherwise.
- 1.2.3 Coating (of any kind) and base flashings shall be smooth to the substrate, and wrinkles in membrane or base flashings shall be grounds for rejection.
- 1.2.4 The accumulation of debris and foam adhesive beneath new membrane is not acceptable and shall be grounds for rejection.
- 1.2.5 Oil canning in metal shall be grounds for rejection.
- 1.3 Quality Control - Contractor
- 1.3.1 Maintain quality control over products, services, site conditions, and workmanship, to produce work of specified quality.
- 1.3.2 Promptly after the award of the contract, a preconstruction conference will be held at the job site. The contractor shall be represented, as a minimum, by the superintendent or project manager and foreman who will actually perform/supervise the work. Meetings with the designer and owner shall also be attended by the superintendent or project manager and foreman who actually perform/supervise the work. Failure of representation as stated may result in the rescheduling of these meetings. Meetings during the project may be held as often as the designer and owner deem necessary.
- 1.3.3 The contractor's project foreman or superintendent who attended the pre-construction meeting shall be on site at all times that work is being performed.
- 1.3.4 Subcontractor foremen shall be on site at all times that the subcontractor's work is being performed. The foremen shall be at the actual work site to observe workmanship and to be able to direct the work.
- 1.4 Quality Control - Owner
- 1.4.1 The Owner reserves the right to retain the services of an independent construction monitoring representative to provide full-time monitoring of the roof replacement. If the Owner engages this service, the Contractor will be informed. Testing may be performed to determine any deficiencies.

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- 1.4.2 The cost of such services as described in paragraph 1.4.1 above, will be borne by the Owner for the contract time. The cost of any monitoring and testing required after this period of time due to the installation being incomplete as a result of Contractor-controlled nonperformance will be borne by the Contractor as stated in time of completion section of the Supplementary General Conditions. Such costs will be deducted from the monies due to the Contractor at the time of final payment, recognizing any extensions of time granted by the Owner.
- 1.4.3 The Owner's project inspector described in paragraph 1.4.1 shall be present during all installation of the roof repair and restoration system. Any work performed without said presence may be rendered unacceptable unless prior arrangement is made otherwise with the Owner.
- 1.4.4 The Contractor shall inform the Owner's project manager two (2) weeks prior to the start of the roofing installation and three (3) days prior to the restart of roofing work following a period of work suspension, except for single days of suspension due to weather.
- 1.4.5 The Contractor shall be required to notify the Owner's project manager prior to cancellation of any operations and subsequent restarts of the project. Any cost resulting from the failure to notify shall be borne by the Contractor.
- 1.4.6 Work found to be in violation of the specifications, or not in conformance with acceptable roofing standards, shall be subject to rejection including removal and replacement with new material at the Contractor's expense.
- 1.4.7 The Owner's project inspector shall document quantities of those materials bid on a unit price basis listed in the Form of Proposal as well as other materials. Contractor shall provide bills of material for unit priced material installed.
- 1.5 Quality Control - Manufacturer - Selected Membrane Manufacturer shall be required to provide a qualified technical representative to observe field conditions, including suitability of surfaces and material installation at start of field work, at two week intervals during the work, and at completion of the work. Manufacturer's representative shall submit written report(s) to the Contractor and Designer listing observations and recommendations. Roofing Contractor shall be responsible for ensuring site visits by Membrane Manufacturer's Representative.
- 1.6 Inspection of the Work:
- 1.6.1 It is a condition of this contract that the work shall be subject to inspection during normal working hours by the designer, designated official representatives of the owner, and those persons required by state law to test special work for official approval. The contractor shall therefore provide safe access to the work at all times for such inspections.
- 1.6.2 All instructions to the contractor will be made only by or through the designer or his designated project representative. Observations made by official representatives of the owner shall be conveyed to the designer for review and coordination prior to issuance to the contractor.
- 1.6.3 Should any work be covered up or concealed prior to inspection and approval by the designer, such work shall be uncovered or exposed for inspection, if so requested by the designer in writing. Inspection of the work will be made promptly upon notice from the contractor. All cost involved in uncovering, repairing, replacing, recovering and restoring to design condition, the work that has been covered or concealed will be paid by the contractor involved.



- 1.6.4 If any other portion of the work has been covered which the designer has not specifically requested to observe prior to being covered, the designer may request to see such work and it shall be uncovered by the contractor. If such work be found in accordance with the contract documents, the cost of uncovering and replacement shall, by appropriate change order, be charged to the owner. If such work be found not in accordance with the contract documents, the contractor shall pay such costs unless it be found that this condition was caused by the owner or a separate contractor, in which event the owner or the separate contractor shall be responsible for the payment of such costs.
- 1.6.5 The contractor shall notify the designer in writing that the project is complete and ready for inspection. The designer shall make an inspection to verify that the project is complete and shall prepare a list (punchlist) of any incomplete work. The contract shall complete all items shown on the punchlist and notify the designer the project is complete and ready for final inspection in writing.
- 1.6.6 Selected manufacturers shall be required to provide qualified personnel to observe field conditions, including suitability of surfaces and material installation at start of field work and completion of field work. Manufacturer's representative shall submit written report(s) to the Designer listing observations and recommendations. Roofing contractor shall be responsible for ensuring site visits by manufacturer's representative.
- 1.6.7 Work found to be in violation of specifications or not in accordance with established workmanship practices and standards will be subject to complete removal and proper replacement with new materials at Contractor's expense.
- 1.6.8 Failure of Owner or Designer to discover or reject defective work, or work not in accordance with the Contract, shall not be deemed an acceptance thereof, nor a waiver of Owner's rights to Contractor's compliance with the Contract or performance of the work, or any part thereof. No partial or final payment, or partial or entire occupancy by Owner shall be deemed to be an acceptance of work or of material which is not strictly in accordance with the Contract, nor shall it be deemed to be a waiver by Owner of any of Owner's rights pursuant to this Contract or otherwise.

**PART 2- PRODUCTS**

- 2.1 Not Used.

**PART 3- EXECUTION**

- 3.1 Not Used.

**END OF SECTION**

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**SECTION 01 50 00**  
**TEMPORARY FACILITIES AND CONTROLS****PART 1 - GENERAL**

- 1.1 Drawings and general provisions of the contract, including General Conditions, Supplemental Conditions and other Division 1 specification sections apply to work of this section.
- 1.2 Description
- 1.2.1 Contractor shall provide for temporary facilities and controls required for the performance of the project except as otherwise noted. Such items include, but are not necessarily limited to, utilities such as heat, water, electricity and telephone; sanitary facilities; contractor's facilities; and enclosures such as tarpaulins, barricades, and canopies.
- 1.2.2 All equipment furnished by Contractor shall comply with all pertinent safety requirements.
- 1.2.3 Ladders, planks, hoists, and all similar items furnished by individual trades in the execution of their own portions of the work are not part of this Section.
- 1.2.4 All temporary facilities will be subject to the Owner's approval.
- 1.3 Product Handling
- 1.3.1 The Contractor shall exercise all means necessary to maintain temporary facilities and controls in proper and safe condition throughout the progress of the project.
- 1.3.2 All required connections to existing utility systems shall be made with minimum disruption. If disruption of existing service is required, notice shall be given to the Owner and connections shall not be made without Owner's approval. If necessary, Contractor shall provide for alternate temporary service.
- 1.3.3 If the required utility is not available from the Owner, the Contractor shall provide for alternate temporary service for the duration of the project.
- 1.4 Facility Access – Access onto the roofs shall be by a contractor provided ladder at location(s) pre-approved by the Owner. Ladders shall comply with all OSHA requirements and be removed at the end of each working day.

**PART 2 - PRODUCTS**

- 2.1 Not Used.

**PART 3 - EXECUTION**

- 3.1 Water
- 3.1.1 The Owner will furnish water required for construction through available hose bibs. Any additional water requirements by the Contractor shall be provided by the Contractor at no additional cost to the Owner. Contractor shall furnish hoses as needed to transport water to the point of use. Hoses shall be placed in locations approved by the owner.

### 3.2 Electricity

3.2.1 Contractor will furnish their own electricity during this project.

3.2.2 All wiring needed to facilitate construction of the project shall be temporary in nature and shall be furnished and installed by the Contractor at no additional cost to the Owner. Upon completion of the work, the Contractor shall remove all such temporary wiring and restore service to its original condition at no additional cost to the Owner.

### 3.3 Telephone

3.3.1 The Project Manager, Superintendent and Foreman will be required to have a working mobile phone during the course of the work. The mobile phone shall be capable of taking and sending and receiving photographs, emails and text messages. Such costs shall be included in the Base Bid.

### 3.4 Sanitary Facilities

3.4.1 Contractor shall provide toilet and washroom facilities at the project site at no additional cost to the Owner. The use of the facility's toilet and/or washroom facilities by the Contractor is not approved.

3.4.2 Sanitary facilities shall be located in the ground level contractor staging area within the staging area fencing. They shall be serviced regularly to prevent odor.

### 3.5 Enclosures

3.5.1 Contractor shall furnish, install and maintain for the duration of the project, all scaffolds, ladders, tarpaulins, barricades, warning signs, platforms, bridges, canopies, steps, and other temporary construction required to properly facilitate completion of the project in compliance with all safety and other regulations.

3.5.2 Contractor shall provide all necessary safeguards to warn and prevent pedestrians and Owner's personnel from being exposed to dangers or hazards created by this project.

### 3.6 Signs

3.6.1 No signs or advertising of any kind shall be allowed on the project site unless approved in advance by the Owner.

### 3.7 Construction Aids

3.7.1 Contractor shall provide for debris removal services and containers. Placement and servicing of containers shall be coordinated with the Owner.

3.7.2 Residue and debris from all operations shall not be allowed to accumulate on the project site. Debris shall be removed and properly disposed of in accordance with all Federal, state and local regulations.

3.7.3 Dust, dirt and debris created by project construction shall be properly contained or controlled by the Contractor. Method(s) of control shall be approved by the Engineer.

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### 3.8 Parking

- 3.8.1 Contractor's construction vehicles shall enter the project site and park in areas as directed by the Owner. The Contractor shall be responsible for coordination of traffic by his subcontractors, suppliers, etc., so as not to disrupt ongoing operations of the Owner.

### 3.9 Field Office

- 3.9.1 The Contractor may provide his own Field Office. The location is subject to the approval of the Owner.

### 3.10 Ventilation

- 3.10.1 Provide, as required, facilities to maintain specific storage conditions as described within this Specification and as recommended by the material manufacturer(s) for use in construction.
- 3.10.2 Provide adequate ventilation of enclosed areas to prevent the accumulation of fumes, vapors, and gases.
- 3.10.3 Contractor shall take all necessary precautions (such as but not limited to) installing filters and scheduling work to prevent construction fumes from entering the building. Should it be reported to the contractor that fumes are entering the building the contractor shall immediately rectify and correct the condition to restore clean air to the facility.

### 3.11 Connects and Disconnects

- 3.11.1 In the event it is necessary to disconnect any electrical wiring or connections, plumbing lines or other building services, notify the Owner. Contractor shall not disconnect or connect services unless authorized in writing by Owner.
- 3.11.2 Modification of existing service piping, wiring and duct work required in connection with the lifting, removal or relocation of roof-mounted equipment shall be accomplished by the Contractor as part of his Contract.
- 3.11.3 Any rooftop equipment removed and reinstalled by the Contractor must be tested to ensure it operates properly. If the equipment does not operate properly, notify the Owner and Designer immediately.

### 3.12 Contractor Staging Area

- 3.12.1 Shall be of a size and in a location as shown on drawings.
- 3.12.2 Shall be locked at the end of each day, or when the contractor cannot visually monitor the staging area.
- 3.12.3 Shall be locked with dual locks – one from the Owner and one from the Contractor.

**END OF SECTION**

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**SECTION 01 66 00**  
**STORAGE AND PROTECTION****PART 1 - GENERAL**

- 1.1 Drawings and general provisions of the contract, including General Conditions, Supplemental Conditions and other Division 1 specification sections apply to work of this section.
- 1.2 General Protections
- 1.2.1 Limit size of work sections to safeguard adjacent materials, structures, etc., and to minimize dust and noise.
- 1.2.2 Protect existing facilities from damage during work. Do not overload existing paving, curbs, sidewalks, etc. with vehicle traffic. Do not overload new or existing construction with demolition debris, equipment, etc.
- 1.2.3 Take appropriate steps at each construction site to protect the general public from hazards created by demolition and construction operations.
- 1.2.4 Planned shut-downs – Any utility outage or shut down of HVAC or other equipment or blocking of loading docks needed by the contractor to perform or complete the work must be scheduled in writing in advance and be approved by the owner a minimum of 14 calendar days in advance. The request shall be made through the Owner's project manager.
- 1.2.5 Separate demolition or construction site from public access by fences, barricades, or other appropriate security measures. Accident prevention signs and markers shall comply with NC OSHA regulations to warn of dangers (e.g., overhead electrical wires) and restrictions (e.g., restricted access areas, hard hat areas). Where necessary, provide protected detour routes for vehicles or pedestrian traffic.
- 1.2.6 Barricades and signs must be substantial enough to deter bypassing, vandalizing, or theft. Keep signs neat and legible at all times. Handmade signs are not acceptable.
- 1.2.7 All barricades, temporary walkways, and protection of work and materials shall accommodate access, provide adequate warning, and protection to all segments of the population including wheelchair users and those using walking aids and the hearing and visually impaired.
- 1.2.8 Contractor will note that building will remain occupied during work. He is responsible for taking all precautions necessary to protect building, contents, and personnel from damage or injury from his operations, and from water entry into the building during construction. Dirt and dust must be kept to a minimum.
- 1.2.9 Prior to starting work Contractor shall obtain approval of the Owner for locations of work operations at ground level, such as material storage, hoisting, dumping, etc. Work will be restricted to approved locations.
- 1.2.10 Walls, windows, roof edges, etc., adjacent to hoists, and staging areas shall be protected using canvas tarpaulins. Plastic or felt will not be acceptable.
- 1.2.11 Plywood, minimum  $\frac{3}{4}$ " thick, or other suitable materials shall be used to protect roof areas from damage that may be caused by concentrated equipment loads and foot traffic.

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- 1.2.12 Roof traffic shall be confined to work areas. Contractor shall be responsible for any leaks and resulting damage during and after project completion.
- 1.2.13 Self-supporting ramps shall be used where expansion joints, area dividers, etc. are to be crossed.
- 1.2.14 Contractor shall protect interior operations from adverse weather or construction operations during the project. The contractor shall note that the building will remain occupied and in operation while the project takes place.
- 1.2.15 At the end of each work day, the contractor shall apply nightly temporary tie-ins to ensure that the building is weather tight, and that newly installed materials are free from moisture and debris. Newly installed materials coming in contact with moisture and debris is grounds for rejection of materials, and shall constitute the replacement of the materials with like materials at no additional cost to the Owner.
- 1.2.16 The Contractor will note that the building will remain occupied during work. He is responsible for taking all precautions necessary to protect building, contents, and personnel from damage or injury from his operations. The Contractor will be held liable for any damages to the building, building contents, its occupancy, grounds, landscaping or vehicles (owners, employees or visitors) resulting from work under the Contract. In the event of damage, Contractor will restore property to a condition equivalent to that at the time the project started.
- 1.2.17 The Contractor shall keep existing drainage facilities and associated leaders/downspouts clear of debris and bitumastic materials during construction. The Contractor will be required to use elastomeric plugs to protect leaders/downspouts during demolition and re-roofing operations.
- 1.2.18 Exterior Protections
- 1.2.18.1 Provide construction trailer, if desired, and material staging at location provided by the Owner at the pre-bid meeting.
- 1.2.18.2 Maintain a clean construction area in fencing. Maintain a clean material staging area in fencing. No spills, splatter, or residue shall remain on tarmac, roads or grounds.
- 1.2.18.3 Contractor shall not completely block both lanes of any roadway or parking lot.
- 1.2.18.4 Contractor is responsible for all parking lots, parking decks, parking equipment, roads, drives and other vehicles or pedestrian traffic areas, grounds, grass, landscaping and exterior utilities related (directly or indirectly) to the project and shall be restored to their original or better condition as observed at the time of the project start. The contractor and Owner's project manager shall walk the project at the start and at final completion and agree to existing damage and repairs required by the contractor.

### 1.3 Safety Site Plans

- 1.3.1 The Contractor shall install and maintain temporary fall protection systems for this type of work in accordance with the following standards:
- 1.3.1.1 29 CFR 1910 - OSHA
- 1.3.1.2 29 CRF 1926 - OHSA
- 1.3.1.3 ANSI/IWCA I-14.1

1.3.1.4 ANSI/ASSE Z359.0-2007

1.3.1.5 ASME A120.01-2008

1.3.2 The Contractor shall submit a site specific safety plan that shall outline safety precautions that shall be in place to protect workers, buildings, persons, vehicles, structures, and any other items that may be affected or otherwise endangered during the work. This shall list techniques, materials, safety personnel, and precautions that shall be used to achieve a safe working environment. Include sketches, plans, and diagrams, as necessary, for assessment with the safety plan. This safety plan shall be submitted to the Owner for approval with the bid. Failure to submit a safety plan shall result in disqualification of the bid and the bid shall be labeled “non-responsive”. At a minimum, this safety plan shall include:

1.3.2.1 General Safety requirements.

1.3.2.2 Protocol for providing a safe working environment for Contractor Employees, in accordance with Paragraph 1.1.3 above.

- i Temporary fall restraint systems and anchorages,
- ii Warning lines and barricades,
- iii Safety meetings and minutes.

1.3.2.3 Wind speed working conditions, and protections for temporary roofing in high speed events.

1.3.2.4 Protocol for fire safety,

- i Equipment checklist for proper operation,
- ii Fire extinguisher locations for every open flame, at staging areas, material storage areas,
- iii Wind requirements for open flames,
- iv Monitoring any open flame work for subsequent combustion.

1.3.2.5 Protocol for night/pre-dawn work, including foot-candle lighting, safety monitor per number of workers, barricades encapsulating work areas, 100% tie-in outside of barricaded work area, etc.

1.3.2.6 Protocol for deviations from submitted safety plan on a temporary, as needed basis. This safety plan schedule outlines minimum requirements, and this plan is subject to expansion and approval by the Owner.

1.3.3 Protect existing facilities from fire as a result of construction operations. Contractor shall provide suitable and adequate fire extinguishers conveniently located on at staging areas, storage areas and at areas or equipment where an open flame is being used. Competent operators shall be in attendance at all times and shall be properly trained or instructed in fire protection.

1.3.3.1 At each location where an open flame is used, Contractor shall provide a watchman with a suitable fire extinguisher.

1.3.3.2 Hot work permits will be required for the use of torches.

1.4 Material Protection

1.4.1 Products shall be transported by methods which avoid damage. Damaged material shall be subject to rejection by the Engineer.

1.4.2 Store materials off of the ground covered with tarps. Factory-applied wrappings are not acceptable.

1.4.3 Wet materials shall be removed from the project site.

#### 1.5 Storage

1.5.1 Contractor shall be responsible for proper storage of equipment, materials and devices furnished by himself and/or his subcontractors and suppliers.

1.5.2 To the maximum extent possible, the Contractor shall not store combustible or flammable materials inside the facility.

1.5.3 All storage areas are subject to approval by the Owner or his authorized representative.

#### 1.6 Security Measures:

1.6.1 The contractor shall keep his materials and equipment secure at all times.

1.6.2 The contractor and their subcontractors shall not smoke on state property.

1.6.3 The Owner will provide only those security measures which are deemed prudent for its own operations. The Contractor shall provide the necessary security means to protect the work, materials, tools and construction equipment from vandalism, theft, and fire unless stricter measures are noted elsewhere within the construction documents. The Contractor is responsible for replacement of his or her materials, machinery, equipment, tools, and supplies which are the subject of theft or mysterious disappearance. Clearly mark all tools and equipment with the Contractor's identification. The Contractor shall clearly mark all tool boxes.

1.6.4 The Contractors shall provide the Owner with a list of day and night phone numbers to use in case of emergencies during the course of the project.

1.6.5 Hazard Communication Standards - All Contractors shall comply with the OSHA Hazard Communication Standard. The written Hazard Communications Program and Material Safety Data Sheets for each hazardous chemical shall be readily available and centrally located on site.

1.6.6 The contractor must secure all tools and materials stored on site within a locked 6 ft. tall fence (as a minimum) at the end of each day. This shall also include the portable toilet. Fence posts shall not penetrate the ground or parking lot. The fence shall be double locked with a contractor lock and one supplied by the Owner.

1.6.7 All tools stored on site must be secured in locked steel gang boxes at the end of each day.

1.6.8 All vehicles and motorized equipment shall be locked and secured at the end of each day.

### **PART 2 - PRODUCTS**

2.1 Not Used.

### **PART 3 - EXECUTION**



3.1 Not Used.

**END OF SECTION**

**SECTION 01 74 00  
CLEANING**

**PART 1 - GENERAL**

- 1.1 Drawings and general provisions of the contract, including General Conditions, Supplemental Conditions and other Division 1 specification sections apply to work of this section.
- 1.2 Description: To maintain the buildings and site in a clean condition throughout the duration of the project. The Contractor shall comply with all requirements for cleanliness described in other sections of these Specifications.

**PART 2 - PRODUCTS**

- 2.1 The Contractor shall provide all required manpower, material and equipment to maintain the specified standard of cleanliness.
- 2.2 Contractor shall use only those materials and equipment which are compatible with the surface being cleaned as recommended by the manufacturer or approved by the Designer.

**PART 3 - EXECUTION**

- 3.1 Progress Cleaning:
  - 3.1.1 Stored items shall be kept in an orderly arrangement allowing maximum access and shall not impede drainage or traffic.
  - 3.1.2 Scrap, debris, waste material and other items shall not be allowed to accumulate and shall be removed from the roof on a daily basis.
  - 3.1.3 Contractor shall protect new roofing membrane from dirt and debris during the demolition of the remainder of the roofing. Areas with new roofing membrane shall be kept clean and free of debris during the duration of the re-roofing.
  - 3.1.4 Contractor shall provide storage containers for all items awaiting removal from the site. Storage containers shall be approved by the Designer.
  - 3.1.5 The Contractor shall conduct daily inspections to ensure that the requirements for cleanliness are met.
  - 3.1.6 At locations where the Contractor accesses the site or designated changing areas, the Contractor shall maintain a clean site. The Contractor shall protect the Owners' building from damage, staining, soiling, roofing materials, and roofing debris. This shall also include, at a minimum, the weekly cleaning of these areas. "Clean" shall be interpreted as meaning the level of cleanliness generally attainable by skilled cleaners using commercially available building maintenance equipment and materials.
  - 3.1.7 Work may be stopped or delayed by the Owner should the Contractor fail to take appropriate measures to clean the site on a daily basis. Extensions to the project completion date for such delays will not be approved.
- 3.2 Inspection: The Contractor shall inspect all arrangements of materials stored on the project site on a weekly minimum basis and shall service all arrangements in accordance with the requirements of Paragraph 3.1.1 of this section.

### 3.3 Final Cleaning:

- 3.3.1 Except as specifically provided otherwise, "clean" shall be interpreted as meaning the level of cleanliness generally attainable by skilled cleaners using commercially available building maintenance equipment and materials.
- 3.3.2 All tools, equipment, materials, scrap, debris and waste shall be removed from the project site and a final progress cleaning conducted in accordance with this Section.
- 3.3.3 Unless otherwise directed by the Designer, the Contractor shall clean all adjacent areas on the site and completely remove all resultant debris.
- 3.3.4 The Contractor shall clean out all gutters and associated downspouts of any debris prior to final acceptance by the Owner. Such work shall be performed at no additional cost to the Owner.
- 3.3.5 Restore grass or planted areas by filling ruts, raking, seeding, planting, sodding, and fertilizing. Sweep paved areas.
- 3.3.6 Contractor shall visibly inspect all exterior surfaces and remove all traces of dirt, waste materials, smudges, splashed materials and other foreign matter. The Designer may require that light sandblasting or other cleaning be performed at no cost to the Owner. If such cleaning is required, the Contractor shall take all necessary precautions to prevent damage to adjacent materials, property and vegetation.
- 3.3.7 Prior to final inspection, the surface of the membrane shall be cleaned of all debris, dust, and foreign material. This may require the use of water, detergents, and other cleaning agents approved by the roofing system manufacturer. Contractor will be responsible for providing the necessary items to perform this task. Do not use any abrasive pads that can score the polymer.
  - 3.3.7.1 During the work, the Contractor or subcontractor shall not be allowed to stage materials on newly installed roofing. The Contractor shall phase work and stage necessary materials at existing roofing areas. Any damage to new membrane during construction shall result in repairs to the membrane at no additional cost to the Owner, and large areas shall result in the removal and replacement of new membrane at no additional cost to the Owner.

**END OF SECTION**

**SECTION 01 77 00  
PROJECT CLOSEOUT PROCEDURES**

**PART 1 - GENERAL**

- 1.1 Drawings and general provisions of the contract, including General, Supplemental and Special Conditions and other Division 1 specification sections apply to work of this section.
- 1.2 Description: To provide a specific format for final acceptance and final inspection.
- 1.3 Related Work:
  - 1.3.1 Completion: Waiver of Claims, General Conditions
  - 1.3.2 Cleaning: Section 01 74 00
  - 1.3.3 Project Record Documents: Section 01 78 39
  - 1.3.4 Warranties: Section 01 78 36
  - 1.3.5 Closeout Submittals Required for Trades: Respective Section of Specification
  - 1.3.6 Final Acceptance: Conditions of the Contract.
  - 1.3.7 Final Payment: General Conditions
- 1.4 Quality Assurance: All documents submitted to the Owner shall be signed by a person authorized to endorse Contracts on behalf of the Contractor

**PART 2 – PRODUCTS**

- 2.1 Not Used.

**PART 3 - EXECUTION**

- 3.1 Final Acceptance:
  - 3.1.1 The Contractor shall submit written certification to the Owner when the project or designated portion of the project is substantially complete. A list of major items to be completed or corrected shall be stated.
  - 3.1.2 The Owner will make an inspection within ten (10) days after receipt of certification and issue a Certificate of Final Acceptance containing:
    - 3.1.2.1 The Date of Final Acceptance.
    - 3.1.2.2 The Contractor's list of items to be completed or corrected and any amendments by the Owner or Designer.
    - 3.1.2.3 The time to be allowed for the Contractor to complete or correct listed items.

- 
- 3.1.2.4 The time and the date Owner will assume possession of the work or designated portion thereof.
- 3.1.2.5 The signatures of the Owner, Designer and Contractor.
- 3.1.3 The Contractor shall then complete or correct those items so listed within the designated time and inform the Owner upon completion.
- 3.1.4 Should the Owner determine that the work is not substantially complete, the Owner shall immediately notify the Contractor in writing stating reasons. The Contractor shall then complete the work and send a second written notice to the Owner certifying that the project, or designated portion thereof, is substantially complete. The Owner will re-inspect the work within ten (10) days after receipt of certification.
- 3.2 Final Inspection:
- 3.2.1 The Contractor shall submit written certification to the Owner that:
- 3.2.1.1 The Contract Documents have been reviewed.
- 3.2.1.2 Work has been completed in accordance with the Contract Documents.
- 3.2.1.3 The project has been inspected for compliance with the Contract Documents.
- 3.2.1.4 The project is ready for final inspection.
- 3.2.2 The Owner will make a final inspection within ten (10) days after receipt of certification.
- 3.2.3 Should the Owner determine that the work is finally complete in accordance with the requirements of the Contract Documents, the Owner will request that the Contractor submit the appropriate project closeout documentation.
- 3.2.4 Should the Owner determine that the work is not finally complete, the Owner will immediately notify the Contractor in writing stating reasons. The Contractor shall then take immediate measures to remedy the stated deficiencies and send an additional written notice to the Owner certifying that the work is complete. The Owner will re-inspect the work within ten (10) days after receipt of certification.
- 3.3 Re-Inspection Costs: Should the Owner be required to perform additional inspections due to noncompliance of work with the certifications of the Contractor, the Contractor shall compensate the Owner for such additional services. Such costs will be deducted from final payment to the Contractor.
- 3.4 Closeout Submittals:
- 3.4.1 Project Record Documents: As required by Section 01 78 39
- 3.4.2 Warranties: As required by Section 01 78 36
- 3.4.3 Evidence of payment and release of liens: Waiver and Release Upon Payment – Final.
- 3.4.4 Consent of Surety
- 3.4.5 Contractor's Affidavit of Payment of Debts and Claims: AIA G706.

3.4.6 Contractor's Affidavit of Release of Liens: AIA G706A.

3.4.7 The Contractor shall be responsible for proper execution of all submittals required by this Section prior to delivery to the Owner through the Designer.

3.4.8 The Contractor shall submit a final statement of accounting to the Owner. The statement shall reflect all adjustments including, but not limited to:

3.4.8.1 Original Contract sum.

3.4.8.2 Change Orders noting such items as:

- (a) Unit Prices
- (b) Cash Allowances
- (c) Deductions for Uncorrected Work
- (d) Deductions for Re-Inspection Payments
- (e) Other Adjustments

3.4.8.3 Total adjusted Contract sum

3.4.8.4 Previous payments

3.4.8.5 Remaining amount due

3.4.9 The Owner will prepare a final Change Order reflecting approved adjustments not previously noted.

3.5 Final Application for Payment:

3.5.1 The Contractor shall submit final application for payment in accordance with the specifications.

3.5.2 The Owner will issue a final certificate in accordance with the specification.

**END OF SECTION**

## SECTION 01 78 36

### WARRANTIES

#### PART 1 - GENERAL

- 1.1 Drawings and general provisions of the contract, including General Conditions, Supplemental Conditions and other Division 1 specification sections apply to work of this section.
- 1.2 Upon completion of the work and prior to the final payment, the Contractor shall submit the required contractor's warranty and/or manufacturer's guarantee, as required by this Section.
- 1.3 Submit all items required by this Section as part of project record documents, Section 01 78 39.
- 1.4 Warranties and Bonds
  - 1.4.1 Contractor:
    - 1.4.1.1 Comply with the General Conditions of the Contract concerning warranties and bonds. The Contractor shall agree that the work covered under this Contract shall remain free from any water penetration and physical defects caused by defective workmanship or materials for a period of five (5) years from the date of final acceptance by Owner. Warranty shall be executed on Contractor's company letterhead and signed by an authorized officer of the company.
    - 1.4.1.2 Prior to final payment, Contractor shall submit one original and three copies of the roofing system manufacturer's twenty year, No Dollar Limit Guarantee, with flashing endorsement, to the Owner.
    - 1.4.1.3 The Contractor and the Owner's representative shall conduct an inspection approximately 30 days prior to the end of the Contractor's guarantee to determine the present physical condition of the roofing system. The Owner's representative shall then submit a written report as to the findings of this inspection and the roofing Contractor, at his own expense, shall repair any defects covered under the scope of this contract.
  - 1.4.2 Roof Membrane Manufacturer:
    - 1.4.2.1 General - Warranties shall not contain conditions limiting the manufacturer's obligations due to:
      - i Receipt of payments from the roofing contractor.
      - ii The roofing system having been installed in accordance with the manufacturer's specifications and procedures.
    - 1.4.2.2 Coating Manufacturer's Guarantee (As Part of Alternate 9):
      - i The Contractor shall include in the base bid the cost of the manufacturer's 10-year no dollar limit material and workmanship system warranty.
      - ii The system shall include all new components above the deck such as insulation, adhesive system, base sheets, membrane and flashings, low profile expansion joints and flashings, all liquid applied membrane and flashings and shall include all portions of the fastening components that extend through existing insulation and below the top of the roof deck. Warranty shall not be limited to only those components manufactured or

sold by the membrane manufacturer.

- iii The Coating Manufacturer shall agree that the work covered under this contract shall remain free from any water penetration and material defects caused by defective workmanship or materials for a period of five (5) years from the date of final acceptance by the Owner. The Contractor's warranty shall neither replace nor negate any agreement furnished by the manufacturer.

- 1.5 Emergency repairs to defects and leaks shall be performed within 24 hours of receiving notice from Owner. As soon as weather permits, permanent repairs and restoration of affected areas shall be accomplished in a manner in conformance with the original Contract requirements. This work shall be done without additional cost to the Owner, except if it is determined that such leaks and defects were caused by abuse, lightning, hurricane, tornado, hail storm, or other unusual phenomena.
- 1.6 Starting dates of all warranties shall be the date of the final inspection and Owner acceptance which the Owner, Designer, Contractor and Manufacturer agree that all work has been completed in substantial compliance with the plans and specifications of the project.
- 1.7 All warranties shall be governed by and construed in accordance with the laws of the State of North Carolina.
- 1.8 No warranty shall require dispute resolution to take place in any court other than those courts having jurisdiction over the site of the project.
- 1.9 All warranties shall be issued bearing a signature of an officer of the company and shall not require the signature of the Owner nor Designer.
- 1.10 Final payment will be made to the Contractor only after three (3) copies of the warranties and guarantees have been submitted and the membrane manufacturer acknowledges that all bills are paid. All such documents shall show the project name and location and the Owner's name.

**END OF SECTION**



(Print Warranty Body on Contractor's Company Letterhead)

**WARRANTY**

1. Known all men by these presents, that we, *Contractor shall insert company name here* (Contractor), having installed insulation, roofing, flashings, and sheet metal work, and having accomplished certain other work on the Greensboro DMV Roof Replacement, 2527 E. Market Street, Raleigh, NC under Contract between the NC Department of Transportation and (Contractor) warrant to the NC Department of Transportation, with respect to said work that for a period of two (2) years from date of final acceptance of said work by the NC Department of Transportation, the roofing including insulation, roofing membrane, flashings, and sheet metal work, shall be absolutely watertight and free from all leaks, provided however, that the following are excluded from this warranty:
  - a. Defects or failure resulting from abuse by the Owner.
  - b. Defects in design involving failure of the structure, load-bearing walls, and/or foundations.
  - c. Damage caused by fire, tornado, hail, hurricane, acts of God, wars, riots, and/or civil commotion.
2. We agree that should any leaks occur in the roofing, we will promptly remedy said leaks in a manner to restore the roof to a watertight condition by methods compatible to the system and acceptable under industry standards and/or general practice.
3. We further agree that for a period of two (2) years from date of final acceptance referred to above, we will make repairs at no expense to the Owner, to any defects which may develop in the work including, but not limited to, blisters, wrinkles, ridges, splits, warped insulation, and loose flashings, in a manner compatible to the system and acceptable under industry standards and general practice.
4. We also agree that the Owner has the right, at any time during the five-year warranty period, to make emergency repairs to protect the contents of the building or the building itself from damage due to leaking. The cost of emergency repairs made during the two (2) years of the warranty period shall be borne by the Contractor and action by the Owner shall not invalidate the warranty.

IN WITNESS WHEREOF, we have caused this instrument to be duly executed, this \_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_ by \_\_\_\_\_  
 Contractor President

\_\_\_\_\_  
Notary Public

**SECTION 01 78 39**  
**PROJECT RECORD DOCUMENTS**

**PART 1 - GENERAL**

- 1.1 Drawings and general provisions of the contract, including General Conditions, Supplemental Conditions and other Division 1 specification sections apply to work of this section.
- 1.2 Description
  - 1.2.1 To maintain an accurate record of the project throughout its duration. Items to be noted include, but are not necessarily limited to:
    - 1.2.1.1 Contract Documents (Plans, Specifications, Bid Documents and all other documents related to the Construction Contract).
    - 1.2.1.2 As Built Red Lined Drawings
    - 1.2.1.3 Addenda
    - 1.2.1.4 Minutes of prebid, preconstruction, and construction meetings
    - 1.2.1.5 Change Orders
    - 1.2.1.6 Field Orders and Instructions.
    - 1.2.1.7 Construction Schedule
    - 1.2.1.8 Shop Drawings
    - 1.2.1.9 Product Samples
    - 1.2.1.10 Progress Reports
- 1.3 Quality Assurance
  - 1.3.1 The Contractor shall delegate responsibility for maintenance of the record documents to one person on the Contractor's staff as approved by the Designer.
  - 1.3.2 All entries shall be made within 24 hours after receipt of information.
- 1.4 Submittals
  - 1.4.1 The Contractor shall submit the final record documents to the Designer for approval prior to submitting a request for final payment. Submit two copies of "as-built" documents to Designer with letter of transmittal indicating date, project title, Contractor's name and address, list of documents, and signature of Contractor.
- 1.5 Product Handling - the Contractor shall take all necessary precautions to protect the record documents from deterioration loss and damage until completion of the work and transfer of the recorded data to the final record documents.

**PART 2 - PRODUCTS**

2.1 Not Used.

**PART 3 - EXECUTION**

3.1 Maintenance of Record Documents – The Contractor shall maintain the record documents at the project site and make all documents available to the Designer during all working hours.

3.2 Review and Approval – The Contractor shall submit the completed total set of record documents to the Designer as described.

**END OF SECTION**

**DIVISION 2**  
**EXISTING CONDITIONS**

**SECTION 02 41 13**  
**SELECTIVE DEMOLITION AND PREPARATIONS**

**PART 1 - GENERAL**

- 1.1 Drawings and general provisions of the contract, including General Conditions, Supplemental Conditions and other Division 1 specification sections apply to work of this section.
- 1.2 Work Included
  - 1.2.1 Selective demolition and preparations for the roof repair project, as specified herein.
- 1.3 Related Work Specified Elsewhere
  - 1.3.1 Temporary Facilities and Control - Section 01 50 00
  - 1.3.2 Storage and Protection - Section 01 66 00
  - 1.3.3 Fluid Applied Coatings and Sealant – 07 56 00
- 1.4 Protection
  - 1.4.1 Refer to Section 01 45 00.
- 1.5 Submittals
  - 1.5.1 Submittals shall be in accordance with Section 01 33 00 of this Specifications.

**PART 2 - EXECUTION**

- 2.1 Demolition
  - 2.1.1 Do not remove more roofing material in one day than can be replaced. Building shall remain dry and leak free for the duration of the project.
  - 2.1.2 Remove existing sealant and butyl as noted.
  - 2.1.3 Remove all existing fasteners as noted, and discard. Replace in kind.
  - 2.1.4 Carefully remove existing metal ridge and hip panels for reuse'
  - 2.1.5 Carefully remove existing coping as noted for reuse.
  - 2.1.6 The Designer and Contractor shall document the actual quantities removed for materials bid on a unit price basis.
  - 2.1.7 All existing roof mounted equipment shall be protected and remain undisturbed.
  - 2.1.8 Demolition shall be performed by personnel familiar with the replacement of materials being used.

- 2.1.9 Demolition adjacent to areas to remain shall be performed in a neat manner with straight lines to facilitate tie-ins of replacement materials. Contractor shall review tie-in methods with the Designer for approval. Designer has final approval of such methods.
- 2.1.10 Excessive demolition, as determined by the Owner's representative, shall be replaced with equal materials at the Contractor's expense in accordance with the General Conditions of the Contract.
- 2.1.11 No demolition shall be performed if the chance of precipitation is 40% or more as reported by the nearest office of the National Weather Service.

2.2 Metal Repair:

- 2.2.1 Reinstall metal flashing, ridge and hip panels so that the surface is plumb and has the same texture as adjacent areas.

2.3 Preparations

- 2.3.1 Prior to the installation of any new roofing, flashings, metal flashings, any other miscellaneous items, the Contractor shall clean surfaces of all dust, dirt, and other foreign materials.

**END OF SECTION**

**DIVISION 4**

**MASONRY**

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**SECTION 04 01 00**  
**MASONRY CLEANING****PART 1 - GENERAL**

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Cleaning

## 1.3 REFERENCES - NATIONAL PARK SERVICE PRESERVATIONS BRIEFS:

- A. No. 3 – Dangers of Abrasive Cleaning to Historic Buildings, Anne E. Grimmer, U.S. Department of the Interior, National Park Services, Preservation Assistance Division, Technical Preservation Services.

## 1.4 DEFINITIONS

- A. Low-Pressure Spray: 100 to 150 psi.
- B. Saturation Coefficient: Ratio of the weight of water absorbed during immersion in cold water to weight absorbed during immersion in boiling water; used as an indication of resistance of masonry units to freezing and thawing.

## 1.5 SEQUENCING AND SCHEDULING

- A. Work Sequence: Perform masonry cleaning work in the following sequence, which includes work specified in this and other Sections:
  - 1. Remove plant growth.
  - 2. Inspect masonry for open mortar joints and point them before cleaning to prevent the intrusion of water and other cleaning materials into the wall.
  - 3. Clean masonry.
- B. As scaffolding is removed, patch anchor holes used to attach scaffolding.

## 1.6 ACTION SUBMITTALS

- A. Product Data: For each type of product.



1. Include recommendations for product application and use. Include test data substantiating that products comply with requirements.

#### 1.7 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For masonry repair specialist, including field supervisors and workers.
- B. Quality-Control Program

#### 1.8 SUBSTITUTIONS

- A. If alternative methods and materials to those indicated are proposed for any phase of restoration work, provide written description, and program of testing to demonstrate effectiveness for use on this project. Provide documentation showing compliance with the requirements for substitutions and the following information: Coordination information, including a list of changes needed to other work that will be necessary to accommodate the substitution.
- B. A comparison of the substitution with the specified products and methods, including performance, weight, size, durability, and visual effect.
- C. Certification that the substitution conforms to the contract documents and is appropriate for the application indicated. Material substitution requests must be accompanied by independent laboratory test reports from a lab designated by the Designer to establish equivalent performance levels and specification compliance. The submitting party shall pay for testing.

#### 1.9 QUALITY ASSURANCE

- A. Masonry Repair Specialist Qualifications: Engage an experienced masonry repair firm to perform work of this Section. Firm shall have completed work similar in material, design, and extent to that indicated for this Project with a record of successful in-service performance. Experience in only installing masonry is insufficient experience for masonry repair work.
- B. Field Supervision: Masonry repair specialist firm shall maintain experienced full-time supervisors on Project site during times that brick masonry repair work is in progress.
- C. Quality-Control Program: Prepare a written quality-control program for this Project to systematically demonstrate the ability of personnel to properly follow methods and use materials and tools without damaging masonry. Include provisions for supervising performance and preventing damage.

#### 1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to site in manufacturer's original unopened containers and packaging, bearing labels as to type and names of products and manufactures.
- B. Deliver and store restoration material in manufacturer's original, unopened containers with the grade, batch and production data shown on the container or packaging.

- C. Comply with the manufacturers written specifications and recommendations for mixing, application, and curing of reporting mortars and patching materials.
- D. Deliver products in time to avoid construction delays.
- E. Deliver and store products in manufacturer's original packaging with identification labels intact.
- F. Store products protected from weather and at temperature and humidity conditions recommended by manufacturer.

#### 1.11 FIELD CONDITIONS

- A. Cover partially completed work when work is not in progress.
- B. Protect sills, ledges, and projections from droppings.
- C. Damage occurring to the building as a result of work of this section of Contractor's failure to protect against such damage shall be the Contractor's responsibility. The contractor shall restore damaged areas to the complete satisfaction of the Owner and Designer at no expense to the Owner.

### **PART 2 - PRODUCTS**

#### 2.1 MATERIALS

- A. Masonry Cleaner: Steinreinger-N by KEIM Mineral Coatings of America Inc, 10615 Texland Blvd, #600, Charlotte, NC, 28273 (866) 906-5346.
- B. Masking Tape: Nonstaining, nonabsorbent material; compatible with mortar, joint primers, sealants, and surfaces adjacent to joints; and that easily comes off entirely, including adhesive.
- C. Other Products: Select materials and methods of use based on the following, subject to approval of a mockup:
  - 1. Previous effectiveness in performing the work involved.
  - 2. Minimal possibility of damaging exposed surfaces.
  - 3. Consistency of each application.
  - 4. Uniformity of the resulting overall appearance.
  - 5. Do not use products or tools that could leave residue on surfaces.

### **PART 3 - EXECUTION**

#### 3.1 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from masonry restoration work.

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### 3.2 CLEANING

- A. Thoroughly clean exposed masonry surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water applied by low-pressure spray.
  - 1. Do not use metal scrapers or brushes.
  - 2. Do not use acidic or alkaline cleaners.
- B. Clean adjacent nonmasonry surfaces. Use detergent and soft brushes or cloths.
- C. Remove masking materials, leaving no residues that could trap dirt.

### 3.3 FIELD QUALITY CONTROL

- A. Testing Agency: Owner reserves the right to engage a qualified testing agency to perform tests and inspections. Allow inspectors use of lift devices and scaffolding, as needed, to perform inspections.
- B. Designers Project Representatives: Designer may assign Project representatives to help carry out Designers responsibilities at the site, including observing progress and quality of portion of the Work completed. Allow Designer's Project representatives use of lift devices and scaffolding, as needed, to observe progress and quality of portion of the Work completed.
- C. Notify Designer and Project representatives in advance of times when lift devices and scaffolding will be relocated. Do not relocate lift devices and scaffolding until Designer's and Owner's representatives have had reasonable opportunity to make inspections and observations of work areas at lift device or scaffold location.

**END OF SECTION**

**SECTION 07 56 00****FLUID APPLIED COATING AND SEALANTS****PART 1 GENERAL**

- 1.1 Work Included: Installation of sealants (base bid) and silicone coating system (alternates) at:
- 1.1.1 DIV 3 Traffic Services Building Roof
    - 1.1.1.1 Sealant
      - i. Base Bid: Ridges, Hips and Penetrations
      - ii. Alternate 2A – Ridges and Hips
      - iii. Alternate 3: Copings and fastener penetrations
      - iv. Alternate 5: Wall panels
      - v. Alternate 6: Vent trim panel
    - 1.1.1.2 Coatings
      - i. Alternate 1A: Hips and Ridges
      - ii. Alternate 2B: Hips and Ridges
      - iii. Alternate 4: Metal Standing Seams
      - iv. Alternate 8: Gutter lining
      - v. Alternate 9: Entire Hip Roof
- 1.2 Related Work:
- 1.2.1 Summary of Work – Section 01 11 00
- 1.3 Quality Assurance:
- 1.3.1 The Coating Applicator shall be certified by the coating manufacturer to install the coating system.
  - 1.3.2 The Coating Applicator shall have been actively applying coatings on roofs of equal or greater size, for a minimum of 5 years.
  - 1.3.3 Qualifications of Installers: Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work in this section. As a minimum, the Coating Applicator's foreman and the Coating Applicator shall be certified and trained by the Coating Manufacturer and shall be experienced in the application of the specified coating system. Written certification must be provided.
  - 1.3.4 Foreman shall have a minimum of 5 years of experience in the type of coating work specified and be able to proficiently communicate in English in the judgement of the Designer.
  - 1.3.5 The silicone coating manufacturer shall have a minimum of 25 years' experience in the manufacture of silicone roof coatings and be ISO 9001 certified. The coating shall have an Underwriters Laboratories (UL) Listing, and Factory Mutual (FM) Class 1, 4470 Approval.
  - 1.3.6 Standards: Comply with standards specified in this section and as listed in the General Requirements.
- 1.4 Submittals
- 1.4.1 Submittals shall be in accordance with Section 01 33 00.
  - 1.4.2 Contractor shall provide sample material warranty.
  - 1.4.3 Provide shop drawings for any details that deviate from the project drawings.
- 1.5 Delivery, Storage, and Handling.

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- 1.5.1 Deliver materials in manufacturer's original, unopened containers or packages with labels intact and legible. Where materials are covered by referenced specification number, labels shall bear specification number, type, class compliance with UL requirements, date of manufacture, and shelf life expiration date. The material shall be within its listed shelf life when applied. Deliver materials in sufficient quantity to allow work to proceed without interruption.
  - 1.5.2 Store materials in accordance with manufacturer's recommendations.
  - 1.5.3 Store materials on clean raised platforms. Store all materials in dry area, protected from water, direct sunlight and extreme temperatures.
  - 1.5.4 Provide continuous weatherproof protection of materials to ensure against deterioration for duration of project.
  - 1.5.5 Material stored on roof areas for immediate use:
    - 1.5.5.1 Distribute to prevent concentrated loads that would impose excessive strain to deck or structural members, or block storm water drainage.
    - 1.5.5.2 Secure to prevent displacement by wind.
    - 1.5.5.3 Cover with waterproof canvas tarp for protection from exposure.
    - 1.5.5.4 Material storage shall be in strict accordance with manufacturer's recommendations.
    - 1.5.5.5 Environmental Conditions - Materials installation shall proceed only when weather conditions are in compliance with the applicable manufacturer's recommendations for installation and no precipitation imminent. Materials installed during adverse weather conditions shall be subject to removal and replacement.
  - 1.6 Environmental Conditions.
    - 1.6.1 Apply in dry weather. Do not install in inclement weather, when rain is predicted at 30 percent or greater as reported by the National Weather Service nearest the project site, or when the dew point is within 5° F of the surface temperature.
    - 1.6.2 Apply silicone only to clean, dry and secure surfaces.
    - 1.6.3 Do not install when the surface temperature is less than 0° F. Contact the manufacturer if the substrate is over 120° F.
    - 1.6.4 Do not spray apply when the wind velocity exceeds 10 MPH without taking adequate precautions to eliminate overspray.
    - 1.6.5 Take all measures necessary to protect unrelated surfaces from coating overspray or spillage. Contractor to repair, clean or replace as chosen by the Designer and Owner all damaged finishes.
    - 1.6.6 Do not install when safe roofing operations cannot be maintained.
  - 1.7 Guarantee: Shall be in accordance with Section 01 78 36 of this specification.

## **PART 2 PRODUCTS**

### **2.1 Coating:**

- 2.1.1 Coating shall be high solids, solvent-free, alkoxy-based, moisture cured, silicone roof coating, mill

thickness as required by manufacturers have written instructions:

2.1.1.1 Alsan Coating SIL 402 by Soprema

2.1.1.2 Sikalastic 500 by Sika

2.1.1.3 Enduris 3500 by GE.

2.1.2 Coating Flashing: as required by the coating manufacturer and compatible with the base coating.

2.1.3 Coating primer: As required by the coating manufacturer.

2.1.4 Fabric reinforcing: as required by product manufacturer.

2.1.5 Seam sealant: Supplied by the silicone coating manufacturer and compatible with the silicone coating. Shall be high solids, solvent-free, silicone sealant.

2.1.6 Color of coating shall be one of the manufacturer's standard color and shall be approved by the Owner.

2.2 Cleaner: Biodegradable cleaner as recommended by the coating manufacturer.

2.3 Sealants (Base Bid): Sealant

2.3.1 M1 by Chemlink

2.3.2 Dowsil silicone 780 plumbers and roofers sealant

2.3.3 Sikalastomer 511

2.4 Butyl sealant meeting or exceeding the requirement of the following:

2.4.1 Conforms to U.S. Federal Specification TT-S-001657, Type 1

2.4.2 ASTM C1311

2.4.3 CAN/CGSB 19-GP-14M

2.5 Accessory materials shall be as provided by the system manufacturer.

### **PART 3 EXECUTION**

3.1 General – Contractor shall prevent overspray by masking surfaces not to be coated. Use wind screens as necessary. Contractor shall clean up and remove any overspray.

3.2 Adhesion Test: Prior to installing coating, conduct adhesion tests on the membrane and metal in accordance with manufacturer adhesion testing procedures to determine if a primer or other specific surface preparation is required.

3.3 Installation of coating system:

3.3.1 General:

3.3.1.1 Apply coating system in accordance with the manufacturer's written instructions.

3.3.1.2 Coating system to be installed shall have passed an adhesion test performed by the manufacturer's representative on the roof and witnessed by the designer.

3.3.1.3 The Coating Applicator's foreman shall be at the point of application at all times when coating materials are being applied.

- 3.3.1.4 Contractor shall take precautions to not allow fumes to be drawn into the building.
- 3.3.1.5 Allow all coating to dry thoroughly before further application of system.
- 3.3.1.6 Apply coating at rate, mil thickness, and pattern specified by system manufacturer. Extend time, if required to feel dry to the touch. Repeat as required by manufacturer for warranty coverage.
- 3.3.1.7 The minimum dry film thickness for the finished coating system shall not be less than the manufacturer's written requirements for a ten (10) year warranty.
- 3.3.1.8 Contractor shall request visits by manufacturer's technical representative as required for review of proper installation and as required for ten (10) year warranty coverage.
- 3.3.1.9 The wet thickness shall be measured and recorded daily, along with the quantity, batch number, and total square feet applied on a Daily Quality Control Form and given to the Designer once per week.

### 3.3.2 Preparation:

- 3.3.2.1 Clean the substrate in accordance with the manufacturer's written instructions and using the same procedure as accepted adhesion sample tests:
  - i. Remove all grease, dirt, sediment or other foreign matter from the existing roof coating and flashings by vacuuming and/or power brooming.
  - ii. Lightly pressure wash (approximately 2500 psi) and clean with a biodegradable cleaner all surfaces to receive coating system to remove all dirt. Allow surfaces to completely dry.
- 3.3.2.2 Remove and replace wet insulation in accordance with Section 07 22 16.
- 3.3.2.3 Seam sealant:
  - i. Curbs, gaps, flashing details, angle changes, and penetrations must be sealed with a minimum 60 mils of seam sealant.
  - ii. Loose seams must be repaired with seam sealant and fabric reinforcing.
- 3.3.2.4 The coating manufacturer's representative shall provide written approval of the substrate before coating application commences.

### 3.3.3 Application of coating system:

- 3.3.3.1 Primer: Apply primer as recommended by the manufacturer.
- 3.3.3.2 Coating: Apply coating to the properly prepared surface at a rate of approximately 1.5 gallons per square or as required by the coating manufacturer. Coating may be applied by brush, roller, or airless sprayer. Back-rolling should be kept to a minimum.
- 3.3.3.3 Protect finished work from weather or foot traffic until fully cured.
- 3.3.3.4 Cured silicone roof coating shall be monolithic and seamless, encapsulating the entire roof surface.

- 3.3.3.5 The minimum dry film thickness for the finished coating system shall be as required by the manufacturer for a ten (10) year manufacturer warranty. Contractor shall submit documentation from the manufacturer stating their requirements for a ten (10) year warranty.

**END OF SECTION**