



Project Manual For: **City of Naperville**

Vehicle Storage Garage & MCC Building Restoration

**2023- Roofing project**

**3712 Plainfield Naperville Rd.**

**Naperville, IL 60540**

**USC Project #:**

Due Date: March 7th , 2023

**Project Owner:** City of Naperville 3712  
Plainfield Naperville RD Naperville, IL 60540



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# 1 Instruction to Proposers

In accordance with the Invitation to Proposal, the Proposal form must be submitted in accordance with the following:

## **PROPOSAL DUE DATE: 3-7-2023 (2pm)**

1. Proposals can be submit in one of the following two formats using the Proposal forms as provided herein:
  - a. E-mail proposals to: [DBSbids@garlandind.com](mailto:DBSbids@garlandind.com)
  - b. Fax proposals to: (216) 883-2055
2. If you have any questions regarding the Proposal documents, please call Shawn Browning at #331-216-9115
3. Coordination with the Owner, as specified hereinafter, shall be made exclusively through the General Contractor's Representative: Shawn Browning at #331-216-9115.
4. Proposal Bonds **are not** required for this project. Performance and Payment Bonds will **not be** required if awarded the project. Performance and payment bonds will be provided by Garland/DBS, Inc., herein referred to as "General Contractor" for the project.
5. Time is of the essence prior to contract signing, the number of consecutive working days necessary for the completion of the project shall be established by both parties. The Contractor agrees that failure to complete the scope of work within that stipulated period shall result in the assessment liquidated damages in the amount of \$300 per day past a date to be agreed upon during the pre-construction conference.
6. It is the General Contractor's intention to remit payment of approved invoice amounts within forty-five (45) days of General Contractor's acceptance. Deductions may be made for unapproved amounts invoiced and/or any penalties or damages incurred by the Owner or General Contractor.
7. The final invoice for retention will be paid upon the General Contractor's receipt of final payment by the Owner.
8. All Invoices must be submitted to General Contractor on AIA G702/G703 invoice forms or approved equal.
9. The contractor shall be prepared to submit a Certificate of Insurance with the Owner and General Contractor identified as the additional insured in accordance with the requirements as outlined in the Supplementary Conditions.
10. The Contractor shall be responsible for any building permits required by the City of Naperville and must comply with all local, State, and Federal requirements.



11. Once the project is awarded the start date will be no later than 4/25/2023 and the contractor must continue to work, full-time and with a sufficient workforce able to faithfully prosecute the Work until final completion is issued by the General Contractor. Roofing must be performed in logical sequence and in accordance with the specification documents as provided herein, deviations will only be allowed under direction of the General Contractor or Owner.
12. **One Proposal sheet shall be completed in full for all buildings in scope.** Unit costs must be provided for additional / optional repair items to be completed on various buildings. Any expected latent or concealed site conditions should be identified upfront with unit pricing.
13. Proposers are reminded that the General Contractor is purchasing the Garland roof system materials for this project. Proposers should adjust profit and overhead accordingly as they are not incurring the expense of the materials, but will still need to handle the materials and load the roof once the materials arrive to the site.
14. Proposers are reminded that the freight for the General Contractor supplied materials will be paid for by the General Contractor and will not be an expense to the Proposer.
15. Proposers are reminded that sales or use tax on the General Contractor supplied materials will be paid for by the General Contractor and will not be an expense to the Proposer.
16. Proposers are responsible for all materials not supplied by the General Contractor, as well as, the costs, freight, and sales or use taxes, if applicable.



## 2 Proposal Forms

Proposer must completely fill-out the following Proposal forms and submit them via the following methods:

1. E-mail Proposals to: [DBSbids@garlandind.com](mailto:DBSbids@garlandind.com)
2. Fax Proposals to: (216) 883-2055

Proposers should use best efforts to identify potential latent or concealed site conditions and provide unit costs for them in the appropriate section of the Proposal documents as to establish pricing for what may be unforeseen site conditions upfront.

### **PLEASE DOUBLE CHECK YOUR PRICING TO BE AS COMPETITIVE AS POSSIBLE:**

1.  The General Contractor is purchasing the Garland roof system materials for this project.
  - a. Adjust profit and overhead accordingly as you are not incurring the expense of the materials
  - b. Account for the handling, storage and staging of the Garland materials in your price
2.  The General Contractor is responsible for paying the freight associated with the Garland roof system materials.
  - a. Remove any associated freight on Garland material from your price
3.  The General Contractor is responsible for paying the sales or use tax on the Garland roof system materials.
  - a. Do not include sales and use tax , if applicable, for the Garland Roof System Materials in your price
  - b. Include all other materials not supplied by the General Contractor, as well as, the costs, freight, and sales or use taxes associated with them.
4.  The General Contractor is providing Performance and Payment Bonds if the project is awarded.
  - a. Do not include the costs of performance and payment bonds in your price.



**Garland/DBS, Inc.**  
**3800 East 91st Street**  
**Cleveland, OH 44105**



**Return this Worksheet To:**      [dbsbids@garlandind.com](mailto:dbsbids@garlandind.com)      or      (216) 883-2055 (Fax)

**Submission of this form acknowledges receipt and acceptance of:**

1. All standard Garland details and specifications.
2. Prevailing Wage Rates; if applicable
3. Project specific specifications, drawings, and details.
4. Subcontractor is responsible for purchase of Garland and non Garland materials.  
**Please note:** Shingles and color boards are to be shown to the client by the Subcontractor for selection.
5. All on-site tradesmen must have a background check and valid I-9 certificates on file. These documents for review upon request.
6. Default payment terms are 2% at 10 days, Net 45 Days
7. DBS will purchase Garland Material based on the material quantities provided herein. Additional Garland Materials or other manufacturer's materials necessary to complete the project will be the Subcontractor's obligation.
8. Proposal bonds are **not** required from the Subcontractor for this project.
9. Performance and Payment bonds will be provided by DBS and are **not** the Subcontractor's responsibility.
10. Workmanship Warranties will **not** extend beyond five (5) years.

**Submit with this Project Cost proposal:**

1. Garland Material List with all quantities, unit sizes, & coverage rates (Subcontractors are responsible to obtain material lists, data sheets, and product costs from Garland Rep)
2. Any qualifications/exclusion to Subcontractor's price proposal.

**Awarded subcontractor must submit:**

1. Site Specific Safety Plan and OSHA 300 log.
2. Equipment list and selected Waste Hauler's License (State or Local).
3. Certificate of Insurance – listing Garland/DBS, Inc. and the project Owner as additional insured's.
4. All licenses and permits.
5. Tax exempt status and sales tax requirements.

<b>CONTRACTOR'S NAME:</b>			
<b>ADDRESS (CITY, STATE, &amp; ZIP CODE):</b>			
<b>TELEPHONE:</b>		<b>CELL:</b>	
<b>CONTACT PERSON:</b>			
<b>CONTACT E-MAIL ADDRESS:</b>			
<b>PROJECT NAME:</b>	CON VSB & MCC Building Restoration		
<b>ADDRESS (CITY, STATE, &amp; ZIP CODE):</b>	3712 Plainfield Naperville RD, Naperville, IL 60540		
<b>Total Labor \$:</b>			
<b>GARLAND REPRESENTATIVE:</b>	Shawn Browning		
<b>PROJECT SQUARE FOOTAGE:</b>	approx: 5,500 sq ft		



Garland/DBS, Inc.  
3800 East 91st Street  
Cleveland, OH 44105



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CONTRACTOR'S NAME:

DBS PROPOSAL #:

**SUBCONTRACTOR AFFIRMATION:**

Does your proposal comply with Garland's standard published application procedures?

YES  NO

Does your proposal comply with Garland's standard published details?

YES  NO

Is your proposal based upon DBS's Continuing Services Agreement?

YES  NO

Is your proposal based upon DBS Inc's General Conditions & Acknowledgements (Page1)?

YES  NO

**SUBCONTRACTOR CLASSIFICATION (Check All That Apply):**

- |   |  |
|---|--|
| <input type="checkbox"/> Minority Owned Business              | <input type="checkbox"/> Veteran-Owned Business (VOB)          |
| <input type="checkbox"/> Women-Owned Business (WOB)           | <input type="checkbox"/> Service-Disabled VOB                  |
| <input type="checkbox"/> Small Business                       | <input type="checkbox"/> HUBZone Business                      |
| <input type="checkbox"/> Large Business (None of the Above)   | <input type="checkbox"/> 8(a) Certified Business               |
| <input type="checkbox"/> Alaskan Native Tribal-Owned Business | <input type="checkbox"/> Native American Tribal-Owned Business |

**PROPOSAL BREAKDOWN BY KEY COMPONENTS:**

ROOFING LABOR:

Building Envelope Restoration:

\$28,500.00

NON-GARLAND ROOF MATERIALS:

NON-ROOFING MATERIALS:

PERMITS:

SALES TAX - NON-GARLAND MTLs:

TOTAL SUBCONTRACTOR PROPOSAL PRICE

GARLAND MATERIALS BY DBS:



Garland/DBS, Inc.  
3800 East 91st Street  
Cleveland, OH 44105



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CONTRACTOR'S NAME:

DBS PROPOSAL #:

SUBCONTRACTOR QUOTE MUST BE GOOD FOR 120 DAYS. IF SUBCONTRACTOR CAN HOLD PRICING FOR LONGER, PLEASE FILL-IN TOTAL NUMBER OF DAYS:

DAYS

PROPOSALS WILL BE EVALUATED ON A COMBINATION OF THE BASE PROPOSAL PROPOSAL, RESPONSIVENESS TO THE PROPOSAL DOCUMENTS, AND MARK-UP FOR UNANTICIPATED CHANGE ORDERS, PLEASE PROVIDE YOUR CHANGE ORDER MARK-UPS BELOW:

OVERHEAD

PROFIT

**PROJECT DETAILS & MEASUREMENTS:**

Total Roof Square Footage:

# of Roof Areas:

Roof Height (# of Stories):

# of Roof Drains:

Roof Deck Type:

Square Footage of Flashings:

# of Scuppers:

# of Roof Penetrations:

Current Roof Slope:

# of Roof Levels:

Anticipated Working Days:

Anticipated Start Date:





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CONTRACTOR'S NAME:

DBS PROPOSAL #:

**LINE ITEM PRICING FOR ANTICIPATED UNFORESEEN SITE CONDITIONS:**

LINE ITEM DESCRIPTION	PRICE PER UNIT	UNIT SIZE
Soil Stack Replacement		

**CERTIFICATION OF PROPOSAL INFORMATION:**

I certify that I have reviewed and stand behind our Cost Proposal and Garland material quantities. I have incorporated the application procedures, project details and specifications, Continuing Service Agreement, and insurance requirements, in their entirety, into our cost proposal. This Cost Proposal includes all costs necessary to complete this project.

Contractor Name:

Responsible Party's  
Name & Title:

Responsible Party's  
Signature:



**Garland/DBS, Inc.**  
**3800 East 91st Street**  
**Cleveland, OH 44105**



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**CONTRACTOR'S NAME:**

**DBS PROPOSAL #:**

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**GARLAND MATERIAL LIST & SUBCONTRACTOR'S REQUIRED QUANTITIES**

<i><b>PRODUCT NAME &amp; DESCRIPTION</b></i>		<i><b>QUANTITY REQUIRED</b></i>
Unibond Roll 4" x 50'		
COOL SIL BASE Grey 5 gal per 100 sq ft		
24guage 4x10 Flat Stock Sheet Color TBD		
RUST GO PRIMER 5 GAL PAL		



### 3 Prevailing Wage Requirements

This project requires the use of Will County Prevailing Wages Rates as per the accordance with the Illinois Prevailing Wage Act (Illinois Compiled Statutes, Chapter 820, par. 130-1 to 130-12).



## **CONTINUING SERVICES AGREEMENT BETWEEN CONTRACTOR AND SUBCONTRACTOR FOR PROJECTS**

THIS AGREEMENT made this 7th day of March, 2023 between Garland/DBS and the awarded subcontractor.

**CONTRACTOR:** Garland/DBS, Inc.  
3800 East 91<sup>st</sup> Street  
Cleveland, OH 44105

**SUBCONTRACTOR:**

For services in connection with Contractor's Projects under this Continuing

Services Contract. All notice to the parties shall be given at the above address.

The term of the Agreement shall be the twelve (12) consecutive month's period following the proper execution of the Agreement, with an option for an additional twelve (12) months renewal term, if so agreed in writing by both parties.

### **ARTICLE 1 DEFINITIONS**

- 1.1 Agreement: means this continuing services contract and general conditions for the completion of the Contractor's minor construction projects where the basis of payment is the cost of the work plus Subcontractor's overhead and profit, not to exceed twenty (20%) percent.
- 1.2 Architect/Engineer: means the licensed architect, architect/engineer or engineer, and its consultants, retained by the Contractor to perform design services for the Project on behalf of the Contractor.
- 1.3 Change Order: means work, or performance schedule criteria that is different from the original scope-of- work.
- 1.4 Contract Documents: consist of this Agreement, the drawings, specifications, exhibits, attachments and Contractor issued Purchase Orders as they relate to the Work.
- 1.5 Contractor: is the independent contractor person or entity identified in this Agreement and includes the Contractor's Representative.
- 1.6 Day: means work day during the Contractor's normal hours of operation unless otherwise specifically defined.
- 1.7 Defective Work: is any portion of the Work that is not in conformance with the Contract Documents.



- 1.8 Material Supplier: is a person or entity retained by the Contractor and/or Subcontractor to provide material and/or equipment for the Work.
- 1.9 Others: means other contractors, material suppliers and persons at the Work Site who are not employed by the Contractor and/or Contractor's subcontractors.
- 1.10 Owner: is the person, or entity that owns the real property at the work site for which the work is being performed, and includes the Owner's Representative.
- 1.11 Contractor's Project Criteria: the scope-of-work developed by or for the Owner describing the Contractor's design and construction requirements and objectives for the Project, including budgetary and time constraints, submittal requirements and other requirements governing the Subcontractor's performance of the Work. Contractor's Project Criteria may include conceptual estimates, conceptual schedule and other Project-specific technical materials and requirements needed to define the scope-of-work.
- 1.12 Project: is the project and/or subproject scope-of-work defining the improvements required by the Owner, including budgetary and time criteria for each Project issued by individual Purchase Order from the Contractor for which the Subcontractor is to perform Work under this Agreement.
- 1.13 Performance Schedule: is the document prepared by the Contractor that specifies the dates on which the Subcontractor plans to begin and complete various parts of the Work, including dates which information and approvals are required from the Owner.
- 1.14 Subcontractor: is a person or entity retained by the Contractor as an independent contractor to provide labor, materials, equipment and/or services necessary to complete a specific portion of the Work. The term Subcontractor does not include the architect/engineer.
- 1.15 Substantial Completion: the date when the Work is sufficiently complete in accordance with the Contract Documents so that the Owner can use or utilized the Work for which it is intended.
- 1.16 Sub-subcontractor: is a person or entity that has an agreement with a Subcontractor to perform any portion of the Work.
- 1.17 Work: means all planning, design, construction and other services necessary or incidental to fulfill the scope-of-work defined by the Contractor's individual Purchase Order for a specific Project in accordance with this Agreement and the other Contract Documents. The Work may refer to the whole Project or only a part of the Project if work is also being performed by the Owner or Others.
- 1.18 Work site: means the location where the Work is to be performed.

## **ARTICLE 2 GENREAL PROVISIONS**

- 2.1 Contractor and Subcontractor agree to furnish its best skill and judgment and to proceed with the Projects on the basis of mutual trust, good faith and fair dealing. Contractor and Subcontractor shall endeavor to promote harmony and cooperation among all Project participants.
- 2.2 Subcontractor agrees to comply with all required licenses, permits and inspections as required by the authority having jurisdiction over the Work.



- 2.3 Subcontractor represents that it is an independent contractor and that in its performance of the Work it shall act as an independent contractor.
- 2.4 Neither Subcontractor nor any of its agents or employees shall act on behalf of or in the name of the Contractor or Owner except as provided in the Agreement or unless authorized in writing by Contractor's Representative.
- 2.5 Contractor and Subcontractor will work as a team through the planning and construction phases of the Project.
- 2.6 Contractor reserves the right to inspect and audit Subcontractor's records pertaining to the Project, before, during and up to eighteen (18) months after completion of this contract.
- 2.7 This Agreement is solely for the benefit of the parties, represents the entire and integrated agreement between the parties, and supersedes all prior negotiations, representations or agreements, either oral or written. This Agreement and each and every provision thereof are for the exclusive benefit of the Contractor and Subcontractor and not for the benefit of any third party except to the extent expressly provided in this Agreement.
- 2.8 Where this Agreement is silent, the requirements of the plans and specifications will prevail.  
This Agreement may be amended only by written instrument signed by the Contractor and the Subcontractor.
- 2.9 All Contract Documents related to the Purchase Order, any Change Order to the Purchase Order, the Purchase Order and any correspondence related to the Work shall be identified by the GCI Contract Number for this Agreement.

### **ARTICLE 3 PAYMENT**

- 3.1 Subcontractor's basic services under the Agreement shall include all labor, tools, materials, equipment and all other incidentals necessary to provide a completed sub-project with workmanship of the highest quality by industry standards. Construction services for Projects shall be provided on a sub-project bases, which will be executed by Contractor Purchase Order(s) for each Sub-Project. The Purchase Order(s) shall be considered part of the Contract Documents. Subcontractor shall submit a cost proposal for each Sub- Project. Should the Contractor and Subcontractor not reach a Price agreement on any Sub-Project, the Contractor reserves the right to cease negotiations with the Subcontractor for that Sub-Project and perform the work by other means without affecting this Agreement or any other Sub-Project.
- 3.2 Contractor shall administer design and construction management phase services as provided by the Contract Documents and the Purchase Order for each individual Sub-Project, which shall define the Scope- of-Work for the Sub-Project.
- 3.3 For each Sub-Project, the Subcontractor shall commence work within ten (10) working days after receipt of the Purchase Order as authorization of Notice to Proceed from the Contractor. Subcontractor shall submit for Contractor's review and approval a schedule-of-values for all of the Sub-Project Work. The Schedule- of-Values will: (a) subdivide the Work into its respective parts, (b) include values for all items comprising the Work, including but not limited to general conditions, and (c) serve as the basis for progress payments made to Subcontractor throughout the work.



- 3.4 On or before the 25<sup>th</sup> day of the month, Subcontractor shall submit for Contractor's review and approval its Application for Payment requesting payment for all Work performed and projected through to the end of the month. The Application for Payment shall be accompanied by an updated Schedule-of-Values. Subcontractor Application and Certification for Payment received by the Contractor after the 25<sup>th</sup> of the month shall not be process for payment until the next months pay application submission to the Owner. Notwithstanding anything to the contrary in the Contract Documents, Contractor shall pay Subcontractor all undisputed amounts in an Application for Payment no later than the 25<sup>th</sup> day of the following month..
- 3.5 The Application for Payment may not request payment for equipment and materials not yet incorporated into the Project.
- 3.6 Subcontractor shall not bill for defective work until the work has been re-inspected and accepted by the Contractor.
- 3.7 The Application for Payment shall constitute Subcontractor's representation that the Work has been performed consistent with the Contract Documents; and has progressed to the point indicated in the Application for Payment.
- 3.8 Payment hereunder will not be evidence of or construed to be proper performance or progress of the Work.
- 3.9 On or before the date established in Sections 3.3 and 3.4 of this Agreement, Contractor shall pay Subcontractor all amounts properly due. If Contractor determines that Subcontractor is not entitled to all or part of an Application for Payment, Contractor will notify Subcontractor in writing at least five (5) days prior to the date payment is due. The notice shall indicate the specific amounts Contractor intends to withhold, the reasons and contractual basis for the withholding, and the specific measure Subcontractor must take to rectify Contractor's concerns. Subcontractor will attempt to resolve Contractor's concerns prior to the date payment is due. If the parties cannot resolve such concerns, Contractor may pursue its rights under the Contract Documents.
- 3.10 If Contractor fails to pay Subcontractor any undisputed amount that becomes due, Subcontractor, in addition to all other remedies provided in the Contract Documents or at law, may stop Work after proper notification to the Contractor that a problem exists. Proper notification shall be defined as; Subcontractor must provide Contractor with written notice, served by certified mail to Contractor, defining the problem that exists and the Subcontractor's intent to stop work. If Contractor does not cure the problem within a ten (10) day period, Subcontractor must provide Contractor with written notice, served by certified mail to Contractor of Subcontractor's intent to stop work. If Contractor does not cure the problem within an additional ten (10) day period, Subcontractor may stop work. In such case, Subcontractor may be entitled to make a claim for adjustment to the Contract Price and Contract Time(s) to the extent it has been adversely impacted by such stoppage, provided that the Contractor is solely responsible for failure to make payment to Subcontractor.
- 3.11 Subcontractor shall not stop work for reason of payments withheld in whole or in part, or for failure of the Contractor to make payment to the Subcontractor for applications for payment submitted after the 25<sup>th</sup> of the month, or for disputes as identified in Article 13.
- 3.12 Subcontractor shall not stop work for reason of payments withheld in whole or in part for extra work performed by Subcontractor without a properly executed Change Order to the Purchase Order.



- 3.13 As a condition for payment and in addition to Contractor's receipt of a Final Application for Payment for the Sub-Project, Subcontractor shall provide the following information:
1. An affidavit that there are no claims, obligations or liens outstanding or unsatisfied for labor, services, material, equipment, taxes or other items performed, furnished or incurred for or in connection with the Work which in any way affect Contractor's interests.
  2. A general release executed by Subcontractor waiving, upon receipt of final payment by Subcontractor, all claims, except those claims previously made to Contractor and remaining unsettled at the time of final payment.
  3. If applicable, consent of Subcontractor's surety to final payment.
  4. All operating manuals, warranties and other deliverables required by the Contract Documents.
- 3.14 The acceptance by Subcontractor of the final payment under this Subcontract Agreement shall constitute and operate as a release to Owner and indemnity for all claims and liabilities to Subcontractor, its representatives, subcontractors, and assigns as well as for any additional compensation or payment related to any and all things done or furnished with respect to the services rendered by Subcontractor under, or in connection with, this Subcontract Agreement. However, final payment shall in no way relieve the Subcontractor of liability for its obligations or for faulty or defective work discovered after final payment.

The final payment shall be due within forty (40) days after all of the conditions precedent required under this section have been satisfied.

#### **ARTICLE 4 TIME**

- 4.1 Subcontractor agrees that it will commence performance of the Work and achieve the Contract Time(s) in accordance with the Sub-Project Purchase Order..
- 4.2 If Subcontractor is delayed in the performance of the Work due to acts, omissions, conditions, events, or circumstances beyond its control, the Contract Time(s) for performance shall be reasonably extended by Change Order to the Purchase Order. By way of example, events that will entitle Subcontractor to an extension of the Contract Time(s) include, but not limited to, acts or omissions of Owner or anyone not under Contractor's control (including separate contractors), changes in the Work, Differing Site Conditions, Hazardous Conditions, wars, fires, floods, labor disputes, unusual delay in transportation, epidemics, earthquakes, adverse weather conditions not reasonably anticipated, and other acts of God.
- 4.3 Owner Caused Delay: Contractor shall not be obligated or liable to Subcontractor for payment or extension of time due to Owner caused delays beyond the extent of recovery by the Contractor from the Owner in the form of a properly executed Change Order in accordance with Article 5 of the Agreement.
- 4.4 Subcontractor shall notify Contractor when it believes the Work or the extent permitted in the Contract Documents, a portion of the Work, is substantially completed. Within five (5) days of Contractor's receipt of Subcontractor's notice, Contractor and Subcontractor will jointly inspect such Work to verify that it is substantially completed in accordance with the Contract Documents and prepare the Contractor's Punch- List to the Subcontractor. If Contractor determines that such Work is substantially completed, Subcontractor shall submit Final Application for Payment.





- 4.5 Upon Substantial Completion of the entire Work or, if applicable, any portion of the Work, Contractor shall release Subcontractor all retained amounts related, as applicable, to the entire Work or completed portion of the Work, less any amount equal to the reasonable value of all remaining or incomplete items of Work as noted in the Contractor's Punch-List to the Subcontractor.

## **ARTICLE 5 CHANGES TO THE CONTRACT PRICE AND TIME**

- 5.1 A Change Order to the Purchase Order is a written instrument issued after execution of the Agreement signed by Owner and Contractor, stating their agreement upon all of the following:
- .1 The scope of the change in the Work.
  - .2 The amount of the adjustment to the Contract Price.
  - .3 The extent of the adjustment to the Contract Time(s).
- 5.2 All changes in the Work authorized by applicable Change Order shall be performed under the applicable conditions of the Contract Documents. Contractor and Subcontractor shall negotiate in good faith and as expeditiously as possible the appropriate adjustments for such changes.
- 5.3 Subcontractor shall not make change or any addition to the work except upon receipt by the Contractor of a signed Change Order to the Purchase Order from the Contractor authorizing such a change or addition. No claims for an extra to the contract price shall be valid unless so authorized
- 5.4 The increase or decrease in the Purchase Order/Contract Price resulting from a change in the Work shall be determined by one or more of the following methods:
- .1 Unit prices subsequently agreed to between parties.
  - .2 Lump sum price, mutually agreed to between parties.
  - .3 Cost, fees, and other markups mutually agree to between parties.
- 5.5 In any emergency affecting the safety of persons and/or property, Subcontractor shall act, at its discretion, to prevent threatened damage, injury or loss. Any change in the Purchase Order/Contract Price and/or Contract Time(s) on account of emergency work shall be determined as provided in this Article 5.4.
- 5.6 Change orders shall be prepared by the Subcontractor and submitted to the Contractor along with backup documentation to include, but not limited to, material, labor, equipment, tools, taxes, insurance, and all incidentals to provide a complete and working systems.
- 5.7 The Contractor shall be the only party authorized to request the Subcontractor to perform extra work in accordance with Article 5 of the Agreement. Any extra work performed by the Subcontractor prior to receiving a properly executed Change Order shall be considered incidental and no adjustments will be made to the Subcontract Amount or Time.



- 5.8 If Contractor and Subcontractor disagree upon whether Subcontractor is entitled to be paid for any services required by Owner, or if there are any other disagreements over the Scope-of-Work or proposed changes to the Work, Contractor and Subcontractor shall resolve disagreement pursuant to Article 13 hereof.

## **ARTICLE 6 LEGAL REQUIREMENTS**

- 6.1 Subcontractor shall perform the Work in accordance with all Legal Requirements and shall provide all notices applicable to the Work as required by the Legal Requirements.
- 6.2 Subcontractor and sub-subcontractors shall comply with all Legal Requirements relating to safety, as well as any Owner-specific safety requirements set forth in the Contract Documents, provided that such Owner-specific requirements do not violate any applicable Legal Requirements. Subcontractor will immediately report any safety-related injury, loss damage or accident arising from the Work to the extent mandated by Legal Requirements, to Contractor and all government or quasi-government authorities having jurisdiction over safety-related matters involving the Project or the Work.
- 6.3 This Agreement is executed in the state where the Contractor's office set forth on page one is located and will be interpreted in accordance with the laws of that state.

## **ARTICLE 7 GOVERNMENT COMPLIANCE, APPROVALS AND PERMITS**

- 7.1 Subcontractor shall give notices, pay all fees, permits and comply with all laws, ordinances, rules and regulations bearing on the conduct of work.
- 7.2 Subcontractor shall obtain and pay for all government charges and inspection fees required for the execution of the Work by any government or quasi-government entity having jurisdiction over the Project. Contractor shall reimburse Subcontractor for direct costs associated with obtaining such government charges and inspection fees.
- 7.3 All state and local licenses will be required by Subcontractor and Sub-Subcontractors prior to commencement of the work. Subcontractor shall provide Contractor with a current copy of all licenses at the time that the Purchase Order for the Sub-Project is executed.
- 7.4 Subcontractor shall conform to the requirements as designated by the United States Federal Governments, Occupational Safety and Health Administration (O.S.H.A).
- 7.5 If Subcontractor or their sub-subcontractors on the site use hazardous substances which by law would have required the employer to notify its employees, they shall, prior to harmful exposure of any employee to such substance, give written notice of the chemical composition thereof in sufficient detail and provide proper employee training to employees to comply with such laws.
- 7.6 Subcontractor must comply with all state, federal and local taxes. Subcontractor accepts sole and exclusive responsibility for any and all state and federal taxes with respect to Social Security, old age benefits, unemployment benefits, withholdings taxes, sales taxes, and worker's compensation premiums.



## ARTICLE 8 SUBCONTRACTOR'S RESPONSIBILITIES

- 8.1 Unless otherwise provided in the Contract Documents imputing the responsibility to Owner, a separate contractor or others, Subcontractor shall provide through itself the necessary supervision, labor, inspections, material, equipment, machinery, and temporary facilities to permit Subcontractor to complete the Project consistent with the Contract Documents.
- 8.2 Subcontractor shall aProposale by all rules created by the Owner. Subcontractor must contract the Contractor for specific information regarding the rules governing all operations of the project.
- 8.3 Subcontractor acknowledges receipt of the contract documents, to include but not necessarily limited to the Sub-Project Purchase Order, Project Manual, and/or plans and specifications.
- 8.4 The Project Manual shall contain Supplemental Conditions that are job specific and incorporated as a contract document by reference to this Agreement.
- 8.5 The Subcontractor accepts responsibility for the visual inspection of conditions that could affect the Subcontractor's Work at the Project site, and based on that inspection acknowledges its responsibility to satisfactorily perform the Subcontractor's Work without additional expense to the Contractor. The Subcontractor shall promptly report any discrepancies between its observations and the Contract Documents to the Contractor.
- 8.6 Subcontractor shall perform all construction activities efficiently. Subcontractor shall supply trained workmen with the requisite expertise, skill and competence, in proper numbers, including scheduling and laying out the work, so that the Work will be started and completed in a professional manner to satisfy the requirements of the Contract Documents.
- 8.7 Subcontractor shall be solely responsible for the accuracy of all measurements and for estimating the material quantities required to satisfy the contract documents, plans and specifications. Drawings provided are for reference only, quantities must be field verified prior to providing Subcontractor's pricing to Contractor.
- 8.8 Location of any and All Temporary Facilities must be approved by the City Representative, such as storage sheds, water, heat, light, power, toilets, hoists, elevators, scaffolding, cold weather protection, ventilation, pumps, watchman service, etc., required in performing the work will be furnished by Subcontractor unless otherwise provided for by Contractor and identified in the Contract Documents.
- 8.9 In connection with its furnishing of temporary facilities indicated, Contractor shall not be liable for conditions beyond the control of Contractor, which may interrupt, delay or otherwise interfere with the availability of such facilities to Subcontractor. Unless otherwise expressly indicated, the temporary facilities furnished by Contractor will not be for the exclusive use of Subcontractor, but will be shared by others performing work in the Project. Contractor, therefore, reserves the exclusive right to schedule the use of any facilities in accordance with its determinations as to the needs of the Project, and will incur no liability as a result thereof.
- 8.10 If either party from time to time furnishes the other a crane, hoisting equipment or other machinery or equipment, with or without an operator, for such party's exclusive use, then the using party will at all times furnish adequate and competent supervision and direction therefore and will be fully liable and responsible for safe and proper care, use and custody of such machinery and equipment.



- 8.11 Subcontractor assumes responsibility to Contractor for proper performance of the Work of Subcontractor's employees, vendors and sub-subcontractors and any acts and omissions in connection with such performance. Nothing in the Contract Documents is intended or deemed to create legal or contractual relationship between Contractor and any vendor, equipment provider, material supplier or sub- subcontractor, including but not limited to any third party beneficiary rights.
- 8.12 Subcontractor shall not subcontract any of the Work without prior written approval from the Contractor.
- 8.13 Subcontractor shall coordinate the activities of all employees of Subcontractor and sub-subcontractors. If Contractor performs other work on the Project or at the Site with separate subcontractors under Contractor's control, Subcontractor agrees to reasonably cooperate and coordinate its activities with those of such separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.
- 8.14 Subcontractor shall keep the Work Site reasonably free from construction materials not incorporated into the Work, debris, trash and construction waste to permit Subcontractor to perform its construction services efficiently, safely and without interfering with the use of adjacent land areas. Upon completion of the days Work, Subcontractor shall remove all debris, trash, construction waste, materials, equipment, machinery and tools arising from the Work or applicable portion thereof to permit Owner the use of the Project for its intended purpose.
- 8.15 If the Subcontractor refuses at any time to remove the debris and left over construction materials from the premises, or to keep the working area clean, such cleaning and disposal will be completed by the Contractor and deducted from the balance due the Subcontractor.
- 8.16 All materials shall be stored and protected against weather, vandalism, and theft. Any materials found to be damaged or missing shall be replaced by the Subcontractor at no cost to the Contractor.
- 8.17 Contractor will not be liable or responsible for loss or damage to the equipment, tools, facilities, scaffolds or other personal property owned, rented or used by Subcontractor, or its agents, employees or servants, in the performance of the Work. Subcontractor will maintain such insurance and will take such protective action as it deems desirable with respect to such property. Contractor will not be liable or responsible for any loss or damage to the Work, and Subcontractor will be responsible for the correction or restoration of any such loss or damage to the Work or to the work of Contractor or any other subcontractor, resulting from the operations or activities of Subcontractor, or its subcontractors, agents, employees or servants hereunder.
- 8.18 Subcontractor shall take necessary precautions to protect the Work of others from loss or damage. Should the Subcontractor cause damage to the Work or property of the Owner, the Contractor or others, the Subcontractor shall promptly remedy such damage to the satisfaction of the Contractor, or the Contractor may remedy the damage and deduct its cost from any amounts due or to become due the Subcontractor, unless such costs are recovered under applicable property insurance.
- 8.19 Subcontractor shall protect all grounds, copings, pavings and exterior of all buildings where work will be performed.
- 8.20 Subcontractor shall protect the Owner's facility from water infiltration. Damage caused by water infiltration resulting from the failure of Subcontractor to secure each day's work in a weather tight manner, will be corrected at the Subcontractor's expense. Included as

damages will be all labor costs incurred by the Owner as a result of such water infiltration.

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- 8.21 The Contractor may direct the Subcontractor to uncover portions of the Subcontractor's Work for inspection by the Contractor at any time. The Subcontractor is required to uncover such work whether or not the Contractor or Owner had requested to inspect the Subcontractor's Work prior to it being covered. Except as provided in the paragraph above, this Agreement shall be adjusted by change order for the cost and time of uncovering and restoring any work which is uncovered for inspection and proves to be installed in accordance with the Subcontract Documents, provided the Contractor had not previously instructed the Subcontractor to leave the work uncovered. If the Subcontractor uncovers work pursuant to a directive issued by the Contractor, and such work upon inspection does not comply with the Subcontract Documents, the Subcontractor shall be responsible for all costs and time of uncovering, correcting and restoring the work so as to make it conform to the Subcontract Documents. If the Contractor or some other entity for which the Subcontractor is not responsible caused the nonconforming condition, the Contractor shall be required to adjust the Sub-Project Purchase Order by Change Order for all such costs and time.
- 8.22 Subcontractor shall promptly remove any work that does not meet the requirements of the contract documents, plans and specifications or is incorrectly installed or otherwise disapproved by the Contractor's Representative as failing to meet the intent of the contract documents, plans and specifications. Subcontractor shall promptly replace and such work without expense to the Contractor and shall bear the cost of making good all work of other subcontractors, or the Owner, destroyed by such removal or replacement.
- 8.23 Acceptability of completed work will be based on Subcontractor's work conformance to the contract requirements. Contractor shall not be responsible for Subcontractor's errors or omissions.
- 8.24 If Contractor deems it unacceptable to have Subcontractor correct work that has been incorrectly done, a deduction from the Sub-Project Purchase Order Price shall be agreed upon therefore. Such a deduction from Purchase Order price shall in no way affect Subcontractor's responsibility for defects that may occur nor Subcontractor's ability for correcting them, and damage caused by them.
- 8.25 Subcontractor is required to cooperate with the hierarchy of construction sequencing and coordinate their activities to not interfere with Contractor's work and/or Contractor Subcontractor's Work to enable Contractor to timely complete the Project Work consistent with the Contract Documents.
- 8.26 Subcontractor shall plan and conduct the operations of the work so that each section started on one day is complete and thoroughly protected before the close of work for that day.
- 8.27 If Owner or any other person or entity asserts a claim or institutes a suit, action or proceeding against Contractor involving the manner or sufficiency of the performance of the Work, upon request of Contractor, Subcontractor will promptly assume the defense of such claim, suit, action, or proceeding, at Subcontractor's sole expense, and Subcontractor will indemnify and hold harmless Contractor and its agents, employees and servant, from and against liability, loss, damage or expense (including attorney's fees, expert witness fees, court cost, and similar costs) arising out of or relating to such claim, suit, action or proceeding.
- 8.28 Subcontractor agrees that One Hundred Dollars and No/Cents (\$100.00) of the Sub-Project Purchase Order Price constitutes the separate consideration for Subcontractor's indemnity pursuant to the provisions and payment paid in the first application for payment.



- 8.29 Subcontractor acknowledges that Contractor has a zero tolerance policy regarding substance abuse, profane language and harassment by Subcontractor's employees and/or sub-subcontractors. Subcontractor shall immediately remove from Work Site any employee and/or sub-subcontractor that Contractor's Representative deems to be disruptive to the work environment and/or objectionable to the Owner's Representative.

## **ARTICLE 9 WARRANTY**

- 9.1 Subcontractor warrants to Contractor and Owner that the construction, including all materials and equipment furnished as part of the construction, shall be new unless specified in the Contract Documents, of good quality, in conformance with the Contract Documents and free of defects in material and workmanship. Subcontractor warranty obligation excludes defects caused by abuse, alterations, or failure to maintain the Work by persons other than Contractor or anyone for whose acts Contractor may be liable. Nothing in this warranty shall provide Owner with greater warranty rights than set forth in this section or the Contract Documents. Subcontractor will provide Contractor, on behalf of the Owner, with all manufacturers' warranties upon Final Completion of the Sub-Project.
- 9.2 Subcontractor agrees to correct any Work that is found to be not in conformance with the Contract Documents, including that part of the Work subject to Section 8.1 hereof, within a period of two years from the date of Substantial Completion of the Work or any portion of the Work, or within such longer period to the extent required by the Contract Documents.
- 9.3 Subcontractor shall guarantee all labor and materials for five (5) years from the date of final payment to the Subcontractor by the Contractor. Subcontractor shall promptly respond to and make repairs during the warranty period in accordance with the terms and conditions of the Manufacturer's material warranty and the contract documents, including any damage done to the Owner's property due to such defects.
- 9.4 Subcontractor shall, within two (2) days of receipt of written notice from Contractor that the Work is not in conformance with the Contract Documents, take meaningful steps to commence correction of such nonconforming Work, including the removal and replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work.
- 9.5 The five-year period referenced in Section 9.2 above applies only to Subcontractor's obligation to correct nonconforming Work and is not intended to constitute a period of limitations for any other rights or remedies Contractor may have regarding Subcontractor's other obligations under the Contract Documents.

## **ARTICLE 10 CONTRACTOR'S RESPONSIBILITIES**

- 10.1 Contractor shall, throughout the performance of the Work, cooperate with Subcontractor and perform its responsibilities, obligations and services in a timely manner to facilitate Subcontractor's timely and efficient performance of the Work and to prevent delay or interfere with Subcontractor's performance of its obligations under the Contract Documents.
- 10.2 Contractor agrees to furnish planning, design phase, construction administration and management services and to use its best efforts to complete the Projects in an expeditious and economical manner consistent with the interests of the Owner.



- 10.3 Contractor shall provide timely reviews and approvals of interim design submissions and construction documents consistent with the turn-around times set forth in Contractor's performance schedule.
- 10.4 Contractor's Representative shall be responsible for providing Owner-supplied information and approvals in a timely manner to permit Subcontractor to fulfill its obligations under the Contract Documents. Contractor's Representative shall also provide Subcontractor with prompt notice if it observes any failure on the part of Subcontractor to fulfill its contractual obligations, including any errors, omissions or defects in the performance of the Work.
- 10.5 Contractor is responsible for all work performed on the Project or at the Site by separate contractors under Contractor's control. Contractor shall contractually require its separate contractors to cooperate with the hierarchy of construction sequencing, and coordinate their activities to not interfere with the Subcontractor's work to enable Subcontractor to timely complete the Work consistent with the Contract Documents.

#### **ARTICLE 11 HAZARDOUS CONDITIONS AND DIFFERING SITE CONDITIONS**

- 11.1 Unless otherwise expressly provided in the Naperville Department of Public Utilities – Water” Terms and conditions: the Contractor is responsible for arranging a “J.U.L.I.E’s” to identify underground utilities that may be compromised by Cranes, Lifts, Scaffolding, ladders, etc. Subcontractor is not responsible for any Hazardous Conditions encountered at the Site. Upon encountering any Hazardous Conditions, Subcontractor will stop Work immediately in the affected area and duly notify Contractor and, if required by Legal Requirements, notify all government or quasi-government entities with jurisdiction over the Sub-Project or Site.
- 11.2 Upon receiving notice of the presence of suspected Hazardous Conditions, Contractor shall notify Owner.  
Owner shall take the necessary measures required to ensure that the Hazardous Conditions are remediated or rendered harmless. Such necessary measures shall include Owner retaining qualified independent experts to: (a) ascertain whether Hazardous Conditions have actually been encountered, and if they have been encountered; and (b) prescribe the remedial measures that Owner must take either to remove the Hazardous Conditions or render the Hazardous Conditions harmless.
- 11.3 Subcontractor shall be obligated to resume Work at the affected area of the Sub-Project only after Owner's expert provides Contractor with written certification that: (a) the Hazardous Conditions have been removed or rendered harmless; and (b) all necessary approvals have been obtained from all government and quasi- government entities having jurisdiction over the Sub-Project or Site. Contractor will provide Subcontractor with written notice to proceed with the work.
- 11.4 Subcontractor will be entitled, in accordance with the terms of this Agreement, to an adjustment in its Contract Price and/or to an adjustment in its Contract Time(s) to the extent Subcontractor cost and/or time of performance have been adversely affected by the presence of Hazardous Conditions.
- 11.5 To the fullest extent permitted by law, Subcontractor shall indemnify, defend and hold harmless Contractor, Design Consultants, Subcontractors, anyone employed directly or indirectly by any of them, and their officers, directors, employees and agents, from and against any and all claims, losses, damages, liabilities and expenses, including attorney's fees and expenses, arising out of or resulting from the presence, removal or remediation of Hazardous Conditions at the Site.



- 11.6 Concealed or latent physical conditions at the Site that: (a) materially differ from the conditions indicated in the Contract Documents; or (b) are of an unusual nature differing materially from the conditions ordinarily encountered and generally recognized as inherent in the Work are collectively referred to and defined herein as "Differing Site Conditions." If Subcontractor encounters a Differing Site Condition, Subcontractor shall immediately notify Contractor. Subcontractor may be entitled to an adjustment in the Contract Price and/or Contract Time(s) to the extent Contractor's cost and/or time of performance are compensated by Owner for the adverse impact by the Differing Site Condition.
- 11.7 Upon encountering a Differing Site Condition and proper notification by Subcontractor to Contractor, Contractor shall provide prompt notice to Owner of such condition, which notice shall not be later than two (2) days after such condition has been encountered. Contractor shall, to the extent reasonably permitted, provide such notice before the Differing Site Condition has been substantially disturbed or altered.

## **ARTICLE 12 INSURANCE AND BONDS**

- 12.1 Subcontractor is responsible for procuring and maintaining from insurance companies authorized to do business in the state in which the Project is located, and with a minimum rating set forth in the Agreement, the following insurance coverages for certain claims which may arise from or out of the performance of the Work and obligations under the Contract Documents:
- .1 Coverage for claims arising under workers' compensation, disability and other similar employee benefit laws applicable to the Work.
  - .2 Coverage for claims by Subcontractor's employee for bodily injury, sickness, disease, or death.
  - .3 Coverage for claims by any person other than Subcontractor's employees for bodily injury, sickness, disease, or death.
  - .4 Coverage for usual personal injury liability claims for damages sustained by a person as a direct or indirect result of Subcontractor's employment of the person, or sustained by any other person.
  - .5 Coverage for claims for damages (other than to the Work) because of injury to or destruction of tangible property, including loss of use.
  - .6 Coverage for claims of damages because of personal injury or death, or property damage resulting from ownership, use and maintenance of any motor vehicle.
  - .7 Coverage for contractual liability claims arising out of Subcontractors obligations under Section 11 hereof.
- 12.2 Subcontractor's liability insurance required by Section 12 above shall be written for the coverage amounts set forth in the Article 12.3 and shall include completed operations insurance for the period of time set forth in the Agreements.





12.3 Subcontractor shall maintain the following insurance:

(a) Worker's Compensation and Employer's Liability Insurance affording:

- (1) Protection under the Worker's Compensation Law of the State in which the work is performed;  
and
- (2) Employer's Liability protection subject to a minimum limit of \$1,000,000.

(b) Comprehensive General Liability Insurance in amounts not less than:  
Contractual Liability Insurance – to cover the obligations of the Subcontractor with minimum limits as required for Commercial General Liability Insurance.

Products Comp/Ops Aggregate	\$3,000,000
Personal Injury	\$3,000,000 per person (including bodily injury)
Medical Expenses (any one person)	\$5,000 per occurrence
Fire Damage (any one fire)	\$500,000 per occurrence
Property Damage	\$3,000,000 per occurrence

(c) Comprehensive Automobile Liability Insurance in the following amounts:

Automobile Liability Insurance – for all vehicles used in performance of the work, whether owned, hired, or non-owned with minimum limits of \$1,000,000 Combined Single Limit.

Bodily Injury	\$1,000,000 per person
	\$1,000,000 per occurrence
Property Damage	\$1,000,000 per occurrence

12.4 The Certificate of Insurance furnished by Subcontractor as evidence of the insurance maintained by Subcontractor shall include a clause obligating the Insurer to give Contractor thirty (30) days prior written notice of cancellation of any material change in the insurance.

12.5 Subcontractor is required to file Certificates of Insurance properly completed and signed by an authorized insurance company representative before their work commences on the job or job site. No monies will be paid to Subcontractor until the acceptable certificates are on file with Contractor.

12.6 Subcontractor's liability insurance set forth in Section 12 shall specifically delete any design-build or similar exclusions that could compromise coverages because of the design-build delivery of the Sub- Project.

12.7 Prior to commencing any construction phase services, Subcontractor shall provide Contractor with certificates evidencing that: (a) all insurance obligations required by the Contract Documents are in full force and in effect and will remain in effect for the duration required by the Contract Documents; and (b) no insurance coverage will be canceled, renewal refused, or materially changed unless written notice is provided to Contractor at least thirty (30) days prior to such change.

12.8 Any loss covered under Subcontractor's property insurance shall be adjusted and made payable to Owner and Contractor as trustees for the insured as their interests may appear. All insurance proceeds received as a result of any loss will be placed in a separate account and distributed in accordance with such agreement as the interested parties may reach. Any disagreement concerning the distribution of any proceeds will be resolved in accordance with Article 13.



since 1895

SECTION 07 56 00

FLUID APPLIED ROOFING RESTORATION

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## PART 1 GENERAL

### 1.1 SECTION INCLUDES

- A. Metal Surface Roof Restoration
- B. Accessories
- C. Edge Treatment and Roof Penetration Flashings

### 1.2 RELATED SECTIONS

- A. Section 06 10 00 - Rough Carpentry: Roof blocking installation and requirements.
- B. Section 07 62 00 - Sheet Metal Flashing and Trim: Metal cap flashing and expansion joints.
- C. Section 07 62 00 - Sheet Metal Flashing and Trim: Weather protection for base flashings.
- D. Section 07 71 23 - Manufactured Gutters and Downspouts: Counter flashing gravel stops, and fascia, scuppers, gutters and downspouts.
- E. Section 22 30 00 - Plumbing Equipment: Piping vents and roof drains.

### 1.3 REFERENCES

- A. ASTM C 78 - Standard Test Method for Flexural Strength of Concrete.
- B. ASTM C 92 - Standard Test Methods for Sieve Analysis and Water Content of Refractory Materials.
- C. ASTM C 109 - Standard Test Method for Compressive Strength of Hydraulic Cement Mortars.
- D. ASTM C 920 - Standard Specification for Elastomeric Joint Sealants.
- E. ASTM D 93 - Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester.

- F. ASTM D 562 - Standard Test Method for Consistency of Paints Measuring Krebs Unit (KU) Viscosity Using a Stormer-Type Viscometer.
- G. ASTM D 624 - Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
- H. ASTM D 1002 - Standard Test Method for Apparent Shear Strength of Single-Lap-Joint Adhesively Bonded Metal Specimens by Tension Loading (Metal-to-Metal).
- I. ASTM D 2196 - Standard Test Methods for Rheological Properties of Non-Newtonian Materials by Rotational (Brookfield type) Viscometer.
- J. ASTM D 2369 - Standard Test Method for Volatile Content of Coatings.
- K. ASTM D 4212 - Standard Test Method for Viscosity by Dip-Type Viscosity Cups.
- L. ASTM D 4402 - Standard Test Method for Viscosity Determination of Asphalt at Elevated Temperatures Using a Rotational Viscometer.
- M. SMACNA Architectural Sheet Metal Manual.
- N. National Roofing Contractors Association (NRCA) - Roofing and Waterproofing Manual.

#### 1.4 SYSTEM DESCRIPTION

- A. Metal Surface Roof Restoration: Renovation work includes:
  1. Surface preparation: Remove loose flaking rust, dust, dirt, debris, secure all gaped panels and replace all loose fasteners with next size larger.
  2. Metal Flashings: Repair/Replace metal flashings, pitch pockets, etc.
  3. Primer: Prime entire roof surface.
  4. Base coat: Apply base coat and fabric on seams and around penetrations/let cure/Apply base coat over the entire roof surface/let cure.
  5. Topcoat: Apply coating over entire roof surface.

#### 1.5 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  1. Preparation instructions and recommendations.
  2. Storage and handling requirements and recommendations.
  3. Installation methods.
- C. Shop Drawings: Submit shop drawings including installation details of fluid applied roofing and flashing prior to job start.
- D. LEED Submittals: Provide documentation of how the requirements of Credit will be met:
  1. List of proposed materials with recycled content. Indicate post-consumer recycled content and pre-consumer recycled content for each product having recycled content.
  2. Product data and certification letter indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content.
  3. Product reflectivity and emissivity criteria to qualify for one point under the LEED credit category, Credit 7.2, Landscape & Exterior Design to Reduce Heat Island - Roof.
- E. Verification Samples: For each product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, and color.

- F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- G. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic inspection and maintenance of all completed roofing work. Provide product warranty executed by the manufacturer. Assist Owner in preparation and submittal of roof installation acceptance certification as may be necessary in connection with fire and extended coverage insurance on roofing and associated work.

#### 1.6 QUALITY ASSURANCE

- A. Perform Work in accordance with manufacturer's current Application and Installation Guidelines and the NRCA Roofing and Waterproofing Manual.
- B. Manufacturer Qualifications: Manufacturer: Company specializing in manufacturing products specified in this section with documented ISO 9001 certification and minimum twelve years and experience.
- C. Installer Qualifications: Company specializing in performing Work of this section with minimum five years documented experience and a certified Pre-Approved Garland Contractor.
- D. Installer's Field Supervision: Maintain a full-time Supervisor/Foreman on job site during all phases of roofing work while roofing work is in progress.
- E. Product Certification: Provide manufacturer's certification that materials are manufactured in the United States and conform to requirements specified herein, are chemically and physically compatible with each other, and are suitable for inclusion within the total roof system specified herein.
- F. Source Limitations: Obtain all components of roof system from a single manufacturer. Secondary products that are required shall be recommended and approved in writing by the roofing system Manufacturer. Upon request of the Architect or Owner, submit Manufacturer's written approval of secondary components in list form, signed by an authorized agent of the Manufacturer.

#### 1.7 PRE-INSTALLATION CONFERENCE

- A. Convene a pre-roofing conference approximately two weeks before scheduled commencement of roofing system installation and associated work.
- B. Require attendance of installers of deck or substrate construction to receive roofing, installers of rooftop units and other work in and around roofing which must precede or follow roofing work including mechanical work, Architect, Owner, roofing system manufacturer's representative.
- C. Objectives include:
  1. Review foreseeable methods and procedures related to roofing work, including set up and mobilization areas for stored material and work area.
  2. Tour representative areas of roofing substrates, inspect and discuss condition of substrate, roof drains, curbs, penetrations and other preparatory work.
  3. Review structural loading limitations of deck and inspect deck for loss of flatness and for required attachment.
  4. Review roofing system requirements, Drawings, Specifications and other Contract Documents.
  5. Review and finalize schedule related to roofing work and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.

6. Review required inspection, testing, certifying procedures.
7. Review weather and forecasted weather conditions and procedures for coping with unfavorable conditions, including possibility of temporary roofing.
8. Record conference including decisions and agreements reached. Furnish a copy of records to each party attending.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging with labels intact until ready for installation.
- B. Store all roofing materials in a dry place, on pallets or raised platforms, out of direct exposure to the elements until time of application. Store materials at least 4 inches above ground level and covered with "breathable" tarpaulins.
- C. Stored in accordance with the instructions of the manufacturer prior to their application or installation. Store roll goods on end on a clean flat surface. No wet or damaged materials will be used in the application.
- D. Storage temperatures should be between 60 degrees F to 80 degrees F (15.6 degrees to 26.7 degrees C). Indoor ventilated storage is recommended. Ensure jobsite storage is in a shaded and ventilated area. Do not store in direct sunlight. Keep materials away from open flame or welding sparks.
- E. Avoid stockpiling of materials on roofs without first obtaining acceptance from the Architect/Engineer.

#### 1.9 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- B. Weather Condition Limitations: Product application must not be done when rain or other conditions such as fog or heavy dew are possible within a 24 hour period. Roof surface must be at least 6 Fahrenheit degrees or 3 Celsius degrees above the dew point and rising.
- C. Proceed with roofing work only when existing and forecasted weather conditions will permit unit of work to be installed in accordance with manufacturer's recommendations and warranty requirements.
- D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed during same day.
- E. When applying materials with spray equipment, take precautions to prevent over spray from damaging or defacing surrounding walls, building surfaces, vehicles or other property. Care should be taken to do the following:
  1. Close air intakes into the building.
  2. Have a dry chemical fire extinguisher available at the jobsite.
  3. Post and enforce "No Smoking" signs.
- F. Avoid inhaling spray mist; take precautions to ensure adequate ventilation.
- G. Protect completed roof sections from foot traffic for a period of at least 48 hours at 75 degrees F (24 degrees C) and 50 percent relative humidity or until fully cured.
- H. Take precautions to ensure that materials do not freeze.

- I. Minimum temperature for application of White-Knight Plus/ White-Stallion Plus, White-Knight Plus WC, LiquiTec and Cool-Sil coatings is 50 degrees F (10 degrees C) and rising.

## 1.10 WARRANTY

- A. Warranty Period: 10 years.
  1. Upon completion of the work, provide the Manufacturer's written and signed limited labor and materials Warranty, warranting that, if a leak develops in the roof during the term of this warranty, due either to defective material or defective workmanship by the installing contractor, the manufacturer shall provide the Owner, at the Manufacturer's expense, with the labor and material necessary to return the defective area to a watertight condition.
    - a. Metal Surface Roof Restoration:
- B. Warranty Period: Installer is to guarantee all work against defects in materials and workmanship for a period indicated following final acceptance of the Work.
  1. Warranty Period:
    - a. 2 years from date of acceptance.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Garland Company, Inc. (The); 3800 E. 91st St., Cleveland, OH 44105. ASD. Toll Free: 800-321-9336. Phone: 216-641-7500. Fax: 216-641-0633. Web Site: <http://www.garlandco.com>.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

### 2.2 METAL SURFACE ROOF RESTORATION

- A. Cool Sil HB:
  1. Primer: Rust-Go Primer (for priming metal components only)
  2. Coating: Cool Sil HB:
  3. Flashing: Cool Sil HB
  4. Reinforcement: Partial reinforcement on metal panel seams only.
    - a. UniBond ST

### 2.3 ACCESSORIES:

- A. Roof Insulation: In accordance with Section 07 22 16 - Roof Board Insulation.
- B. Nails and Fasteners: Non-ferrous metal or galvanized steel, except that hard copper nails shall be used with copper; aluminum or stainless steel nails shall be used with aluminum; and stainless steel nails shall be used with stainless steel, Fasteners shall be self-clinching type of penetrating type as recommended by the deck manufacturer. Fasten nails and fasteners flush-driven through flat metal discs not less than 1 inch (25 mm) diameter. Omit metal discs when one-piece composite nails or fasteners with heads not less than 1 inch (25 mm) diameter are used.
- C. Silicone Sealant - All-Sil: One part, medium modulus, high-performance sealant intended for use in expansion and control joints, reglets, panels, tilt-up walls, metal curtain walls, copings, window and door perimeters, panel bedding, and glazing details.
  1. Tensile Strength, ASTM D 412: 230 psi
  2. V Elongation, ASTM D 412: 360%
  3. Hardness, Shore A ASTM C 920: 24

- D. Silicone Sealer - Cool-Sil FG: One part, 100% silicone, moisture-cure sealer for sealing roof penetrations, drains, existing membrane seams and other flashing details.
  - 1. Tensile Strength, ASTM D 412: 130 psi
  - 2. Elongation, ASTM D 412: 275%
  - 3. Hardness, Shore A, ASTM C 920: 35
  - 4. Adhesion-in-Peel, ASTM C 92: 30 pli
- E. Silicone Dampproofing - Seal-A-Pore HP: Transparent and colorless solution designed to damp-proof above grade masonry surfaces as recommended and furnished by the membrane manufacturer.
  - 1. Density @77 degrees F 8.4 lb/gal min.
  - 2. Viscosity (Zahn #2 cup) Typical 14 sec.
- F. Acrylic Damp-Proofing Tuff-Coat: Damp-proofing that provides heavy body protection while bridging small hair line cracks and masonry imperfections as recommended and furnished by the membrane manufacturer.
  - 1. Density @77 degrees F 12.25 lb/gal typical
  - 2. Viscosity, ASTM D 562: 95 KU
- G. Butyl Tape: 100% solids, asbestos free and compressive tape designed to seal as recommended and furnished by the membrane manufacturer.
- H. Non-Shrink Grout: GarRock all-weather fast setting chemical action concrete material to fill pitch pans.
  - 1. Flexural Strength, ASTM C 78: (modified) 7 days 1100psi
  - 2. High Strength, ASTM C 109: (modified) 24 days 8400lbs (3810kg)
- I. Pitch Pocket Sealer - Universal Pitch-Pocket Sealer: Two-part, 100% solids, self-leveling, polyurethane sealant.
- J. Glass Fiber Cant - Glass Cant: Continuous triangular cross Section made of inorganic fibrous glass used as a cant strip as recommended and furnished by the membrane manufacturer.

#### 2.4 EDGE TREATMENT AND ROOF PENETRATION FLASHINGS

- A. Flashing Boot - Rubbertite Flashing Boot: Neoprene pipe boot for sealing single or multiple pipe penetrations adhered in approved adhesives as recommended and furnished by the membrane manufacturer.
- B. Vents and Breathers: Heavy gauge aluminum and fully insulated vent that allows moisture and air to escape but not enter the roof system as recommended and furnished by the membrane manufacturer.
- C. Pitch pans, Rain Collar 24 gauge stainless or 20oz (567gram) copper. All joints should be welded/soldered watertight. See details for design.
- D. Drain Flashing should be 4lb (1.8kg) sheet lead formed and rolled.
- E. Plumbing stacks should be 4lb (1.8kg) sheet lead formed and rolled.
- F. Fabricated Flashing: Fabricated flashings and trim are specified in Section 07 62 00 - Sheet Metal Flashing and Trim.
  - 1. Fabricated flashings and trim shall conform to the detail requirements of SMACNA "Architectural Sheet Metal Manual" and/or the CDA Copper Development Association "Copper in Architecture - Handbook" as applicable.
- G. Manufactured Roof Specialties: Manufactured copings, fascia, gravel stops, control joints,

expansion joints, joint covers and related flashings and trim are specified in Section 07 71 23 - Manufactured Gutters and Downspouts.

1. Manufactured roof specialties shall conform to the detail requirements of SMACNA "Architectural Sheet Metal Manual" and/or the NRCA "Roofing and Waterproofing Manual" as applicable.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Verify that work penetrating the roof deck, or which may otherwise affect the roofing, has been properly completed.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 3.2 ROOF PREPARATION AND REPAIR

- A. General: All necessary field and flashing repairs must be done according to good construction practices, including the removal of all wet insulation and defective materials as identified through a moisture detection survey such as an infrared scan and replacement with like-materials.
  1. Remove damaged roof flashings from curbs and parapet walls down to the surface of the roof. Remove damaged existing flashings at roof drains and roof penetrations.
  2. Existing roof surfaces shall be primed as necessary and allowed to dry prior to installing the roofing system.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Repair all defects such as deteriorated roof decks, saturated materials, loose or brittle membrane or membrane flashings, etc. Verify that existing conditions meet the following requirements:
  1. Existing membrane is either fully adhered or that the membranes mechanical fasteners are secured and functional.
  2. Application of roofing materials over a brittle, damaged or poor condition roof membrane is not permitted.
- D. Remove all loose dirt and foreign debris from the roof surface. Do not damage roof membrane in cleaning process.
- E. Clean and seal all parapet walls, gutters and coping caps, and repair any damaged metal where necessary. Seal watertight all fasteners, pipes, drains, vents, joints and penetrations where water could enter the building envelope.
- F. Confirm local water run-off ordinances and restrictions prior to cleaning roof. Clean the entire roof surface by removing all dirt, algae, mold, moss, paint, oil, talc, rust or other foreign substance. Use a bio-degradable cleaner like Simple Green Oxy Solve when necessary and warm water. Scrub heavily soiled areas with a brush. Power wash roof thoroughly with an industrial surface cleaner equipped with one piece balanced spray rotating jets for streak free close contact cleaning. Rinse with fresh water to completely remove all residuals. Allow roof to dry thoroughly before continuing.
- G. Repair existing roof membrane as necessary to provide a sound substrate for the liquid membrane. All surface defects must be repaired/renovated and be made watertight. Any repairs must be with be only with materials compatible with the fluid-applied roofing



restoration system.

- H. Power washing of metal roof surfaces to remove all loose rust or scale is mandatory before application. Use a high volume air broom or compressed air to remove residual dust rust perforations, etc. Deteriorated metal roof decks must be repaired or replaced prior to the application of the coating system.

### 3.3 INSTALLATION

#### A. General Installation Requirements:

1. Install in accordance with manufacturer's current Application and Installation Guidelines and the NRCA Roofing and Waterproofing Manual.
2. Adequate coating thickness is essential to performance. If the applicator is unfamiliar in gauging application rates, we suggest that a controllable area be measured and the specified material be applied. In all cases, all minimum specified material must be applied and proper minimum dry film thicknesses must be achieved. Care must be taken to ensure that all areas completed including all flashings, roof penetrations, etc. are coated sufficiently to ensure a watertight seal.
3. Cooperate with manufacturer, inspection and test agencies engaged or required to perform services in connection with installing the roof system.
4. Insurance/Code Compliance: Where required by code, install and test the roofing system to comply with governing regulation and specified insurance requirements.
5. Protect work from spillage of roofing materials and prevent materials from entering or clogging drains and conductors. Replace or restore adjacent work damaged by installation of the roofing system.
6. All primers must be top coated within 24 hours after application, preferably immediately after drying. Clean and re-prime if more time passes after priming.
7. Coordinate counter flashing, cap flashings, expansion joints and similar work with work specified in other Sections under Related Work.
8. Coordinate roof accessories and miscellaneous sheet metal accessory items, including piping vents and other devices with work specified in other Sections under Related Work.

#### B. Metal Surface Roof Restoration: Renovation work includes:

1. Surface Preparation: Remove loose flaking rust, dust, dirt, debris, secure all gaped panels and replace all loose fasteners with next size larger.
  - a. Remove rust by the most rigorous method suitable for the particular project and as approved by Garland.
  - b. Tighten all fasteners and verify that neoprene washers are in place.
  - c. Replace missing fasteners using oversize fasteners as necessary.
  - d. Seal all fastener heads by applying a heavy dab of compatible sealant to the tops and around of all fastener heads.
  - e. Repair gaps, holes and joints in the metal roof with appropriate patching materials.
  - f. Completely remove existing seam coatings, mastics and sealants.
  - g. Ensure skylights, scuppers, gutters, penetrations and structures are firmly secured, watertight and in good working condition.
  - h. Where necessary, install water deflecting crickets behind rooftop mechanical units.
  - i. All roof areas must promote positive drainage.
  - j. Previously coated roofs with well-adhered polyurethane or polyurea coating surfacing must be solvent-wiped with acetone after cleaning to reactivate surface for overcoating.
2. Flashing: Repair/Replace metal flashings, pitch pockets, etc.
3. Primer:
  - a. Prime entire roof surface with Rust-Go Primer rust inhibitive primer at 1/4 gallon

- per 100 SF.
4. Reinforcement: Treatment of field seams and around penetrations:
    - a. Application of UniBond ST seam tape with Base Coat on metal panel end laps, flashings and around penetrations.
      - 1) Verify that the surface to be coated is properly prepared.
      - 2) Remove the clear release liner from the back in workable sections
      - 3) Center 6 inch wide UniBond ST over the middle of the lap.
      - 4) Use care to install the tape uniformly. Do not stretch or cause air pockets, wrinkles or fishmouths.
      - 5) Apply pressure to tape starting at the center and work toward outside edge with a steel roller to activate the bonding process.
      - 6) Inspect the tape to ensure that it is properly installed. Verify edges are tightly fixed to surface. If any discrepancies are present, repair before the coating is applied.
      - 7) Saturate the tape with coating or baser as specified.
  5. Coating: Ensure the fluid-applied coverage rates are obtained throughout the entire roof surface.
    - a. Material: Apply base coat in a uniform manner at 1.5 gallons per 100 SF over the entire roof surface. Allow to cure thoroughly, but no more than 72 hours. Apply a top coating over base coat at 1.0 gallons per 100 SF.
    - b. Use special attention to coating flashings and other critical areas to build adequate membrane thickness.
    - c. Use multiple coats on verticals or steep slopes to prevent sagging and to obtain the required total coverage rate.
    - d. Apply to Garland's minimum membrane thickness over the entire roof surface.

### 3.4 REPAIR OF EDGE TREATMENT AND ROOF PENETRATION FLASHING

- A. General
  1. Repair flashing in accordance with the requirements/recommendations of the Membrane manufacturer and as indicated on the manufacturer's standard drawings. Provide system with base flashing, edge flashing, penetration flashing, counter flashing, and all other flashings required for a complete watertight system.
  2. Install and repair flashings concurrently with the roofing as the job progresses.
  3. Terminate flashings as required by the membrane manufacturer.
- B. Manufactured Roof Specialties: Manufactured copings, fascia, gravel stops, control joints, expansion joints, joint covers and related flashings and trim are provided as specified in Section 07 71 23 - Manufactured Gutters and Downspouts.
  1. Manufactured roof specialties shall conform to the detail requirements of SMACNA "Architectural Sheet Metal Manual" and/or the National Roofing Contractor's Association "Roofing and Waterproofing Manual" as applicable.

### 3.5 CLEANING

- A. Clean-up and remove daily from the site all wrappings, empty containers, paper, loose particles and other debris resulting from these operations.
- B. Remove coating markings from finished surfaces.
- C. Repair or replace defaced or disfigured finishes caused by Work of this section.

### 3.6 PROTECTION

- A. Provide traffic ways, erect barriers, fences, guards, rails, enclosures, chutes and the like to protect personnel, roofs and structures, vehicles and utilities.

- B. Protect exposed surfaces of finished walls with tarps to prevent damage.
- C. Plywood for traffic ways required for material movement over existing roofs shall be not less than 5/8 inch (16 mm) thick.
- D. In addition to the plywood listed above, an underlayment of minimum 1/2 inch (13 mm) recover board is required on new roofing.
- E. Special permission shall be obtained from the Manufacturer before any traffic shall be permitted over new roofing.

### 3.7 FIELD QUALITY CONTROL

- A. Require attendance of roofing materials manufacturers' representatives at site during installation of the roofing system.
- B. Perform field inspection and [and testing] as required under provisions of Section 01 41 26 - Permit Requirements.
- C. Correct defects or irregularities discovered during field inspection.

### 3.8 FINAL INSPECTION

- A. At completion of roofing installation and associated work, meet with Contractor, Architect, installer, installer of associated work, roofing system manufacturer's representative and others directly concerned with performance of roofing system.
- B. Walk roof surface areas, inspect perimeter building edges as well as flashing of roof penetrations, walls, curbs and other equipment. Identify all items requiring correction or completion and furnish copy of list to each party in attendance.
- C. If core cuts verify the presence of damp or wet materials, the installer shall be required to replace the damaged areas at his own expense.
- D. Repair or replace deteriorated or defective work found at time above inspection as required to produce an installation that is free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- E. Notify Architect upon completion of corrections.
- F. Following the final inspection, provide written notice of acceptance of the installation from the roofing system manufacturer.

### 3.9 SCHEDULES

- A. Primers:
  - 1. Rust-Go Metal Primer:
    - a. Flash Point: 40 degrees F (4.4 degrees C) min
    - b. Solids by Weight: 69.9% plus/minus 2.0%
    - c. Solids by Volume: 52.5% plus/minus 2.0%
    - d. Viscosity @ 77 degrees F (25 degrees C):70 plus/minus 5 KU
- B. Reinforcement:
  - 1. UniBond ST: Fatigue resistant, polyester-faced adhesive tape.
    - a. Tensile Strength 4500 psi.
    - b. Elongation, 500%
    - c. Low Temperature Flexibility, -70 degrees F (-56.6 degrees C).
    - d. Service Temperature, -30 to 200 degrees F (-34.4 to 93.3 degrees C).

- e. Permeance ASTM 96b, .001 perms.
- f. Adhesion Greater than 20 lbs./in.

C. Coatings:

1. Coating: Cool-Sil HB Gray Silicone Coating (Roller Grade): Single-component 100 % silicone, liquid waterproofing membrane.
  - a. Tensile Strength: ASTM D 412, 350 psi
  - b. Elongation: ASTM D 412, 174%
  - c. Flash Point: ASTM D 93, 141 degrees F min. (60.6 degrees C)
  - d. Solids Content: ASTM D 2369, Typical 95%
  - e. VOC: < 50 g/l
2. Coating: Cool-Sil HB White Silicone Coating (Roller Grade): Highly reflective, multi - purpose, single-component 100% silicone, liquid waterproofing membrane.
  - a. Tensile Strength: ASTM D 412, 350 psi
  - b. Elongation: ASTM D 412, 174%
  - c. Flash Point: ASTM D 93, 141 degrees F min. (60.6 degrees C)
  - d. Solids Content: ASTM D 2369, Typical 95%
  - e. VOC: < 50 g/l
  - f. Reflectance: 0.89
  - g. Emittance: 0.90
  - h. SRI: 113

D. Sealant.

1. Sealant: All-Sil: Low modulus, high extension/compression and excellent adhesion to most building materials s,
  - a. Tensile Strength: ASTM D 412, 130 psi
  - b. Elongation: ASTM D 412, 275%
  - c. Solids Content: ASTM D 2369, Typical 95%
  - d. VOC: < 50 g/l

END OF SECTION

## 5 Scope of Work, Details, & Drawings

### VSB Building



### MCC Building





PART 1 — GENERAL

1.1 WORK COVERED BY CONTRACT DOCUMENTS

A. The following brief description is not intended to totally define the scope of work. Refer to the contract documents for an entire description of the project scope.

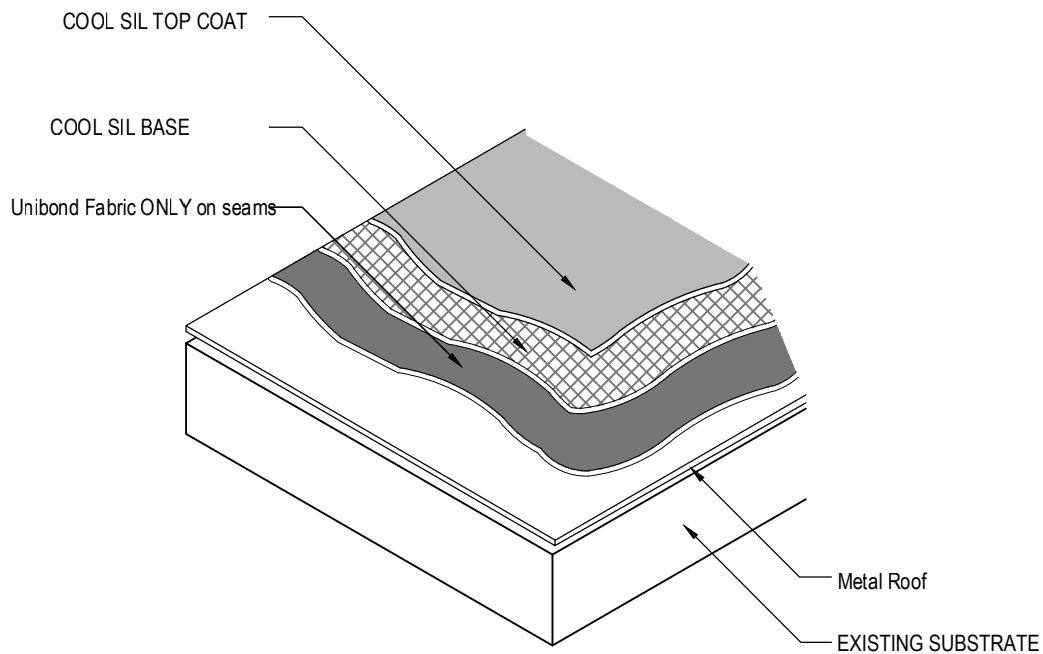
B.1 The successful Proposer shall provide labor, Garland and non-Garland materials to install a shingle roof and restoration coating

The general scope of work is as follows: VSG & MCC Building Restoration

Scope of Work:

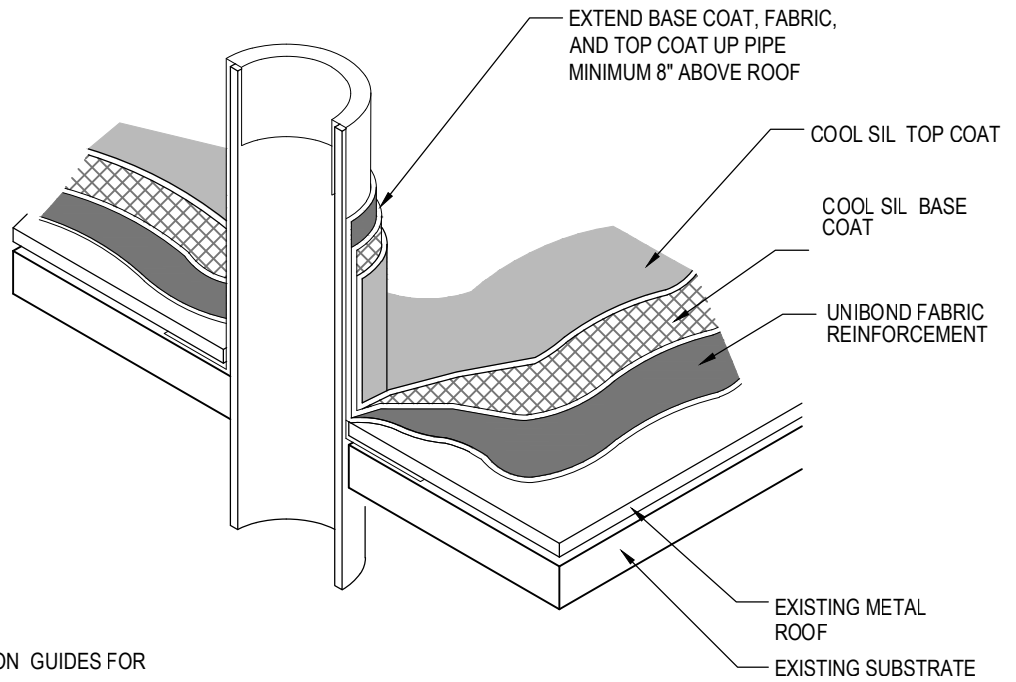
1. Stage and mobilize equipment & materials
2. Clean substrate free of debris with power broom and blower.
3. Install Garlands Unibond reinforcement rolls over all Lap Seams Replace any missing Fasteners and or broken
4. Apply RUST GO PRIMER at rate of .5 gal per 100 sq ft.
5. Apply Garlands Cool Sil at rate of 2 gal per 100 sq ft.
6. Allow 24-48hrs for Cool Sil to flash
7. Apply Garlands Cool Sil top coat at rate of 3 gal per 100 sq ft.
8. Coat all pipe penetrations.
9. Full Clean Sweep of all construction debris.

## 5 Scope of Work, Details, & Drawings



NOTE:

1. REFER TO WHITE-KNIGHT PLUS APPLICATION GUIDES FOR INSTALLATION GUIDELINES.



**NOTE:**

1. REFER TO COOL SIL APPLICATION GUIDES FOR INSTALLATION GUIDELINES.

## TYPICAL PIPE PENETRATION DETAIL



since 1895

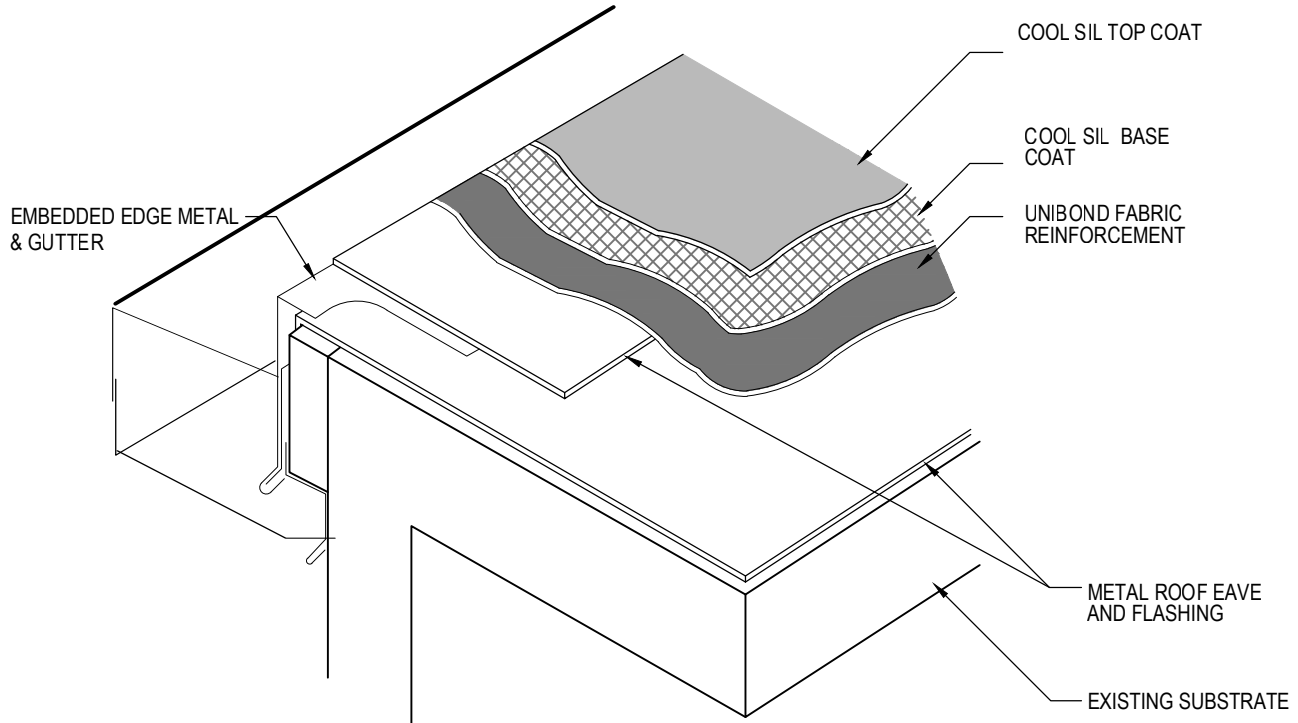
THE GARLAND COMPANY, INC.  
GARLAND CANADA, INC.  
THE GARLAND COMPANY UK, LTD

PROJECT:	
CUSTOMER:	
ARCHITECT:	
REPRESENTATIVE:	
DATE:	SHT: OF



**NOTE:**

1. REFER TO COOLSIL APPLICATION GUIDES FOR INSTALLATION GUIDELINES.



## TYPICAL EMBEDDED EDGE METAL DETAIL



THE GARLAND COMPANY, INC.  
 GARLAND CANADA, INC.  
 THE GARLAND COMPANY UK, LTD

PROJECT:	
CUSTOMER:	
ARCHITECT:	
REPRESENTATIVE:	
DATE:	SHT: OF



C. Contractor's duties:

1. Except as otherwise specifically excluded, provide and pay for:
  - a. Labor, equipment and required safety equipment.
  - b. Tools, construction equipment and machinery.
  - c. Water, heat and utilities required for construction (if applicable).
  - d. Other facilities and services necessary for proper execution and completion of the work, including proper disposal of removed roofing and waste.
  - e. Products used for the completion of the project.

Pay legally required sales, consumer and use taxes (if applicable).
3. Pay Prevailing wage rates in compliance with Will County rates, and provide certified payroll documentation to the Owner upon request.