PROJECT SPECIFICATION

2018 ROOF REHABILITATION

AT

931 EAST MAIN STREET BUILDING

PREPARED FOR:

COMMON WEALTH DEVELOPMENT
1501 WILLIAMSON STREET
MADISON, WISCONSIN  53703

JULY 28, 2018

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931 East Main Street Building

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INVITATION TO BID

THE OWNER:
Common Wealth Development
1501 Williamson Street
Madison, Wisconsin

THE PROJECT:
2018 Roof Rehabilitation at
931 East Main Street

Bids are being requested for Roof Rehabilitation at the above-cited facility for the following Work:

PROJECT DESCRIPTION: The project description is given only for the purpose of acquainting prospective Bidders with the Project and is not intended to give Bidders a complete description of all the Work or materials. It is intended only as an aid for understanding the scope of the Project. All dimensions and existing conditions are to be verified by the Bidder.

1. Coordinate all roofing operations with the Owner and Engineer.
2. Remove the existing roof materials and insulation components to the roof deck as required.
3. Furnish and install new roof deck as required on a Unit Price basis.
4. Furnish and install new materials as required to raise penetration curbs 8” minimum above the membrane surface.
5. Furnish and install new wood nailers as required to accommodate added insulation thickness and as shown on the Drawings.
6. Furnish and install new equipment supports as required.
7. Furnish and install new vapor barrier system as required.
8. Furnish and install new insulation system as required.
9. Furnish and install new roof membrane and flashing system as required.
10. Furnish and install new insulation saddles to assist drainage as required.
11. Furnish and install new interior roof drains as required.
12. Contractor shall perform all Work in accordance with the State of Wisconsin Department of Health and Social Services, HSS 159, Asbestos/Lead Abatement Certification.
13. Furnish and install all contingent work as necessary and required to fully complete the Project per the intent of this Project Manual. Federal Labor Standard Provisions, Federal Non-Discrimination Requirements and Federal Wage Decision Requirements apply to this project (see appendices 1-3).

--- END OF SECTION ---

00100-1
2018 ROOF REHABILITATION
AT
931 EAST MAIN STREET, MADISON, WI

BID DUE DATE: 2:00 P.M., LOCAL TIME, September 6, 2018
Sealed bids will be received by Common Wealth Development, hereinafter called the Owner, to:

Paul Jasenski
Program Manager
Common Wealth Development
1501 Williamson Street
Madison, Wisconsin 53703

Until 2:00 P.M. local time, Thursday September 6, 2018 for the 2018 Roof Rehabilitation at 931 East Main Street in Madison, Wisconsin.

The Bidding Documents have been prepared by SRI Consultants, Inc. (SRI), 3207 Laura Lane, Middleton, Wisconsin 53562 (Telephone: 608-831-5333) and will be made available to qualified Roofing Contractors.

All Qualified Roofing Contractors may attend a Pre-Bidders Conference on Thursday, August 30, 2018 starting at 10:00 A.M. local time to inspect the existing conditions at the 931 East Main Street Building in Madison, Wisconsin. Access to the specified roof areas will be made available after the Pre-Bidders Conference.

Common Wealth Development will be utilizing Federal Funds for this project. Because of this additional terms and conditions will apply. These terms and conditions are contained within Federal Labor Standard Provisions, Federal Non-Discrimination Requirements and Federal Wage decision as posted (www.cwd.org). Note that the Wage Decision is subject to change and does not lock in until the bid's due date. The contractor must accept the Wage Decision in order to be considered a responsive bidder and to be awarded the contract. A goal established by The City Madison, Department of Civil Rights, is a 5% participation rate for Minority/Women/Disadvantaged Business Enterprises. The contractor is responsible for meeting the 5% goal. If a Minority/Women/Disadvantaged Business Enterprises is utilized to provide materials for this project, 60% of material purchase amount may apply to the 5% goal.

A Bid Bond or Certified Check for 10% of the maximum bid payable to the Common Wealth Development is required as described in the instructions to bidders.

--- END OF SECTION ---
ITEM 1. INTRODUCTION

A. Bids entitled to consideration must be prepared and submitted in accordance with the following instructions.

B. The Contract Documents for this Project are on file and may be examined on the Common Wealth Development website, which is: www.cwd.org.

    Common Wealth
    Development
    1501 Williamson Street
    Madison, WI 53703
    Paul Jasenski
    Housing Project Manager
    Telephone: 608-256-3527 #14
    E-Mail: Paul@cwd.org

C. Bid Bond or certified check for 10% of the maximum Bid payable to the Owner is required, as a guarantee that if the Bid is accepted, the Contractor will execute and file the proposed Contract and 100% Performance Bond within ten (10) days after the award of the Contract. The certified check will be returned to the Contractor as soon as the Contract and Bond are executed. If, after ten (10) days, the Contractor should fail to execute said Contract and Bond, the certified check or Bid Bond shall be forfeited to the Owner as liquidated damage.

D. **Common Wealth Development will be utilizing Federal Funds for this project.** Because of this additional terms and conditions will apply. These terms and conditions are contained within the Federal Labor Standard Provisions (Appendix 1), Federal Non-Discrimination Requirements (Appendix 2) and Federal Wage Decision (Appendix 3). Note that the Wage Decision is subject to change and does not lock in until the bid's due date. The contractor must accept the Wage Decision in order to be considered a responsive bidder and to be awarded the contract. A goal established by The City Madison, Department of Civil Rights, is a 5% participation rate for Minority/Women/Disadvantaged Business Enterprises.

E. The Federal Wage Decision included as Appendix 3 to these specifications are the minimum prevailing wages for this work.

F. The Owner reserves the right to reject all Bids or to waive any irregularities in any Bid or to accept any Bid which will be in the best interest of the Owner.

G. No Bid may be withdrawn for a period of ninety (90) days after the date set for the opening thereof.

H. All Bidders may attend a **Pre-Bidders Conference on Thursday, August 30, 2018** starting at 10:00 A.M. local time at the 931 East Main Street Building located in Madison, Wisconsin.
ITEM 2. SUBMISSION OF BIDS

A. Sealed Bids for 2018 ROOF REHABILITATION at:

   931 East Main Street Building
   Madison, Wisconsin

   Will be received at The Common Wealth Development office or mailed to the address below.
   BIDS MUST BE RECEIVED ON OR BEFORE 2:00 P.M.

   Place:      Common Wealth Development
               1501 Williamson Street
               Madison, Wisconsin 53703
               Attn: Paul Jasenski

   Time:  2:00 P.M. (Central Time)       Date:  Thursday, September 6, 2018

B. Bids shall be submitted in a sealed envelope indicating the Bidder’s name and address.
   Envelopes shall be marked: 2018 Roof Rehabilitation Bid.

C. One copy of the Bid shall be submitted on the Bid Form furnished. All blank spaces on the
   form shall be filled. The Bid sum shall be stated in both writing and in figures. The Bid Form
   shall not be altered. Bid Forms submitted improperly or partially completed will be subject to
   rejection.

D. Bids shall be submitted by mail or other delivery to the place indicated above. No oral, fax,
   or telephonic Bids will be accepted.

E. The Bids will be privately opened. Any Bids received after the time and date stated will be
   subject to rejection.

F. In submitting Bids, each Bidder represents that they agree to all the terms and conditions
   contained in the Contract Documents.
ITEM 3. AVAILABILITY OF BID DOCUMENTS

A. The Bidding Documents will be sent to qualified contractors in electronic format through e-mail or can be view on the Common Wealth Development website: www.cwd.org. A hardcopy format of the Bidding Documents will not be distributed at the pre-bid.

ITEM 4. EXAMINATION

A. Each Bidder shall examine carefully the Project Manual, Addenda and all other Contract Documents relating to the Project.

B. Each Bidder shall acquaint him or herself with the site and all conditions relevant to the Work and shall make all evaluations and investigations necessary to a full understanding of any difficulties, which may be encountered in performing the Work. The buildings will be open for Contractor inspection during weekday hours. There will not be anyone present to answer questions regarding the Project Documents at these times.
C. The failure of any Bidder to receive or examine any form, instrument or document or to acquaint himself with the site and conditions relevant to the Work shall in no way relieve the Bidder from any obligation with respect to his Bid.

D. No Bidder to whom a Contract is awarded shall be allowed extra compensation on account of any matter or thing that the Bidder could have made him or herself aware of prior to bidding.

ITEM 5. DISCREPANCIES AND INTERPRETATIONS

A. Should a Bidder find any discrepancies in or omissions from any of the Contract Documents or be in doubt as to their meaning, he shall advise the Engineer. Necessary clarifications will be issued to all Bidders by means of Addenda. All Addenda shall become part of the Contract Documents. Oral clarification made, but not set forth in writing in the form of an Addendum, will not be considered binding.

ITEM 6. MODIFICATION AND WITHDRAWAL OF BIDS

A. Modification by telegraph or in writing will be accepted if received prior to the time and date set for Bid receipt.

B. Bids may be withdrawn by telegraphic or written request if received from Bidder prior to the time and date set for Bid receipt.

C. No Bids may be withdrawn for a period of ninety (90) calendar days after the date set for Bid receipt.

D. Negligence by the Bidder in preparing his Bid shall not constitute a right to withdraw his Bid subsequent to the time and date set for Bid receipt.

ITEM 7. BASIS OF BIDS

A. Bids shall be based on the specific materials, equipment and manufacturers specified. No substitution shall be considered unless a written request has been received by the Engineer for approval at least seven (7) working days prior to the Bid date. Each request shall include a complete description of proposed substitute, name of materials or equipment for which it is to be substituted, drawings, cuts, performance and test data and other data, samples, or information the Engineer deems necessary for a complete evaluation.

If notification concerning approval is to be returned by mail, each shall be accompanied with a self-addressed and stamped envelope and a reply letter for indicating approval and disapproval; otherwise, notification will be by Addendum issued only to Bidders and Plan Holders. If the Engineer approves any proposed substitution, such approval will be set forth in a written Addendum.
If brochures are furnished, they shall be marked clearly to show what will be provided. If allowed to Bid, clearly indicate changes in materials, construction, installation, or areas not in compliance with specified item.

B. Bids shall be based on full completion of the Work within the number of consecutive calendar days, or by the date indicated on the first page of the Bid Form.

ITEM 8. FORMS

A. The Form of Agreement shall be the Owner’s AIA-A101 Contract with the General Conditions thereon or Form of Agreement Section 00500 of the project specification.

B. The Owner’s payment and Change Order forms shall be used as prescribed in the AIA-A201 General Conditions of the Contract.

ITEM 9. REQUIREMENTS FOR SIGNING BIDS

A. Bids that are signed for a partnership shall be signed by all the Partners, or by an Attorney-in-Fact. If signed by an Attorney-in-Fact, there shall be attached to the Bid, a Power of Attorney evidencing the authority to sign the Bid, executed by the Partners.

B. Bids that are signed for a Corporation shall have the correct corporate name thereof and the signature of the President or other authorized officer of the corporation manually written below the corporate name. If an official other than the President of the Corporation manually signs the Bid, attach certified evidence of authority for such official to sign the Bid.

--- END OF SECTION ---
To: Paul Jasenski

From: Program Manager
Contractor

Common Wealth Development
1501 Williamson Street
Madison, Wisconsin 53703

Business Address

City State Zip

Project: 2018 Roof Rehabilitation at
931 East Main Street Building

Telephone Number

Fax Number

Bids Due: 2:00 P.M (Central Time) Thursday, September 6, 2018

BIDDERS:

A. The undersigned has carefully examined the Drawings and Specifications and all other Contract Documents relating to the Project, acquainted him or herself with the site and all other conditions relevant to the Work and made all evaluations and investigations necessary to a full understanding of any difficulties that may be encountered in performing the Work.

B. The undersigned further proposes and agrees that the Work will be completed by December 15, 2018.

C. The undersigned agrees that any delay in the construction schedule that has been determined by the Owner/Engineer to be the Contractor’s responsibility shall result in a penalty to the Contractor of $500.00 for each working day that completion is delayed if the owner/engineer determined that the contractor could have completed the work on schedule.

D. The undersigned agrees that in the event the Contract Work cannot be completed by the date specified previously, and the Owner does not grant an extension of the Completion Date, the Work shall be discontinued temporarily. It shall be understood that the Owner will permit Work to resume only during that time allotted for the subsequent year’s Work.

E. The undersigned agrees that he may not be permitted to Bid in future Work for the Owner until the Work in progress is complete. He further agrees that the Contract Documents, including all Contractor responsibilities, shall remain enforced during the postponement of the Work.
F. The undersigned agrees that he shall take sole physical and financial responsibility for all efforts required ensuring the premises associated with the Work are in a suitable (including watertight) condition, as judged by the Owner and Engineer, during the postponement of the Work. The undersigned further agrees to hold harmless the Owner and Engineer for physical and financial responsibilities required to resume the Work after postponement.

G. The undersigned submits herein a cost breakdown of the Base Bid, Unit Prices and Alternate Bids as directed on the Bid Form. Any or all of the Alternate Bids may be selected by the Owner and added to, or subtracted from, the Base Bid sum as applicable.

H. The undersigned agrees, if this Bid is accepted, to enter an agreement on the Owner’s Standard Agreement Form for the Base Bid sum, adjusted for any Alternate Bids selected by the Owner. The undersigned further agrees to furnish a Performance and Payment Bond, for 100 percent (100%) of the total Contract Price.

I. The undersigned agrees that extra or additional work may be compensated on the basis of actual cost plus:

   _____% for overhead and profit if performed by Contractor.
   
   _____% for overhead and profit if performed by Subcontractor(s).
   
   _____$/Hour Labor Base Rate for Crew Foreman.
   
   _____$/Hour Labor Base Rate for Roofing Journeyman.
   
   _____$/Hour Labor Base Rate for Laborer.

J. In submitting this Bid, it is understood that the Owner reserves the right to reject any or all Bids, waive any formalities or technicalities in any Bid and to make an award in the best interest of the Owner. It is further understood and agreed that this Bid may not be withdrawn for a period of ninety (90) days after the date set for Bid receipt.

   K. The undersigned agrees to purchase and obtain all required construction permits prior to performing any work and to follow the current permit procedures and policies.

**931 East Main Street Building in Madison Wisconsin**

**BASE BID, 60 mil, Fully Adhered EPDM Roofing**, (Lump Sum) COST BREAKDOWN:
The undersigned hereby proposes and agrees to furnish all labor, materials, equipment, tools, permits, taxes, services and all other things necessary or appropriate for the proper and complete execution of the Work for the **lump sum** of:

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Dollars ($_______________)

00400-3
Barrel Roof Area Only

lump sum cost to provide and install a vapor barrier membrane system over the existing wood roof deck as specified in Addendum #2.

Lump Sum Cost: ________________________

UNIT PRICE SCHEDULE

(Include material, labor, overhead, and profit for each item.)

A. The undersigned hereby submits the following Unit Prices for extra or additional Work and for the deletion of Work:

1. Replacing existing cast iron roof drains or components:
   a. Bodies $__________ per unit
   b. Clamping Collars $__________ per unit
   c. Domes $__________ per unit
   d. Entire Assemblies $__________ per unit

2. Replacing deteriorated wood nailers where required:
   a. 2 X 4 $__________ per lineal foot
   b. 2 X 6 $__________ per lineal foot
   c. 2 X 8 $__________ per lineal foot
   d. 2 X 10 $__________ per lineal foot
   e. 2 X 12 $__________ per lineal foot
   f. 4 X 4 (cant) $__________ per lineal foot
   g. Other (Specify) $__________ per lineal foot

3. Repair damaged or deteriorated decking with new to match existing as deemed necessary by the Engineer.
   (Metal) $__________ per square foot
   (Wood) $__________ per square foot

B. The preceding Unit Prices include all charges for performance of the applicable Work as prescribed in the General Conditions.

C. It is understood that the preceding Unit Prices shall be used wherever applicable as prescribed in the General Conditions.

ADDENDA

The undersigned hereby acknowledges receipt of the following Addenda, which shall become part of the Contract Documents:
Respectfully submitted,

( ) Corporation  ( ) Partnership
( ) Individual  ( ) Other

__________________________________________
Contractor

__________________________________________
Signature

__________________________________________
State of Incorporation
(if applicable)

__________________________________________
Name

__________________________________________
Title

__________________________________________
Date

__________________________________________
Telephone Number

---END OF SECTION---
AGREEMENT

THIS AGREEMENT made and entered into this ___ th day of, by and between the
Common Wealth Development, hereinafter referred to as the “Owner” and ____________,
hereinafter referred to as the “Contractor”.

WITNESSETH:

WHEREAS, the Owner desires to employ the Contractor for the purpose hereinafter
specified, and

WHEREAS, the Contractor desires to be employed by the Owner on the terms and
conditions hereinafter specified.

NOW, THEREFORE, the Owner and the Contractor for the consideration hereinafter set
forth, do hereby covenant, promise and agree as follows:

ARTICLE I: DESCRIPTION OF WORK

The Contractor shall fully perform the Work as described in the Drawings and
Specifications in accordance with the Bid submitted by the Contractor, dated, __________, 2018
for roof rehabilitation of the designated roof areas at ______________ (areas)

ARTICLE II: CONTRACT SUM

The Owner agrees to pay the Contractor for the Work described, the total Contract Sum
of ___________________________ dollars and no cents [0.00]. Payment of
this amount is subject to additions or deductions in accordance with the provisions of this
Agreement and of the other documents to which this Agreement is subject.

ARTICLE III: PAYMENT

Payment of the total Contract Sum is to be as

follows: A. Progress Payments

Not later than seven (7) calendar days before the end of the month, the Contractor shall
present to the Engineer/Consultant a statement of the value of the Work done and materials in
place, itemized according to the headings of the Specifications hereinbefore referred to and made
a part thereof. Not later than the last Tuesday of the month he shall present to the Owner his
estimate of the value of said Work and materials in place but not paid for. Progress payments
may be withheld if:
1. Work is found defective and not remedied.
2. Contractor does not make prompt and proper payments to Subcontractors.
3. Contractor does not make prompt and proper payment for labor, materials or equipment furnished by him.
4. Another Contractor is damaged by an act for which Contractor is responsible.
5. Claims or liens are filed on the job.
6. In the position of the Engineer/Consultant or Owner, Contractor’s work is not progressing satisfactorily.

B. Retainage

The Owner shall retain five percent (5%) of progress payment until final completion and all specified Guarantees are in the Owner’s possession.

C. Final Payment

The Owner shall make final payment to Contractor within thirty (30) days after full completion of the Work and after the Owner’s final acceptance of the Project. As a condition precedent to final payment, the Contractor shall deliver to the Engineer/Consultant good and sufficient evidence that all claims due and chargeable to the Contractor have been paid. Should there prove to be any such claim after final payment, the Contractor hereby specifically covenants and agrees to refund to the Owner upon demand all money and expenses that the Owner may pay or incur in discharging any claim or lien against the Contractor or the Owner on account of such Work. The Contractor agrees to defend the Owner against any and all claims against the Owner for materials and labor furnished in said construction, whether before or after final payment.

D. Payments Not Acceptance

No payments under this Agreement either wholly or in part shall be construed to be an acceptance of defective or improper materials or workmanship.

ARTICLE IV: DESIGNATION OF ENGINEER/CONSULTANT; DUTIES AND AUTHORITY

The Engineer/Consultants duties and authority are as follows:
A. General Administration of Contract

The primary function of the Engineer/Consultant is to provide the general administration of the Contract. In performing these duties, he is the Owner’s Representative and duly authorized agent during the entire period of construction.

B. Inspections, Opinions and Progress Reports

The Engineer/Consultant will visit the site at intervals appropriate to the stage of roof rehabilitation Work to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the intent of the Contract Documents. However, He will not be required to make exhaustive or continuous on-site inspections to check quality or quantity of the Work. On the basis of the on-site observations, he will keep the Owner informed of the Work progress and will endeavor to guard the Owner against defects and deficiencies in the Work. He will not have control over, or charge of, and will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions in connection with the Work since these are solely the Contractor’s responsibility.

C. Access to Worksite

The Engineer/Consultant shall be given free access to the worksite at all times. The Contractor shall also permit all persons appointed or authorized by the Engineer/Consultant or the Owner to visit or inspect said Work, or any part thereof at all times and places during the progress of the same and provide sufficient, safe and proper ways and means for such inspection.

D. Interpretation of Contract Documents; Decisions on Disputes

The Engineer/Consultant will be the initial interpreter of the Contract Document requirements and will make primary decisions on claims and disputes that arise. The decision of the Engineer/Consultant upon any question relating to the true meaning of the Drawings and Specifications, performance of Work or completion of job, shall be final and conclusive upon the parties hereto unless within five (5) days after such decision the party complaining, by written demand, requires a reconsideration on the matter so decided. If such demand is made, the questions involved shall be reviewed by the Owner at its next or regular or special meeting; and if upon such review the Owner shall in any manner change the decision made by the Engineer/Consultant, the decision as so changed shall be final and conclusive. Except as herein provided, the decision of the Engineer shall be final and conclusive.

E. Rejection and Stoppage of Work

The Engineer/Consultant shall inspect the Project to determine if any material or workmanship is not in accordance with the provisions of the Contract Documents. If, in the opinion of the Engineer/Consultant, such material or workmanship exists, He shall notify the Owner of such deviations. The Owner shall have authority to reject the Work, which in his
opinion does not conform to the Contract Documents and in this connection to stop the Work or a portion thereof when necessary. If such material or workmanship is found, the Owner shall notify the Contractor within a reasonable time after discovery of the non-conforming material or workmanship.

F. Payment Recommendations

The Engineer/Consultant shall receive the Contractor’s estimates of the value of the Work and material done each month as provided herein and shall recommend to the Owner the estimate of the Work and materials in place but not paid for.

ARTICLE V: BEGINNING AND COMPLETION DATES

Construction under this Contract shall be completed by December 15, 2018.

The Contractor agrees that the construction covered by this Agreement shall be prosecuted regularly, diligently and without interruption at such rate of progress as will insure full completion thereof in the time stated above.

ARTICLE VI: CONTRACT DOCUMENTS

The documents, which constitute the Contract Documents of this Agreement and which by this reference, are made a part hereof as though expressly sets forth are:


B. This Agreement.

C. The Contractor’s Bid dated__________, 2018, attached hereto.

D. Written interpretations of the Drawings and Specifications and directives to be made from time to time by the Engineer and the Owner.

E. Work Change Order issued or to be issued.

The Contract Documents together form the Contract for the Work herein described. The parties intend that the documents include provisions for all labor, materials, equipment, supplies and other items necessary for the execution and completion of the Work and all terms and conditions of payment.

ARTICLE VII: RESPONSIBILITIES OF THE CONTRACTOR

The Contractor’s duties, rights and responsibilities in connection with the Project herein are as follows:
A. Responsibility for the Supervision of Construction

The Contractor shall be solely responsible for all construction under the Contract, including the techniques, sequence, procedures and means and for coordination of all Work; he shall supervise and direct the Work to the best of his ability and give it all attention necessary for such proper supervision and direction.

B. Furnishing of Labor, Materials, Etc.

The Contractor shall provide and pay for all materials, labor, transportation, services, tools, equipment and machinery and all other items and services necessary for the proper execution and completion of the Work on the Project according to the true intent and meaning of the Contract Documents, whether the same may or may not be particularly described therein, and according to such explanations and directions as the Engineer/Consultant may from time to time give for the purpose of the Work. Every part of the Work shall be executed and completed in a sound workmanlike and substantial manner and all materials used in the construction shall be new and of the best of their respective kinds, except as otherwise distinctly directed in writing by the Engineer/Consultant or allowed by the Specifications. If the Contractor brings or puts into the Work any material or workmanship not in accordance with the Contract Documents, the Contractor shall, within 24 hours after he or his agents receive from the Engineer/Consultant written notice thereof, proceed to remove from the Project all such materials, whether worked or unworked, and immediately take down all portions of the Work condemned by the Engineer/Consultant as unsound or improper.

C. Extra Work

The Contractor shall not deviate from the Drawings or Specifications or execute any extra work of any kind whatsoever unless authorized in advance in writing by the Engineer/Consultant. The amount to be paid, allowed or deducted on account of any such alterations or extra work, if any, shall be stated in writing, or provision made for the determination thereof in said written authorization and no claim shall be valid, nor shall any such be due and owing to the Contractor therefore, unless such written extra work Change Order stating the amount to be paid or allowed or providing for the determination of such amount, shall precede the change made or work done.

D. Discipline and Employment

The Contractor shall maintain at all times strict discipline among his employees, and he agrees not to employ for work on the Project any person unfit or without sufficient skill to perform the job for which he was employed. The Contractor agrees not to employ any of the Owner’s employees to perform any work or service whatsoever in the performance of this Contract.
E. Access to Job Site

The Contractor shall permit all persons appointed or authorized by the Owner or the Engineer/Consultant to visit or inspect the Project or any part thereof at all time and places during construction and provide sufficient, safe and proper ways and means for such inspections. When so directed by the Engineer/Consultant, the Contractor shall prevent the entrance or presence upon the Project of any person or persons not engaged or employed in the Work. Should the Contractor fail to do so, the Engineer/Consultant, acting for the Owner, may employ such guards, watchmen or other person as he from time to time deems necessary. All expense thereof shall be chargeable against the Contractor and may be deducted from any amount due or to become due to the Contractor.

F. Compliance with Laws and Regulations

The Contractor shall conform in all respects to the provisions and regulations of any general or local act or ordinance, or of any local or government authority which may be applicable to the said Work and indemnify the Owner against all penalties incurred by reason of the non-observance of any such provision or regulation.

G. Procurement of Licenses and Permits

The Contractor shall secure all licenses necessary for proper completion of the Work, paying the fees therefore.

H. Safety

The Contractor has the duty of providing for and overseeing all safety orders, precautions and programs necessary to the reasonable safety of the Work, specifically including, but not limited to, the Occupational Safety and Health Standards. In this connection, he shall take reasonable precautions for the safety of all work employees and other persons whom the Work might affect, all work and materials incorporated in the Project and all property and improvements on the construction site and adjacent thereto, complying with all applicable laws, ordinances, rules, regulations and orders.

I. Clean Up

The Contractor agrees to keep the Work premises and adjoining ways free of waste material and rubbish caused by his work or that of any Subcontractor. He further agrees to remove all such waste materials and rubbish daily and on termination of the Project, together with all his tools, equipment, machinery and surplus materials. He agrees on terminating his work at the site, to conduct general clean-up operations to the direction and to the satisfaction of the Engineer/Consultant and the Owner.
ARTICLE VIII: TIME OF ESSENCE - EXTENSION OF TIME

All times stated herein or in the Contract Documents are of the essence hereof. If an additional time is allowed for the completion of any Work, the new time fixed by such extension shall be of the essence thereof.

Should the Contractor be delayed in the completion of the Work required herein by any cause mentioned in this Agreement, or by an alteration or addition made in said Work by and under the authority of the Engineer/Consultant as herein provided, then the time herein fixed for the completion of said Work may be extended for a period equivalent to the time lost by reason of any of the causes aforementioned. The extended period, any, shall be determined and fixed by the Engineer/Consultant in writing, but no such allowance shall be made, unless a claim in writing therefore is presented by the Contractor to the Engineer/Consultant within a 48 hour period after the occurrence of any such alleged cause. If, on account of any such causes, the Engineer/Consultant shall deem it advisable to suspend the Work, he shall have the right and power to do so without extra charge being made by the Contractor, but the time of suspension, if any, will be allowed in addition to the time stipulated for completing the performance of the Work required by the Contract Documents.

Any delay in the construction schedule which has been determined by the Engineer/Consultant to be the Contractor’s responsibility shall result in a penalty to the Contractor of $500.00 for each working day that completion is delayed beyond the date outlined in Article V of this Agreement. The Engineer/Consultant shall determine the workings days. The penalty shall be deducted from the Contract Sum amount. If the penalty should exceed the outstanding amount of the Contract, the Contractor shall be required to make payment to the Owner.

ARTICLE IX: CONTRACTOR’S INSURANCE

The Contractor shall not commence Work under this Contract until he has obtained all insurance required under this paragraph and such insurance has been approved by the Owner, nor shall the Contractor permit any Subcontractor to commence work on his subcontract until like insurance has been so obtained and approved.

The Contractor shall obtain, pay for, and maintain during the life of this Contract such Workmen’s Compensation, Employer’s Liability, Contractual Liability, and Automobile Liability to protect the Contractor performing work covered by this Contract from the claims for damages for bodily injury, including glass breakage, which may arise from operations under this Contract whether such operations be by himself or any Subcontractor or by anyone directly or indirectly employed by either of them in amounts not less than the following:
Worker’s Compensation and Employer’s Liability
Statutory / $100,000

Comprehensive General Liability

Including:

Contractor’s Protective, Completed Operations and Contractual

Bodily Injury $500,000 / $1,000,000
Property Damage $500,000

Comprehensive Automobile Liability
(Owned, Non-Owned and Hired Car)

Bodily Injury $500,000 / $1,000,000
Property Damage $500,000

Contractual Liability $1,000,000 Each Occurrence

The Contractor shall provide proper endorsement to his General Liability Insurance to cover property damage liability arising from: (1) use of mechanical equipment, (2) explosion and (3) the collapse of or structural injury to any building or structure due to excavation, borrowing, filling or backfilling, or to moving, shoring, underpinning, razing or demolition of any building or structure or removal or rebuilding of any structural support thereof including roof membrane reconstruction with rooftop equipment and hot asphalt present.

The Contractor shall furnish the Owner with Certificates of Insurance covering each of the several items of insurance specified above.

ARTICLE X: HOLD HARMLESS AGREEMENT

In addition to obtaining insurance as provided in Article IX, the Contractor agrees at all times to protect, indemnify and hold harmless the Owner and Engineer/Consultant, their agents and employees from and against any and all claims, demands, judgments, expenses, damages, expenses and losses, including reasonable attorney’s fees, arising out of performance of the Work herein which is caused in whole or in part by the Contractor’s negligent act or omission or that of a Subcontractor, or that of anyone employed by them or for whose acts Contractor or Subcontractor maybe liable. This reference includes but is not limited to bodily injury or death, including injury to the building occupants; property damage to the Owner’s property whether said property is part of the Project or not, including loss of use, damage to or loss of use of the Contractor’s properties; damage to or loss of use of any other property.

The Contractor agrees to indemnify and hold harmless the Owner and Engineer/Consultant of any claim or lawsuit directly or indirectly arising from or related to asbestos or any material containing asbestos or any disease directly or indirectly related to
asbestos; or any act, error or omission, professional or otherwise, involving the existence, use, detection, removal, elimination of or exposure to asbestos or any material containing asbestos.

ARTICLE XI: WORK CHANGES

The Owner and the Engineer/Consultant reserve the right to order Work changes in the nature of additions, deletions, or modifications, without invalidating the Contract and agrees to make corresponding adjustments in the Contract Sum and time for completion. Written Change Orders signed by the Engineer/Consultant and approved by the Owner will authorize all changes. The Change Order will include conforming changes in the Contract and completion time.

ARTICLE XII: THE OWNER’S RIGHT UPON BREACH BY CONTRACTOR

In case the Contractor at any time refuses to order, contract for or supply promptly and at the right time, sufficient skilled workmen or sufficient and proper materials, or fails in any way to prosecute the Work with promptness and diligence, or when so ordered so to do by the Engineer/Consultant fails to discontinue the employment of any person or persons whose presence or continued employment tends to delay or hinder the said Work, or fails in the performance of any of the covenants and agreements herein contained, the Owner shall thereupon have the power and shall be at liberty, after three (3) days written notice to the Contractor or posting the same on said building, to order, contract for or otherwise provide such labor and materials as the Engineer/Consultant may deem necessary, and to deduct the cost thereof from any money then due or thereafter to become due to the Contractor under this Agreement, or otherwise to charge the cost thereof to the Contractor, who shall be liable thereof.

Also, if the Contractor fails in the performance of any of the covenants or agreements herein contained, the Owner shall be at liberty immediately to terminate this Agreement as provided in Article XIV.

ARTICLE XIII: ACCEPTANCE

The occupation of a facility subject to this Agreement shall in no way constitute acceptance of the Work performed or materials used.

ARTICLE XIV: TERMINATION

The Contractor may on thirty (30) days written notice to the Owner and Engineer/Consultant terminate this Contract before the completion date hereof when for a period of thirty (30) days after a progress payment is due, through no fault of the Contractor, the Owner fails to issue a Certificate of Payment therefore, or fails to make the payment. On such termination, Contractor may recover from the Owner payment for all Work completed and for any loss sustained by him for materials, equipment, tools or machinery to the extent of actual loss thereon plus loss of a reasonable profit, provided he can prove such loss and damages.

The Owner may on seven (7) days notice to Contractor, terminate this Contract before the completion date hereof and without prejudice to any other remedy he may have, when Contractor defaults in performance of any provisions of the Contract Documents. On such termination, the Owner may take possession of the worksite and materials, equipment, tools and machinery.
thereon and finish the Work in whatever way he deems expedient. If the unpaid balance on the Contract Sum at the time of such termination exceeds the expense of finishing the Work, the Owner will pay such excess to the Contractor. If the expense of finishing the Work exceeds the unpaid balance at the time of termination, the Contractor agrees to pay the difference to the Owner.

On such default by the Contractor, the Owner may elect not to terminate the Contract and in such event he may make good the deficiency of which the default consists and deduct the costs from the progress payment then and to become due to the Contractor.

ARTICLE XV: ASSIGNMENT

The Contractor shall not let nor assign this Agreement or any interest therein without the written consent of the Owner, except that the Contractor may subcontract portions of the Work in the usual course of business, he being and remaining at all times and under all circumstances primarily responsible to the Owner therefore.

ARTICLE XVI: INVALIDITY OF WORD, CLAUSE, ETC.

The parties hereby agree that if any court of competent jurisdiction shall declare any word, clause, sentence, or paragraph of this Agreement invalid or unenforceable, the remainder of the Contract shall not be affected thereby but shall remain binding on the parties.

ARTICLE XVII: EXECUTORS AND ASSIGNS

The parties hereto bind themselves, their heirs, successors, executors, administrators and representatives to the full performance of this Agreement.

ARTICLE XVIII: ARBITRATION

All claims, disputes and other matters in question between the Contractor and the Owner, except for claims which may have been waived by the making or acceptance of final payment, shall be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association unless the parties mutually agree otherwise. No arbitration arising out of or relating to the Contract Documents shall include, by consolidation, joinder or in any other manner, the Engineer, his employees or consultants except by written consent to be joined. No arbitration shall include by consolidation, joinder or in any other manner, parties other than the Owner, the Contractor and any other persons substantially involved in a common question of fact or law, whose presence is required if complete relief is to be accorded in the arbitration. No other person other than the Owner or Contractor shall be included as an original third party or additional third party to an arbitration whose interest or responsibility is insubstantial. Any consent to arbitration involving an additional person or persons shall not constitute consent to arbitration of any dispute not described therein or with any person not named or described therein. The foregoing agreement to arbitrate and any other agreement to arbitrate with an additional person or persons duly consented to by the parties to the Owner-
Contractor Agreement shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

Notice of the demand for arbitration shall be filed in writing with the other party to the Owner-Contractor Agreement and with the American Arbitration Association and a copy shall be filed with the Engineer/Consultant. The demand for arbitration shall be made within a reasonable time after the claim, dispute or other matter in question has arisen, and in no event shall it be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statute of limitations.

Unless otherwise agreed in writing, the Contractor shall carry on the Work and maintain its progress during any arbitration proceedings, and the Owner shall continue to make payments to the Contractor in accordance with the Contract Documents.

ARTICLE XIX: WARRANTY

The Contractor warrants to the Owner and the Engineer/Consultant that all materials and equipment furnished under this Contract will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the Engineer/Consultant, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

The Contractor shall provide the Owner with manufacturer’s ten (10) year watertight integrity warranties for the roofs specified.

OWNER

CONTRACTOR

Signature

Signature

Title

Title

00500-11
SPECIAL PROCEDURE FOR OBTAINING PAYMENT FOR MATERIALS NOT STORED AT THE SITE OF THE WORK

This Agreement applies only to:

Project: 2018 Roof Rehabilitation at 931 East Main Street in Madison, Wisconsin.

Due to the limited amount of space available for the storage of materials at the site, the Owner, under the following conditions, approves partial payments for certain materials stored off the premises.

1. **Prior Approval:** The Contractor shall obtain the approval of the Owner before making any arrangements to obtain a Certificate for Payment for materials stored off the site. Materials must be suitable for storage and must be properly packaged if this is necessary.

2. **Storage Site:** The Contractor shall furnish and maintain a suitable storage site and proper storage conditions which must be approved in advance by the Engineer assigned to the Project. The site must be within the State of Wisconsin.

3. **Storage Conditions:** The material covered by the request for certification for partial payment must be stored above grade and must be properly protected always against weather, heat, cold, moisture, and other hazards as the material may require. The Engineer must approve the storage conditions. All protection must be provided by the Contractor at his own expense and must be maintained throughout the storage period.

   Material must not be co-mingled with other similar material but must be stored by itself and must be plainly labeled “Property of Common Wealth Development”.

   It must be stored so that it can be readily inspected, measured, and counted at all times by the Engineer.

4. **Bill of Sale:** Request for certification for partial payment for materials stored under the above conditions must be accompanied by a Bill of Sale, properly identifying the material and transferring ownership of the materials to the Owner. The Bill of Sale must be accompanied by an inventory of the stored material together with a description of the storage site by street number and city, or by legal description of the premises.

5. **Insurance:** The Owner shall be notified to cause the builders risk, fire, and extended coverage insurance policy covering this Project to include the materials, stored off site, in the amount and under the same conditions as that provided for material stored on site of the Project. The signing of “Storage Conditions Approved” shall be confirmation that insurance coverage has been provided. Unless specifically exempted by the Owner, the Contractor shall furnish insurance against loss by theft or vandalism, and the Owner shall be named the beneficiary under the policy, as trustee for all concerned. A Certificate of Insurance must be provided the Engineer prior to his approval of this Agreement.
6. **Responsibility:** The Contractor agrees that in accepting partial payments for the stored materials he is in no way relieved of responsibility for the safe storage of the material and its safe transportation and installation in the Work, or for furnishing and installing the material in strict accordance with the Drawings and Specifications.

The Contractor also agrees that acceptance by the Owner of a Bill of Sale for the material does not imply acceptance of the material, which shall be subject to final acceptance or rejection up to the time the Contractor’s work is completed and finally accepted.

The Contractor also agrees that the usual guarantee covering his work under the Drawings, Specifications and Contract, are in no way impaired as a result of the partial payment and the acceptance of the Bill of Sale.

The Owner accepts no responsibility in connection with the material.

7. **Acceptance:** The Contractor shall indicate his acceptance of the above conditions by signing and returning one copy of this Storage Agreement.

ACCEPTED: ____________________________________________

Signature

Date ____________________________ Contractor

STORAGE CONDITIONS APPROVED:

Date ____________________________ Engineer

Material Stored: ____________________________________________

Storage Site: ____________________________________________

---END OF SECTION---

00600-2
The “General Conditions of the Contract for Construction” as prepared by the American Institute of Architects (AIA) No. A201-2007 Edition, hereinafter referred to as the “General Conditions are hereby made part of the Contract Documents.

The General Conditions may be examined at the offices of the Owner and/or Engineer.

SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the “General Conditions of the Contract for Construction” as prepared by the AIA, No. A201-2007 Edition. Where any article of the General Conditions is amended, or any paragraph, subparagraph, or clause thereof is amended or deleted by these Supplementary Conditions, the unamended and undeleted provisions of that article, paragraph, subparagraph or clause shall remain in full force and effect.

ARTICLE 1 - GENERAL PROVISIONS

Add the following Basic Definitions:

1.1.8 PROVIDE

As used in connection with labor, materials, and equipment shall mean to furnish and install complete, including connections to utilities or service, complete anchorage and suspension, fastening or anchor devices, trim, finish and other related work, unless specifically specified otherwise.

1.1.9 APPROVED, SATISFACTORY, EQUAL TO, PROPER, AS DIRECTED AND SIMILAR TERMS

These shall mean the decision rests with the Engineer, whose decision shall be final and binding upon the Contractor and Subcontractor.

1.1.10 NOTICE TO PROCEED

This shall mean verbal or written notice by the Engineer or Owner to the Contractor to commence Work of the Contract, issued either before or after execution of the Contract. If verbally given, and the Contractor requests, the Notice shall be confirmed in writing. In issuing the Notice, stipulations may be included as to time and other requirements that may condition commencement of the Work.

ARTICLE 3 - CONTRACTOR

Add the following Paragraph 3.19:
3.19 MATERIAL SAFETY DATA SHEETS (MSDS)

3.19.1 The Contractor shall submit “Material Safety Data Sheets”, OSHA Form OSHA-20, for any item(s) provided during the performance of the Work which may have toxic, hazardous, or infectious substances as defined by the Federal Occupational, Safety and Health Standards entitled “Subpart Z - Toxic and Hazardous Substances, Section 1910.1000.” Material Safety Data sheets shall be submitted to the Owner.

ARTICLE 4 - ADMINISTRATION OF THE CONTRACT

4.3 CLAIMS AND DISPUTES

Add the following Subparagraph 4.3.6.1:

4.3.6.1 Information and data relating to underground facilities shown or indicated in the Contract Documents at or contiguous to the site is based on information and data furnished to the Owner or Engineer by owners of such Underground Facilities or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1 Owner or Engineer shall not be responsible for the accuracy or completeness of any such information or data; and,

2 Contractors shall have full responsibility for reviewing and checking all such information and data, for locating all Underground Facilities shown or indicated in the Contract Documents, for coordination of the Work with the owners of such Underground Facilities during construction, for the safety and protection thereof as provided in Paragraph 10.2 and repairing any damage thereto resulting from the Work, the cost of all of which will be considered as having been included in the Contract Sum.

ARTICLE 9 - PAYMENTS AND COMPLETION

9.3 APPLICATIONS FOR PAYMENT

Add the following Subparagraph 9.3.3.1

9.3.3.1 Contractor shall furnish approved Waiver of Lien with each invoice. All Waivers of Lien shall contain the proper information and shall be signed by an officer who is duly authorized to sign such Waivers of Lien.

9.3.3.2 Contractor shall pay employees weekly, provide a Monthly MEUR report to owner and at project completion submit a certified payroll report.

9.3.3.3 The Owner shall retain five (5) percent of each progress and final payment until final completion and all Guarantees are in the Owner’s possession.
ARTICLE 10 - PROTECTION OF PERSONS AND PROPERTY

10.1 - SAFETY PRECAUTIONS AND PROGRAMS

Delete entire Subparagraphs 10.1.2, 10.1.3 and 10.1.4 and substitute the following:

10.1.2 Termination used in this Subsection shall be as defined in Federal Register 40 CFR Part 763, Subpart E - Asbestos-Containing Materials in Schools.

10.1.2.1 Contractor shall contact the Owner and Engineer if asbestos containing building materials (ACBM) or suspected ACBM are uncovered or encountered during the performance of the Work. (Note: This does not pertain to asbestos-containing roofing materials [ACRM] which shall be the responsibility of the Contractor to conform to DHSS 159 regulations.) The Contractor shall not disturb ACBM or suspect ACBM and Work in the area shall be suspended, if necessary to prevent release of asbestos fibers. The Owner shall authorize the Work to proceed following removal of ACBM or bulk sampling to confirm suspected ACBM does not contain asbestos.

10.1.2.2 Asbestos management plans are available in the Administrative Office at each building and Building Services that identifies the locations of asbestos-containing materials. The Contractor, his Subcontractors, and agents shall not disturb friable ACBM nor make non-friable ACBM friable in the course of the Work unless specified herein. Unless it is otherwise expressly provided in the Contract Documents:

.1 The Owner shall arrange and pay for all costs associated with the bulk sampling of ACBM and suspect ACBM.

.2 The Owner shall arrange and pay for all costs associated with removal of ACBM and air monitoring.

.3 The Contractor shall be required to review the site with the Owner prior to start of Work for ACBM or suspect ACBM as it relates to the Work.

.4 The Contractor shall indemnify and hold harmless the Owner and its Consultants against claims, damages, losses and expenses resulting from the willful or negligent damage of asbestos-containing material during the performance of the Work.

ARTICLE 11 - INSURANCE AND BONDS

11.1 - Contractor’s Liability Insurance

Delete entire Subparagraph 11.1.2 and substitute in its place the following:

11.1.2 The insurance required by Subparagraph 11.1.1 shall be written for not less than limits of liability specified as follows, or required by Laws and/or Regulations, whichever is greater.
.1 Worker’s Compensations, etc., under Subparagraph 11.1.1 of the General Conditions:

(1) State Statutory
(2) Applicable Federal (e.g. Longshoreman’s) Statutory
(3) Employer’s Liability $100,000

.2 Comprehensive General Liability Under Sections of the General Conditions:

(1) Bodily Injury (including completed operations and products liability):

$ 500,000 Each Occurrence
$1,000,000 Annual Aggregate

(2) Property Damage:

$ 500,000 Each Occurrence
$1,000,000 Annual Aggregate

or a combined single limit of $500,000

Property Damage Liability Insurance shall provide explosion, collapse and underground coverages where applicable.

.3 Comprehensive Automobile Liability:

(Owned, Non-Owned and Hired Car)

(1) Bodily Injury:

$ 500,000 Each Person
$1,000,000 Each Occurrence

(2) Property Damage:

$ 500,000 Each Occurrence

or a combined single limit of $500,000

.4 Contractual Liability Coverage:

The Contractual Liability required by the General Conditions shall provide coverage for not less than the following amounts:

$1,000,000 Each Occurrence
Add the following Clauses 11.1.2.1 through 11.1.2.3:

11.1.2.1 The types of insurance and the limits of liability indicated above are the minimum required and neither the Owner nor the Engineer warrants the adequacy of the types of insurance or the limits of liability.

11.1.2.2 The Contractor shall require Subcontractor not protected under Contractor’s insurance to take out and maintain Worker’s Compensation Insurance and insurance of the same kind and in amounts that the Contractor considers appropriate as specified above. The Contractor shall submit evidence of such insurance coverage to Owner.

11.1.2.3 The Contractor shall carry sufficient comprehensive insurance of his equipment at site of Work and on route to and from site to fully protect him. The Contractor shall require same coverage of his Subcontractors. It is expressly understood and agreed that the Owner and/or Engineer shall have no responsibility therefore.

ARTICLE 12 - UNCOVERING AND CORRECTION OF WORK

12.2 - CORRECTION OF WORK

Add the following Subparagraph 12.2.7:

12.2.7 Negligence: Neither the final payment nor any provision in the Contract Documents shall relieve the Contractor of the responsibility for negligence or faulty materials or workmanship within the extent and period provided by the Law.

ARTICLE 13 - MISCELLANEOUS PROVISIONS

Add the following Paragraph 13.8:

1381 Terminology used in this Subsection shall be as defined in Federal Register 40 CFR Part 763, Subpart E - Asbestos-Containing Materials in Schools.

1382 Use of asbestos-containing materials as part of the Work is expressly prohibited. The Contractor shall notify the Engineer, in writing, as to conflicts with this subparagraph and the Specifications so that substitute materials can be investigated, and a directive can be issued per Article 7 of the General Conditions. In case of conflict, this subparagraph shall govern.

1383 The Contractor shall submit Material Safety Data Sheets (MSDS) per Paragraph 3.19 for all suspect products utilized as part of the Work.

--- END OF SECTION ---
PART 1 – GENERAL

1.1 REQUIREMENTS INCLUDED

INDEX

1. General 17. Fence
2. Special Site Conditions 18. Roadway
3. Inspection of Surfaces 19. Toilets
4. Hazardous Substances 20. Telephones
7. Project Meetings 23. Cold Weather Protection
9. Manufacturer’s Directions 25. Watchmen
11. Layout 27. Storage of Materials
12. Supervision 28. Protection of Finished Construction
13. Field Offices 29. Protection in General
14. Stairs and Scaffolds 30. Cleaning
16. Signs 32. Normal Working Hours
17. Tobacco/Alcohol Use Prohibited

1. GENERAL

A. All articles in these General Requirements are applicable to all Divisions and Sections of the Work included herein. The Conditions of the Contract, General and Supplementary General Conditions, and these General Requirements shall apply with equal force and effect to the Contractor and Subcontractors engaged in this Work.

B. Sequence of operations or place of commencement may be determined by the Engineer as deemed to best serve the needs and convenience of the Owner, or as necessity of occasion requires.

C. Contractor or the Contractor’s authorized representative must be present to accept delivery of all equipment and material shipments. The Owner’s employees will not knowingly accept, unload or store anything delivered to the site for the Contractor’s use. Inadvertent acceptance of delivered items by any representative of the Owner shall not constitute acceptance or responsibility for any of the materials or equipment. It shall be the Contractor’s responsibility to assume all liability for any equipment or material delivered to the job site.
2. SPECIAL SITE CONDITIONS

A. Confine all operations, equipment, apparatus, and storage of materials to the immediate area of work to the greatest possible extent. Contractor shall ascertain, observe, and comply with all rules and regulations in effect on the Project site, including, but not limited to parking and traffic regulations, use of walks, security restrictions and hours of allowable ingress and egress.

B. Contractor shall become acquainted with the location of underground service, utilities, structures, etc., which may be encountered or be affected by the Contractor’s work, and shall be responsible for any damage caused by neglect to provide proper precautions or protection.

C. Existing pipes, electrical work, and all other utilities encountered, which may interfere with new Work, shall be rerouted, capped, cut off, or replaced by the trades having jurisdiction.

D. Information pertaining to existing conditions that appear on the Drawings is based on available records. While such data has been collected with reasonable care, there is no expressed or implied guarantee that conditions so indicated are entirely representative of those actually existing or that unlooked for developments may not occur. They are merely provided to assist the Contractor in the investigation of conditions.

E. The Contractor shall coordinate with the Maintenance Department to arrange for parking areas for construction purposes. The Contractor shall only use the designated areas for parking and shall not interfere with other parking areas or traffic patterns.

3. INSPECTION OF SURFACES

A. Contractor shall obtain complete data at the site and inspect surfaces that are to receive the Work before proceeding with fabricating, assembling, fitting, or erecting his work.

B. The Contractor shall notify the Engineer in writing in case of discrepancies between existing Work and the Drawings, and defects in such surfaces that are to receive the Contractor’s work. The Engineer will direct such work or surfaces to be remedied.

C. Starting of the Work implies acceptance of the work of others. Removal and replacement of work applied to defective surfaces, in order to correct defects, shall be done at the expense of the Contractor who applied work to defective surfaces.

4. HAZARDOUS SUBSTANCES

A. Contractor’s attention is directed to the Occupational Safety and Health Administration (OSHA) regulations. This has been incorporated into the Wisconsin Administrative (Building) Code. Compliance with all possible applicable provisions is the Contractor’s responsibility.
B. Contractor shall perform all Work in accordance with State of Wisconsin Department of Health and Social Services, HSS 159.

5. SOIL TEST BORINGS

A. Soil test borings are not relevant to this Project.

6. MUTUAL RESPONSIBILITY

A. The Contractor shall coordinate the Work with adjacent work and shall cooperate with all other trades so as to facilitate the general progress of the Work. Each trade shall afford all other trades every reasonable opportunity for the installation of their work and for the storage of their material. In no case will any Contractor be permitted to exclude from the premises or Work, any other Contractor or employees thereof, or interfere with any Contractor in the executing and installation for the Work.

B. Each trade shall perform its work in proper sequence in relation to that of other trades and as approved by the Engineer. Any cost caused by defective or ill-timed work shall be borne by the trade responsible therefore.

C. The Contractor shall arrange the Work and dispose of materials so as not to interfere with the Work or storage of materials of others and each shall join their work to that of others in accordance with the intent of the Drawings and Specifications.

D. All trades shall work in cooperation with the Contractor and with each other and fit their work into the structure as job conditions may demand. All final decisions as to right-of-way and run of pipes and ducts, etc. shall be made by the Engineer or an authorized representative at prearranged meetings with responsible representatives of the trades involved.

E. It shall be the responsibility of the Contractor to keep constant check on the progress of the Work so that each particular trade can insure proper preparation for installation of that trade’s work and not cause delay in the progress of the Work. It shall further be the responsibility of the Contractor to periodically make inspections of Work in progress and to notify the Engineer when the Work is complete in compliance with the Specifications and Drawings.

7. PROJECT MEETINGS

A. Project meetings will be held at the time designated by the Engineer. Contractor, when requested, shall attend project meetings. If the Principal of the firm does not attend meetings, a responsible representative of the Contractor who can bind the Contractor to a decision at the meetings shall attend.

B. The Engineer, or a representative thereof, will write a report covering all items discussed and decisions reached, and distribute copies of the report to all parties involved.
8. CUTTING AND PATCHING

A. The Contractor shall do all cutting or fitting of the Work as required to make its several parts fit together, or to receive the work of others, as shown or reasonably implied by the Specifications or Drawings, or as may be directed by the Engineer. Holes cut in exterior walls shall be waterproofed.

B. The Contractor who cuts shall also be responsible for patching. Where cutting and patching is required, the Contractor shall hire individuals skilled in such work to do cutting and patching.

C. Contractor shall not endanger any portion of the Work by cutting, digging, or otherwise and shall not cut or alter the work of others without their consent.

D. Wherever any material, finish, or equipment is damaged, the trade skilled in that particular work shall accomplish the repair or replacement and the cost shall be charged to the party responsible for the damage.

9. MANUFACTURER’S DIRECTIONS

A. The Contractor shall apply, install, connect, erect, use, clean, and condition manufactured articles, materials, and equipment as recommended by the Manufacturer, unless specified to the contrary.

B. Manufacturer’s specifications, recommendations, instructions or other data referenced shall be construed as data contained in the Manufacturer’s printed publications current as of the Bid date, except when a specific date is specified.

C. For products or execution requirements specified by reference to Manufacturer’s data, comply with the requirements therein, except when more rigid requirements are specified or are required by applicable codes.

10. REFERENCES

A. For products or execution requirements specified by association or trade standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable code.

B. The date of the standard is that in effect as of the Bid date, except when a specific date is specified.

C. In the event of conflicting requirements between referenced standards and the Contract Documents, the Contract Documents shall govern.
11. LAYOUT

A. The Contractor shall immediately upon entering the site for the purpose of beginning the Work, locate general reference points and take such action as is necessary to prevent their destruction. The Contractor shall layout the Work and is responsible for all lines, elevations, and measurements of the building and other work executed by the Contractor under the Contract. The Contractor must exercise proper precaution to verify figures on the Drawings before laying out the Work and will be held responsible for any error resulting from failure to exercise such precaution.

B. The Contractor shall verify grades, lines, levels, locations, and dimensions as shown on the Drawings and report any errors or inconsistencies to the Engineer before commencing the Work. Starting of the Work by the Contractor shall imply acceptance of existing conditions.

12. SUPERVISION

A. The Contractor shall take complete charge of the Work under his Contract and coordinate the Work of all trades on the Project.

13. FIELD OFFICES

A. Field offices will not be required for this Project.

14. STAIRS AND SCAFFOLDS

A. The Contractor shall furnish and maintain equipment such as temporary stairs, fixed ladders, ramps, chutes, runways, and the like as required for proper execution of Work by all trades.

15. HOISTS

A. The Contractor shall provide and maintain at least one material elevator or hoist, if necessary. It shall be built in accordance with State code requirements. The Contractor shall remove the material hoist(s) at such time as construction dictates.

B. Hoists shall not interfere with or affect construction and shall be located at a proper distance from exterior walls. Protection shall be provided to prevent damage, staining, and marring of permanent work.

C. No material hoist may be used to transport personnel unless it meets code requirements for personnel hoists.

16. SIGNS

A. No job signs are required.
17. FENCE

   A. No temporary fence(s) are required, except as necessary to meet applicable safety requirements.

18. ROADWAY

   A. Temporary roadway(s) are not necessary for this Project.

19. TOILETS

   A. The Contractor shall provide toilet facilities for Contractor’s use. Toilets used by workmen shall be kept clean and sanitary at all times.

20. TELEPHONE

   A. No separate project telephone is required. The Contractor shall make own arrangements for receiving telephone messages. Party making same shall pay cost of all telephone calls.

21. WATER SUPPLY

   A. Water for construction purposes is available through existing facilities, free of charge, at the site during normal working hours. The Contractor shall make arrangements with the Owner for the use of nearby facilities and shall comply with such requirements and restrictions for its use as may be prescribed. The Contractor shall provide all extensions from existing sources to Project Work area(s) as required to carry out the Work.

22. ELECTRICAL POWER

   A. Electric power for construction purposes (lighting, hand tools, etc.) is available from existing facilities free of charge at the site during normal working hours. The Contractor shall make arrangements with the Owner for use of such facilities and shall comply with such requirements and restrictions for their use as may be prescribed. The Contractor shall provide all extensions from existing sources to Project Work area(s) as required to carry out the Work. The Contractor, at the Contractor’s expense, shall arrange for any services in excess of those available at the site.

23. COLD WEATHER PROTECTION

   A. All heating and protective covering, required to protect the Work from injury due to freezing and moisture during the construction period and prior to enclosure of the building, shall be classed as COLD WEATHER PROTECTION. Such protection shall be provided and paid for by the Contractor for the Work up to the time the building is enclosed.
B. Heat required to protect materials from injury due to freezing during the construction period and prior to enclosure, shall be provided by means of portable heating units intended for this purpose.

C. All heating units must be approved types. Proper ventilation must be provided. The use of temporary units whose product of combustion will damage fresh concrete, mortar, or other building materials, will not be allowed. Use of coke or oil salamanders is prohibited.

D. If electrical power is required for portable heating units, it may be taken from the available temporary power source and paid for by the Contractor.

24. FIRE PROTECTION

A. The Contractor shall provide and maintain in working order during the entire construction period fire extinguishers as required. Extinguishers shall be non-freeze type such as A-B-C rated dry chemical of not less than 10-pound capacity each. In addition, any Contractor who maintains an enclosed shed on the site shall provide and maintain in an accessible location, one or more similar non-freezing type fire extinguishers in each enclosed shed.

25. WATCHMEN

A. Watchmen shall not be provided by the Owner. The Contractor will be held responsible for loss or injury to persons or property where the Contractor’s work is involved and shall provide such watchmen and take such precautionary measures as may be deemed necessary to protect the Contractor’s interests.

26. DELIVERY OF MATERIALS

A. The Contractor shall give written notice to Engineer of delivery date required for each product, in accordance with the construction schedule.

B. The Contractor shall receive and unload products at the Project site. The Contractor shall inspect products upon delivery to the Project site and record shortages, damaged or defective items on all copies of the delivery receipt.

C. Copies of all delivery receipts shall be retained and promptly filed for future inspection by the Engineer.

D. Handling of all products at the Project site, including uncrating and storage, shall be the responsibility of the Contractor.

E. The Contractor shall be fully responsible for damaged or defective items received and for missing items unless recorded on the delivery receipt as prescribed herein.
27. STORAGE OF MATERIALS

A. The Contractor shall confine equipment, apparatus, storage of materials, and operations to limits indicated by directions of the Engineer and shall not bring material onto the site until they are needed for the progress of the Work.

B. The storage of materials on the grounds and within the building shall be in strict accordance with the instructions of the Owner. Storage of materials within the building shall at no time exceed the design carrying capacity of the structural system.

C. All materials affected by moisture shall be stored on platforms and protected from the weather.

D. Should it be necessary at any time to move material shed or storage platforms, the Contractor shall move same at the Contractor’s expense, when directed by the Engineer.

E. The Owner assumes no responsibility for materials stored in the building or on the site. The Contractor assumes full responsibility for damage due to the storing of materials.

F. An agreement may be executed for the storage of materials not stored at the site of the Work but required for the Project. The Owner outlines this special procedure for obtaining payment for these materials in the “Storage Agreement”. (See Section 00600 of the Specifications.)

G. Repairing of areas used for placing of sheds, offices, and for storage of materials shall be done by the Contractor.

28. PROTECTION OF FINISHED CONSTRUCTION

A. The Contractor shall assume the responsibility for the protection of all finished construction under the Contract and shall repair and restore any and all damage to finished Work to its original state.

B. Wheeling of any loads over any type of floor or finished roof rehabilitation work, either with or without plank protection, will be permitted only in rubber-tired wheelbarrows, buggies, trucks or dollies.

C. Where structural concrete is the finished surface, care must be taken to avoid marking or damaging those surfaces.

29. PROTECTION IN GENERAL

A. All structures and equipment shall be constructed, installed, and operated with guards, controls and other devices in conformance with the Wisconsin Administrative Code, Chapter IND. 1, Safety.

B. The Contractor shall:
1. Provide, erect, and maintain all required planking, barricades, guard rails, temporary walkways, etc. of sufficient size and strength necessary to protect stored materials and equipment; paved surfaces, walks, curbs, gutters and drives; streets adjacent to or within the Project area; adjoining property and the building as well as to prevent accidents to the public and the workmen on the job site.

2. Notify owners of corporate or private property if their property interferes with the Work so that arrangements for proper protection can be made.

3. Provide protection against rain, snow, wind, ice, storms or heat so as to maintain all Work, materials, apparatus, and fixtures, incorporated in the Work or stored on the site, free from injury or damage. At the end of the day’s work, cover all new Work likely to be damaged. Remove snow and ice as necessary for safety and proper execution of the Work.

4. Damaged property shall be repaired or replaced in order to return it to its original condition.

5. Protect materials, work and equipment not normally covered by above protection, until construction proceeds to a point where the general building protection of the area where located, dispenses with the necessity therefore.

6. Take any and all necessary precautions to protect the Owner’s property as well as adjacent property, including trees, shrubs, buildings, sanitary and storm sewers, water piping, gas piping, electrical conduit or cable, etc., from any and all damage which may result due to work on this Project.

7. Repair work outside of property line in accordance with the requirements of the authority having jurisdiction.

8. Repair any work, damaged by failure to provide proper and adequate protection, to its original state to the satisfaction of the Owner or remove and replace with new work at the Contractor’s expense.

30. CLEANING

A. The Contractor shall be responsible for all cleaning required within the technical sections of the Specifications governing Work under the Contractor’s jurisdiction as well as for keeping all work areas, passageways, ramps, stairs, and all other areas of the premises free of rubbish, debris and scrap which may be caused by the Contractor’s operations or that of the Subcontractors.

1. Remove rubbish, debris, and scrap promptly upon its accumulation and in no event later than the end of each week.

2. Combustible waste shall be removed immediately or stored in fire resistive containers until disposed of in an approved manner.
3. No burning of rubbish or debris will be allowed at the site. Rubbish, debris and scrap shall not be thrown through any window or other opening or dropped from any great height; it shall be conducted to the ground to waiting truck(s) or removable container(s) by means of approved chutes or other means of controlled conveyance.

4. Scrap lumber shall be removed from the premises.

5. Spillages of oil, grease or other liquids, which could cause a slippery or otherwise hazardous situation or stain a finished surface, shall be cleaned up immediately.

B. Broken, scratched or otherwise damaged glass shall be replaced by the Contractor.

C. In addition to the above, the Contractor shall be responsible for the general “broom” cleaning of the premises and for expediting all of the cleaning, washing, waxing and polishing required within the technical sections of the Specifications governing Work under this Contract. The Contractor shall also perform “final” cleaning of all exposed surfaces to remove all foreign matter, spots, soil, construction dust, etc. so as to put the Project in a complete and finished condition ready for acceptance and use intended.

D. If rubbish and debris is not removed, or surfaces cleaned as specified above, the Owner reserves the right to have said work done by others and the related cost(s) will be deducted from the monies due the Contractor.

31. GUARANTEE DOCUMENTS

A. Upon “Substantial Completion” of the Project, Contractor shall submit such written guarantees to the Engineer for presentation to the Owner. Furnish guarantees in triplicate unless otherwise indicated.

32. NORMAL WORKING HOURS

A. Building hours of operation are as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Weekdays</td>
<td>7:00 A.M. - 4:30 P.M.</td>
</tr>
<tr>
<td>Weekends</td>
<td>Closed</td>
</tr>
</tbody>
</table>

B. Access to buildings will be limited to normal working hours. The Owner and Engineer shall approve work performed outside normal working hours in advance. No access to buildings beyond normal working hours will be allowed.

33. TOBACCO/ALCOHOL USE PROHIBITED

A. Tobacco use on the property shall be prohibited.

B. Alcohol use on the property shall be prohibited.

--- END OF SECTION ---
PART 1 -- GENERAL

1.01 References

A. The standards and Manufacturers’ association requirements issued by the following agencies are considered a part of these Specifications. Should conflict occur between Project Specifications and references, Project Specifications shall govern. Referenced material and modifications to each are indicated in each section they apply to. The following is a list of these organizations:

Abbreviations and Names: The following acronyms or abbreviations as referenced in the Contract Documents are defined to mean the associated names. Both names and address are subject to change and are believed to be, but are not assured to be, accurate and up-to-date as the date of the Contract Documents.

AA          Aluminum Association
            818 Connecticut Avenue, NW
            Washington, DC 10006
            (202) 862-5100

AAMA        Architectural Aluminum Manufacturers Association
            35 E. Wacker Drive
            Chicago, IL 60601
            (312) 782-8256

ACI          American Concrete Institute
            Box 19150 Redford Station
            Detroit, MI 48219
            (313) 532-2600

ACIL        American Council of Independent Laboratories
            1725 K Street NW
            Washington, D.C. 20006
            (202) 659-3766

AIA          American Institute of Architects
            1735 New York Avenue, NW
            Washington, D.C. 20006
            (202) 626-7474

AITC        American Institute of Timber Construction
            33 W. Hampden Avenue
            Englewood, CO 80110
            (303) 761-3212
DIVISION 1 - GENERAL REQUIREMENTS
SECTION 01090 - REFERENCES

FS  Federal Specification (General Services Admin.)
    Building 179
    Washington Navy Yard, SE
    Washington, D.C.  10407

MCAA  Mechanical Contractors Association of America
      5530 Wisconsin Avenue
      Washington, D.C.  20015
      (202) 654-7960

MIL  Military Standardization Documents (U.S. Dept. of Defense)
     Naval Publications and Forms Center
     5801 Tabor Avenue
     Philadelphia, PA  19120

MRCA  Midwest Roofing Contractors Association
      4840 West 15th Street, Suite 1000
      Lawrence, KS   66049
      (913) 843-4888

NAAMM  The National Association of Architectural Metal Manufacturers
       21 N. LaSalle Street
       Chicago, IL  60601
       (312) 346-1600

NCMA  National Concrete Masonry Association
      P. O. Box 781
      Herndon, VA 22070
      (703) 435-4900

NECA  National Electrical Contractors Association
      7315 Wisconsin Avenue
      Washington, D.C.  20014
      (301) 657-3110

NEMA  National Electrical Manufacturers Association
      2102 L Street NW
      Washington, D.C.  20037

NFPA  National Fire Protection Association
      470 Atlantic Avenue
      Boston, MA  02210
      (617) 482-8755

01090-3
NRCA  National Roofing Contractors Association  
O’Hare International Center  
10255 West Higgins Road, Suite 600  
Rosemont, IL  60018-5607  
(708)-299-9070

OSHA  Occupational Safety and Health Administration  
(U.S. Department of Labor)  
Government Printing Office  
Washington, D.C.   20402

PDI  Plumbing and Drainage Institute  
5342 Boulevard Pl.  
Indianapolis, IN  46208  
(317) 251-5298

SDI  Steel Deck Institute  
P. O. Box 3812  
St. Louis, MO  63122  
(314) 965-1741

SJI  Steel Joist Institute  
1703 Parham Road  
Richmond, VA  23229  
(804) 288-3071

SMACNA  Sheet Metal and Air Conditioning Contractors’ National Association  
8224 Old Courthouse Road  
Vienna, VA  22180  
(703) 790-9890

TIMA  Thermal Insulation Manufacturers Association  
7 Kirby Plaza  
Mt. Kisco, NY  10549  
(914) 241-2284

UL  Underwriters Laboratories  
333 Pfingsten Road  
Northbrook, IL  60062  
(312) 272-8800

--- END OF SECTION ---

01090-4
PART 1 -- GENERAL

1.01 DEFINITIONS

A. “Provide” -- Supply materials, products and services as well as furnish labor for installation and completion of items of work mentioned.

B. “Furnish” -- Design, fabricate, purchase and deliver to the job site or other destination (all at Contractor’s expense) as directed by Specification, Owner or Engineer.

C. “Or Approved Equal” clause -- Where use of “or approved equal” clause appears in reference to a given product, material or item of work, no other product, system, material or item of work will be considered for use in the Work or used as a basis for bidding except when submitted and approved in writing by Engineer as required.

D. “Or Equal” clause -- Where use of “or equal” clause appears in reference to a given product, materials or items or work, no other products, system, material or item of work shall be used that is not equal in performance, quality, construction and finish to product system, material or item of work specified.

E. “Debris” -- Rubbish, garbage, empty containers and wrapping and materials that cannot be used in the Work and not to be retained by the Owner.

F. “Owner” – Common Wealth Development

G. “Work” -- Consisting of all labor and operations, transportation, hoisting, materials, tools, equipment, services, inspections, investigations, coordination and supervision required and/or reasonably necessary to produce the construction required by the Contract Documents.

H. Where “as directed”, “as required”, “ordered”, “prescribed”, “approved”, “acceptance” or words of similar nature are used, it shall be understood that such words refer to actions to be taken, in writing, by the Contractor unless otherwise stated. The words, “necessary”, “suitable”, “equal” or words of like import shall mean necessary or equal in the opinion of the Owner and Engineer.

I. “Install or Installation” -- The act of physically placing, applying, setting, erecting, anchoring, securing, etc. construction materials, equipment, furnishings, appliances and similar items specified and furnished at the job site. Installation of specified items shall be complete in all respects and at the Contractor’s expense.

J. “Asbestos” -- The asbestiform varieties of chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonitegrunerite); anthophyllite; tremolite; and actinolite.

K. “Asbestos-Containing Material (ACM)” -- When referring to buildings means any material or product which contains more than one percent asbestos.
L. “Asbestos-Containing Building Material (ACBM)” -- Surfacing asbestos-containing materials (ACM), thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a building.

M. “Asbestos-Containing Roofing Material (ACRM)” -- Roof material composed of asbestos of any type and in an amount greater than 1% by weight, either alone or mixed with other fibrous or nonfibrous materials.

The Contractor is advised to consult the “Glossary” included in the “NRCA Roofing and Waterproofing Manual”.

--- END OF SECTION ---
PART 1 – GENERAL

1.01 REQUIREMENTS

A. A Preconstruction Conference will be held at the site following the award of the Contract prior to the start of the construction. The Preconstruction Conference will be arranged by the Owner and the Engineer.

B. The Contractor will be given a minimum of three (3) days notice by the Owner and the Engineer. The Contractor is required to attend.
PART 1 – GENERAL

1.1 PROCEDURES

A. Hand deliver submittals to the Common Wealth Development Office, located at 1501 Williamson Street, Madison, Wisconsin 53703 or email them to Paul Jasenski at: paul@cwd.org.

B. Identify submittals with Contractor’s name, Project name and date of submittal.

C. Make any corrections to the submittals required by Engineer/Consultant and resubmit until approved. Direct specific attention in writing to revisions on resubmittals other than the corrections requested by the Engineer/Consultant.

1.2 SUBMITTAL SCHEDULE

A. Schedule and make all submittals in an orderly sequence so as to cause no delay in the Work or in the work of other Contractors.

B. Ensure submittals are made far enough in advance of the related Work activity to provide time required for reviews, revisions, resubmittals, approvals, placing orders and securing materials and equipment.

C. A total of three (3) copies of each submittal are required or email information in electronic format to the email address listed above.

D. In scheduling, allow at least ten (10) days for review following receipt of a submittal by the Engineer. Allow five (5) days for review of a resubmittal.

1.3 CONSTRUCTION SCHEDULE

A. Submit work schedule in graph or tabular form for the various phases of the Work including delivery of materials to site, set-up, start-up, tear off (if applicable), recover, phased work (with area designation and key plan), detail reconstructions (if applicable), metal work, etc.

B. Should any activity critical to the full completion date be, in the judgment of the Engineer, behind schedule by seven (7) or more days, the Engineer may direct the Contractor to expedite the Work to regain compliance with the schedule. If so directed, the Contractor shall promptly expedite the Work by whatever means required including but not limited to, increasing the work force, adding additional shifts and working overtime. Such expediting shall be at no additional cost to the Owner. Failure of the Engineer to so direct shall not relieve the Contractor of his responsibility to comply with the construction schedule.

C. Submit documents to claim conflicts with the work schedule due to weather, labor, etc. within ten (10) workings days of said incident(s) for proper evaluation and action by the Engineer.
1.4 SHOP DRAWINGS AND SAMPLES

A. Submit all drawings, diagrams, illustrations, schedules, performance charts, instructions, specifications and other product data illustrating portions of the Work as required by the Specification sections. Such submittals, whether or not referred to as shop drawings, shall comply with the requirements for shop drawings herein prescribed. Unless otherwise noted in the Specification sections, submit a minimum of three (3) sets of shop drawings to the Engineer.

B. Submit all samples of materials, equipment and workmanship as required by the Specification sections.

C. Unless the precise color and pattern is specifically specified in the Specification sections, and whenever a color or pattern is available in a specified product, submit accurate color and pattern charts and samples for review and selection.

D. Review, stamp with approval and submit all shop drawings and samples required by the Specification sections. Shop drawings or samples submitted without the Contractor’s approval stamp will be returned without review.

E. By approving and submitting shop drawings and samples, the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials, catalog numbers and similar data and that he has checked and coordinated each shop drawing and sample with the requirements of the Work and of the Contract Documents.

F. Shop drawings and samples will be reviewed and approved by the Owner and/or Engineer/Consultant to determine in general if they are in compliance with the Contract Documents. Such approval shall not relieve the Contractor of responsibility for any deviations from the requirements of the Contract Documents or from the responsibility for errors or omissions in the shop drawings or samples.

G. Do not commence any portion of the Work requiring a shop drawings or sample submittal until the submittal has been approved as prescribed herein. All such portions of the Work shall be in accordance with approved shop drawings or samples.

1.5 MATERIAL SAFETY DATA SHEETS

A. Submit “Material Safety Data Sheets” per Supplementary Conditions, Section 3.19.1.

1.6 CERTIFICATES OF COMPLIANCE

A. Submit in duplicate, certificates of compliance for each product specified, prior to installation of applicable product.
B. Certificates of compliance shall include certified laboratory test reports, manufacturer’s certificates or other evidence sufficient to verify compliance with the products specified.

C. Submit all warranties, guarantees, manuals, etc. as described more fully in subsequent sections.

1.7 WAIVER OF LIEN

A. Submit for approval, duplicate sample of executed Waiver of Lien to be used with each invoice.

B. Submit letter listing persons approved to sign Waiver of Lien.

--- END OF SECTION ---
PART 1 – GENERAL

1.1 QUALITY OF WORK

A. Perform all Work in the most workmanlike manner and according to the best standard practices. All Work shall be free from faults and defects in workmanship.

B. Contractor shall be solely responsible for quality control of the Work and shall maintain quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.

C. Required testing and inspection are intended to assist in determination of probable compliances of the Work with the Contract Documents, but do not relieve the Contractor of responsibility for those compliances. Specified testing and inspection are not intended to limit the Contractor’s quality control program.

1.2 TESTING AND INSPECTION

A. Testing and inspection, where required by the Specification sections, shall comply with the specific requirements of the applicable Specification section and general requirements contained herein.

B. All testing and inspection whether required by the Specification sections or by laws, ordinances, rules, regulations, codes or orders of any public authority having jurisdiction or whether performed by the Contractor for quality control shall be at the Contractor’s expense unless otherwise indicated in the Contract Documents.

C. Fully cooperate and coordinate with the personnel of any testing agency whether performing testing or inspection required by the Contract Documents or any public authority having jurisdiction or performing special testing and inspection required by the Engineer and regardless of whether the testing and inspection has been arranged for by the Contractor, Engineer or a public authority having jurisdiction. Testing agency personnel shall have access to the Work at all time for the performance of such testing and inspection and the Contractor shall provide facilities for access in order that the testing agency may properly perform its function.

1.3 TESTING LABORATORY SERVICES

A. Where the Specification sections require testing or inspection by a testing laboratory, engage a reputable, independent testing laboratory specializing in the required services unless the testing or inspection is indicated as furnished by the Owner. Testing laboratory shall be approved by the Engineer.

B. Specimens and samples for testing or inspection shall be taken by the testing laboratory.
C. Submit written reports of results of such testing or inspection, in duplicate, to the Engineer within three (3) days after completion of the testing or inspection. Reports shall clearly indicate compliance or non-compliance with specified standards and with the Contract Documents.

D. Secure required certificates of testing, inspection or approval and promptly deliver to the Engineer.

E. Give the Engineer timely notice of the Work ready to be tested or inspected.

   1. Unless the testing or inspection is indicated as furnished by the Owner, give the Engineer timely notice of the date and time arranged so the Engineer may observe the testing or inspection.

   2. If the testing or inspection is indicated as furnished by the Owner, the Engineer will arrange for a testing laboratory to perform the required services.

F. If testing or inspection is indicated as furnished by the Owner, the Owner will engage an independent testing laboratory to perform the required services at the Owner’s expense. Any testing or inspection furnished by the Owner shall not constitute acceptance of the Work tested or inspected and shall not relieve the Contractor of his responsibility to comply with the Contract Documents. Written reports of results of testing or inspections furnished by the Owner will be made available to the Contractor upon written request.

1.4 SPECIAL TESTING AND INSPECTION

A. In addition to testing and inspection required by the Contract Documents, the Engineer may require special testing and inspection as provided in the General Conditions. The Engineer may instruct the Contractor to arrange for such special testing and inspection or may arrange for the special testing and inspection directly. If the Work so tested or inspected is found to be in compliance with the Contract Documents, the cost of testing or inspection shall, by appropriate Change Order, be charged to the Owner. If the Work is found not to be in compliance, the Contractor shall pay such costs.

1.5 REPLACEMENT AND CORRECTION

A. Promptly replace or correct all Work found not to be in compliance with the requirements of the Contract Documents and the requirements of any public authority having jurisdiction so as not to delay the Work or the work of other Contractors regardless of how such failure to comply may be revealed. Replacement and correction shall be expedited as required to maintain interim Contract completion dates and the full completion date.

B. The Engineer may require additional testing or inspection of Work previously found not to be in compliance until such Work has been properly replaced or corrected. Such additional testing or inspection shall be at the Contractor's expense.

--- END OF SECTION ---
PART 1 -- GENERAL

1.1 PRODUCT LIST

A. Within seven (7) calendar days after award of Contract, submit to Engineer three (3) copies of complete list of major products which are proposed for installation.

B. Tabulate products by Specification section number and title.

C. For products specified only by reference standards, list for each sub products:
   1. Name and address of Manufacturer.
   2. Trade name.
   3. Model or catalog designation.
   4. Manufacturer’s data:
      a. Referenced standards
      b. Performance test data.

1.2 CONTRACTOR’S OPTION

A. For products specified only by reference standards, select products meeting those standards by any manufacturer.

B. For products specified by naming several products or manufacturers, select any one of the products and manufacturers named which complies with the product specifications.

C. For products specified by naming one or more products or manufacturers and stating “or equal”, submit a request as for substitutions, for any product or manufacturer which is not specifically named.

D. For products specified by naming only one product and manufacturer, there is no option and no substitution allowed.

1.3 SUBSTITUTIONS

A. Within a period of seven (7) calendar days after award of Contract, the Engineer will consider formal requests from the Contractor for substitution of products in place of those specified.

   1. After the end of that period, requests will be considered only in the case of product unavailability or other conditions beyond the control of the Contractor.

B. Submit separate request for each substitution. Support each request with:

   1. Complete data substantiating compliance of proposed substitution with requirements stated in Specifications.
a. Product identification including manufacturer’s name and address.

b. Manufacturer’s literature - identify:
   1. Product description.
   2. Reference standards.
   3. Performance and test data.

c. Samples where applicable.

d. Name and address of similar projects on which the product has been used and date of each installation.

2. Itemized comparison of the proposed substitutions with product specified. List all significant variations.

3. Data relating to changes in the construction schedule.

4. List of changes required in other work or products.

5. Accurate cost data comparing proposed substitution with products specified.

6. Designation of required license fees or royalties if applicable.

7. Designation of availability of maintenance services and sources or replacement materials.

C. Substitutions will not be considered for acceptance when:

1. They are indicated or implied on shop drawings or product data submittals without a formal request from the Contractor.

2. They are requested directly by Subcontractor or Supplier.

3. Acceptance will require substantial revision to the Contract Documents.

D. Substitute products shall not be ordered or installed without written acceptance from the Owner or Engineer.

E. The Engineer will determine acceptability of proposed substitutions.

1.4 APPROVED EQUAL PRODUCT OPTION

A. Within a period of three (3) calendar days prior to the Bid Due Date, the Engineer will consider formal requests from the Contractor for “approved equal” substitutions.
B. Each request for Engineer approval consideration shall be prepared and submitted as set forth in Subsection 1.03 -- Substitutions.

1.5 CONTRACTOR’S REPRESENTATION

A. In making form requests for substitution or approved equals, the Contractor represents that:

1. He has investigated the proposed product and he has determined that it is equal to or superior in all respects to that specified.

2. He will provide same warranties or bonds for substitution as for product specified.

3. He will coordinate installation of accepted substitution into the Work and will make such changes as may be required for the Work to be complete in all respects.

4. He waives all claims for additional costs caused by the substitution which may subsequently become apparent.

5. Cost data is complete and includes related costs under his Contract but not:

   a. Costs under separate Contracts.

   b. Engineer’s costs for redesign or revision of Contract Documents.

1.6 ENGINEER’S DUTIES

A. Review Contractor’s requests for substitutions with reasonable promptness. Notify the Contractor in writing of decision to accept or reject requested substitutions.
PART 1 – GENERAL

1.1 CLOSEOUT PROCEDURES

A. Comply with the procedures stated in the General Conditions for “Issuance of Certificate of Substantial Completion”. When the Contractor considers the Work has reached Substantial Completion, submit written certification that the Contract Documents have been reviewed, Work has been inspected, and that the Work was completed in accordance with the Contract Documents and ready for the Engineer’s observation.

1.2 CLEANING

A. Prior to a final inspection and acceptance of the Work, remove all debris, rubbish, waste material, tools, construction equipment, machinery, and surplus materials from the Project site and thoroughly clean the building of all roofing stains, marks, spills, or coatings. Remove all dirt, dust, marks, smears, spots, grease, and stains from all floors, walls, ceilings, steel, piping, interior fixtures, equipment, hardware, and all finish surfaces.

1.3 LANDSCAPING

A. Fence off around existing trees to drip line. Till areas disturbed by construction and leave areas in a seed and straw condition, acceptable to the Engineer. Any landscape damage to the area, including sidewalk and shrubbery, shall be replaced by the Contractor.

1.4 GUARANTEE AND MAINTENANCE MANUALS

A. Prepare two (2) complete sets of manuals containing the Manufacturer’s roof guarantees and instructions for maintenance of roofing and flashing.

B. Manuals shall be bound with covers of durable material, arranged in the sequence of the Specification sections and shall include the following:

1. Neatly typewritten index.

2. Complete written instructions regarding how to notify the Manufacturer in case of roof leaks. Instructions shall include: names, addresses and telephone numbers of the Manufacturer’s headquarters personnel responsible for warranty work.

3. Assemble all guarantees, warranties, and assignments thereof as required by the General Conditions and the Specification sections. The guarantees, warranties, and assignments shall be delivered to the Engineer prior to final payment for the Work.

--- END OF SECTION ---
PART 1 – GENERAL

1.1 CONDITIONS OF THE CONTRACT

A. The conditions of the Contract (General, Supplementary, and Other Conditions) and the requirements of Division 1, are hereby made a part of this Section. Applicable provisions of Division 1 shall govern Work under this Section.

1.2 WORK INCLUDED

A. Provide all labor, materials, services and incidentals necessary to perform the following work:

   1. Remove and dispose of existing roofing system as shown on the Drawings.
   2. Remove and dispose of existing metal work as shown on the drawings.
   3. Remove and dispose of all contingent materials as required and specified.
   4. Disconnection and reconnection of all HVAC units as required.

1.3 RELATED SECTIONS

A. Section 07201 - Insulation.

B. Section 07531 - Elastomeric Sheet Roofing - Fully Adhered

C. Section 07620 - Sheet Metal Flashing and Trim.

D. Section 07900 - Sealants.

1.4 REGULATORY REQUIREMENTS

A. The following regulatory agencies’ requirements shall be enforced:

   1. Occupational Safety and Health Administration (OSHA).
   2. Wisconsin Administrative Code.
   3. United States Department of Transportation (US DOT).
   4. Environmental Protection Agency (EPA).
6. In Wisconsin:
   a. Department of Natural Resources (DNR).
   b. Department of Health and Social Services (DHSS).

B. The Contractor shall perform all Work in accordance with State of Wisconsin Department of Health and Social Services, HSS 159.

C. The Engineer on this Project is not an advisor of asbestos-related issues. The Contractor shall consult the Owner’s Asbestos Consultant for clarifications.

1.5 PROTECTION

A. When Work involves removal of roofing materials, the following minimum requirements shall be enforced:

1. The Contractor shall exercise extreme caution and take all necessary precautions to limit exposing his workmen or bystanders to any dangerous conditions.

2. Protect all existing utilities against damage. Maintain existing utilities during demolition operations.

3. Protect passageways and maintain all exit ways to ensure the safe passage of persons around the area of demolition.

4. Conduct operations in a manner that will prevent damage by falling debris, or other causes.

5. Provide interior and exterior shoring, bracing, or support required to prevent movement, settlement, or collapse of adjacent facilities indicated to remain.

6. Protect all remaining portions of the building and property not scheduled for demolition. These areas shall be completely protected during demolition and removal of debris. Any resulting damage shall be repaired or replaced to like-new condition by the Contractor responsible under the direction and approval of the Owner or Engineer.

7. Protect all landscaping from damage and replace or repair any landscaping to like-new condition. Repairing the damage is the Contractor’s responsibility. Grass areas damaged shall be replaced with sod and watered for two weeks by the Contractor.

8. Cover air vents designated by the Owner with filter fabric or plastic sheet to prevent visible dust and debris from entering the building. Remove filter fabric or plastic sheet upon job completion.

9. When the Work involves removal of roofing materials containing asbestos, notify the Owner’s Asbestos Consultant immediately for proper removal procedural information.
1.6 OCCUPANCY

A. The Owner shall occupy the building during demolition and construction and the facility shall remain operational.

B. Coordinate all Work in advance with the Owner.

1.7 DUST CONTROL

A. The following minimum requirements will be enforced:

1. It is imperative that dust be kept to a minimum during removal of the roofing system.

2. Debris shall be transported on covered trucks.

3. Debris shall be removed as it accumulates.

4. As it pertains to interior conditions, no excessive disturbance of the structure which causes air-borne debris will be tolerated.

PART 2 – EXECUTION

2.1 DEMOLITION IN STRUCTURES AND CONSTRUCTION TO REMAIN

A. Remove existing construction and equipment including roofing membrane, insulation, flashings, sheet metal and blocking as required to complete the installation of new roofing Work as shown or specified.

B. Coordinate all HVAC disconnect and reconnect work with a service technician approved by the HVAC unit Manufacturer.

C. Do not start tear off of existing materials when inclement weather is expected.

D. Refer to Subsection 1.05 PROTECTION for requirements relating to protection of existing structure and property.

E. Provide protective devices, enclosures, rails and similar items necessary to provide for normal public passage and to prevent bodily injury to occupants of the building.

F. Use of the building, or any of its mechanical or electrical systems, shall not be curtailed without prior agreement with the building Owner.

G. Conduct demolition operations and the removal of debris to ensure minimum interference with roads, walks and other adjacent occupied or used facilities.

H. If during the course of the demolition work portions of the existing structure are opened to the weather, it shall be the Contractor’s responsibility to close such openings as required in a
weathertight manner at the end of each workday.

2.2 DISPOSAL OF MATERIALS

A. All demolition material not schedule for re-use shall be removed from the Owner’s site by the Contractor.

1. No prolonged accumulation of debris will be allowed.

2. Remove all salvaged items from the site as demolition progresses. Storage or sale of removed items on the site will not be allowed.

3. The Contractor is responsible for the proper location and method of disposal for each individual component of the roofing system.

4. The site is to be broom clean at the end of each working day.

B. No burning on site will be permitted.

--- END OF SECTION ---
INSULATION
SECTION 07205

PART 1 -- GENERAL

1.1 CONDITIONS OF THE CONTRACT

A. The conditions of the Contract (General, Supplementary, and Other Conditions) and the requirements of Division 1, are hereby made a part of this Section. Applicable provisions of Division 1 shall govern the Work under this Section.

1.2 WORK INCLUDED

A. This Section includes all labor, material, equipment and related services necessary to perform the following Work:

1. Repair and/or replace existing roof deck or pertinent substrate as required to receive new insulation.

2. Furnish and install new rigid board insulation system.

3. Furnish and install new wood blocking incidental to the insulation Work.

1.3 RELATED SECTIONS

A. Section 02070 - Demolition.

B. Section 07531- Elastomeric Sheet Roofing - Fully Adhered.

C. Section 07620 - Sheet Metal Flashing and Trim.

D. Section 07900 - Sealants.

1.4 QUALITY ASSURANCE

A. The Insulation Manufacturer shall have a minimum ten (10) years’ experience specializing in roof insulations.

B. The Contractor shall have a minimum five (5) years documented experience specializing in installing insulation systems.

C. The insulation system must be applied by a Roofing Contractor authorized by the Insulation System Manufacturer.

D. All components used in the insulation system shall be approved by the Insulation Manufacturer.
E. There shall be no deviation made from this Specification or the approved shop drawings without prior written approval by the Manufacturer and Engineer.

F. Shop drawings of proposed alternate details shall be submitted to the Engineer for approval prior to the start of construction.

G. Proposed alternate details and application procedures shall comply with the Specifications, Drawings, and Manufacturer’s recommendations.

H. The Contractor shall keep a copy of the Insulation Manufacturer’s installation instructions and these Specifications on site at all times.

1.5 REGULATORY REQUIREMENTS

A. Materials and construction shall meet the following:


2. Factory Mutual Engineering Corporation (FM): Windstorm Resistance Classification, FM Data Sheets 1-28 (September, 1991 Revision) and 1-49 (Class I-90 Construction); Fire Classification, Class 1 (FM Approval Standards).


4. Regional, State, and Local Building Codes and/or Ordinances.

1.6 REFERENCES

A. References shall refer to the most recent standard.


2. Federal Specifications (FS).


1.7 SPECIAL ROOFING CONTRACTOR REQUIREMENTS

A. The Contractor shall provide a Project Foreman with a minimum of five (5) years documented experience in the supervision of insulation system installation and shall be knowledgeable in the type of insulation system specified herein.

B. The Contractor shall not change Foreman or crew without prior approval of the Engineer.

C. The Contractor’s Foreman shall be present on the job site during the majority of work hours.
and shall be accessible at all times to ensure good Project coordination and communication.

D. During the workday should the weather conditions appear to be changing adversely, the Foreman shall take preventative measures to allow the roof to be closed to a watertight condition to avoid exposure of buildings, equipment and materials.

E. All Work that requires saw cutting, vacuuming and other similar functions that create substantial noise and/or vibration shall be coordinated well in advance of the Work with the Owner and the Engineer.

F. Prior to the start of the Project, and daily after the start, the Contractor shall review the type of space below the roof being worked on to ensure that all special requirements because of occupancy type are complied with prior to the start of the Work.

G. Take all necessary precautions to protect the Owner’s property as well as adjacent property, including trees, shrubs, buildings, sanitary and storm sewers, water piping, gas piping, electric conduit or cable, etc., from any and all damage which may result due to Work on this Project.

H. Repair any Work, damaged by failure to provide proper and adequate protection, to its original state to the satisfaction of the Owner or remove and replace with new Work at the Contractor’s expense.

1.8 SUBMITTALS

A. Submit shop drawings as required. Drawings shall show details required for proper insulation system installation that are now shown in or that differ from the Specifications and Drawings.

B. Submit a list of materials for use in the Work.

C. Submit product data for the insulation system(s).

D. Submit Insulation Manufacturer’s installation instructions.

E. A total of three (3) copies of each submittal are required.

1.9 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Deliver all materials in Manufacturer’s original, unopened containers with Manufacturer’s labels intact and legible.

B. Stack insulation at least 4” above the ground on pallets and cover with a breathable covering, such as canvas. The covering shall extend to grade on all sides. Protect foam insulations from direct exposure to sunlight. Translucent plastic wrap as provided by the Manufacturer for shipping will not constitute adequate protection.
C. Materials shall be stored so as to protect them completely from damage by the elements and temperatures. Storage of materials on ground and/or rooftop shall be protected with waterproof canvas covering and stored on raised platforms. The use of pallets or similar type equipment will be acceptable.

1. Waterproof canvas covering shall be applied in a watertight manner and securely tied at the end of each work day or work period.

2. Use of the Manufacturer’s product protection wrapping is not acceptable for worksite type protection. Wrapping shall be side-punctured or end-punctured or slashed before covering with canvas.

3. No tears in the waterproof canvas covering will be allowed.

D. Material storage in warehouse, storage trailer, or tent is recommended.

E. Keep lids tightly sealed on all emulsions, solvent based adhesives, and cements to keep volatiles from escaping.

F. Handling Materials

1. Do not store or transport insulation materials on the roof in a manner that may exceed the live load capacity of the deck system or the structure. The Engineer, during routine observations, may make recommendation as to loading.

2. Do not transport insulation materials over or store materials on a finished section, without prior approval from the Engineer.

1.10 ENVIRONMENTAL REQUIREMENTS

A. Do not apply insulation during inclement weather or when air temperature is below (or is expected to be below) 40°F (5°C).

1.11 GUARANTEES, WARRANTIES, CERTIFICATES

A. Furnish two copies of the following to the Engineer:

1. Contractor’s Warranty: The Contractor shall warrant, in writing, all insulation materials for a period of two (2) years following completion and that the insulation system has been installed according to material Manufacturer’s current specifications. The warranty shall cover labor and materials. The MRCA printed guarantee shall be used as a standard.

PART 2 -- PRODUCTS

The Contractor is responsible for furnishing the following materials in the amount required for completion of the entire Project specified herein.
INSULATION
SECTION 07205

2.1 ACCEPTABLE MANUFACTURERS

A. Provide products by Manufacturers specified herein which meet or exceed standards as set forth in this Section. **No materials specified or approved shall contain asbestos.**

B. All materials shall be new unless otherwise noted.

2.2 MATERIALS

A. Insulation

1. **Flat Stock:**

   a. Polyisocyanurate: (Thickness as shown on the Drawings) Rigid board insulation such as “ISO 95+ GL” by Firestone Building Products Company, “MultiMax FA” by RMAX, Inc., “AC Foam-I” by Atlas Energy Products or approved equal. 4’ X 4’ maximum board size. Conform to ASTM C1289-17 Class 1, Grade 2.

   b. Wood Fiber: (Thickness as shown on the Drawings) Class E, rigid board insulation such as “Fiber Top” by Firestone Building Products Company, “High Density Fiberboard Insulation” by Celotex Corporation or approved equal. 4’ X 4’ maximum board size.

   c. Cover board: ISOGARD HD Cover board: (Thickness as shown on the Drawings) high density rigid cover board with a UL fire rating. 4’ X 8’ maximum board size.

2. **Tapered:**

   a. Polyisocyanurate: 1/8” designated per foot slope (except as noted on the Drawings) with polyisocyanurate board fill (not to exceed 1-1/2” thickness) such as “Tapered ISO 95+ GL” by Firestone Building Products Company. 1/2” minimum starting thickness. Fiberglass facers are required. Conform to Conform to ASTM C1289-17 Class 1, Grade 2. Note: Maximum thickness of any tapered insulation board to be 2”.

   b. Saddles and Crickets: 1/4” per foot finished slope (except as noted on the Drawings) tapered perlite system with perlite board fill as manufactured by Johns Manville, International Permalite, Lucas Sales Co., Inc., or approved equal. All boards shall be factory primed. Conform to FS HH-I-15296 and ASTM C728.

B. Asphalt: ASTM D312 Type III if required, (minimum rooftop application temperature as certified EVT, ± 25°F).
C. Fasteners (Miscellaneous):

1. Fasteners used to secure insulation to wood or metal decking shall be self-drilling, self-tapping, organic fluoropolymer coated screws (minimum 30 Kesternich Cycles) with a minimum 0.222” shank diameter with G-90 galvanized metal plate devices, minimum 2-7/8” hexagonal, such as those manufactured by Olympic Construction Fasteners, Buildex, or DeckFast, length as required. Fasteners shall be FM approved for the specific use.

2. Insulation adhesive: Such as OlyBond 500 adhesive by OMG Roofing Products or approved.

3. Nails used to secure wood such as fascias, cant strips, blocking and nailers to other wood members shall be galvanized and long enough to penetrate 1-1/4”. Two rows are required, staggered when feasible. Spacing in any one row shall not exceed 24”. Spacing shall not exceed 12”, 8’ each way from outside corners. Withdrawal resistance shall be 100 pounds per nail minimum. (Lag screws of equivalent strength may be used if desired.)

4. Fasteners used to secure lumber to masonry or concrete shall be 1/2” minimum diameter metal expansion stud anchors in pre-drilled holes such as “Kwik-Bolt II Stud Expansion Anchor” by Hilti, Inc. or approved equal. Space fasteners at 12” o.c. (maximum).

5. Fasteners used to secure lumber to metal deck shall be self-drilling, self-tapping, organic fluoropolymer coated screws (minimum 30 Kesternich Cycles) with a minimum 0.201” shank diameter such as “Type 14-10 Heavy Duty All Purpose Screw” by Olympic Fasteners or approved equal (2-1/4” length required for 2x nailer or blocking). Space fasteners at 12” o.c. (maximum). AND/OR nut, bolt and washer assemblies, 1/2” minimum diameter, spaced 4’ o.c. and have galvanized metal or stainless steel consistency. Stagger if lumber if 6” or wider. At outside corners fasteners shall be spaced 2’ o.c., 8’ each way from the corner. Minimum withdrawal resistance shall be 800 pounds per fastener.

6. Fasteners used to secure base sheet to light weight concrete shall be “Tube-Loc Nail” by Simplex Nails and Manufacturing Company, with 1” diameter cap, 1-1/2” length required (1 fastener per sq. ft.).

7. Other fasteners not specifically described shall be as selected by the Contractor subject to approval by the Engineer. All fasteners shall meet the requirements set forth in FM Data Sheet 1-28 and 1-49 as appropriate.

D. Insulated Tapered Edge Strips: Tapered perlite rigid board insulation as shown on the Drawings such as “Tapered Fesco Board” by Johns Manville, or approved equal.

E. Base sheet: Firestone MB Base M asphalt impregnated and coated glass fiber mat reinforced

F. Lumber, Nailers and Blocking: #2 grade wood (lumber) or better.

G. Plywood: APA exterior rated 4-ply CDX with salt preservative pressure treatment (0.40 pcf minimum retention).

H. Batt Insulation: ASTM C665, FS HH-I-521, Type I, nominal 4” thick fiberglass blanket.

I. Other Materials: All other materials, not specifically described but required for a complete and proper installation of the Work in this Section, shall be as selected by the Contractor subject to approval by the Engineer.

PART 3 -- EXECUTION

3.1 DEFINITIONS

A. The term “phased construction” or “phased application” shall mean the insulation system construction or application process in which all parts of cross-section of a roofing system, including the vapor retarder, roof insulation, roof membrane and surfacing are not completed for a particular roof area during one day or work period.

3.2 EXAMINATION

A. The Contractor shall have the sole responsibility for the accuracy of all measurements and for the estimate of material quantities required and necessary to satisfy the requirements of these Specifications.

3.3 SUBSTRATE PREPARATION

A. Remove the existing membrane and insulation down to the structural deck. (Note: No saw-cutting of the deck is permitted. Position blade so depth of cut lies within the thickness of the existing roof system.)

B. Scrape, broom, repair and/or replace deck to insure that the substrate is smooth, clean, dry and free from any sharp projections and depressions prior to the start of installation of the new insulation system.

C. Deck Repairs (Note: Deck repairs, if needed, shall be as directed by the Engineer and shall be by Change Order.)

1. Steel Deck:

   a. Where rust has pitted the surface of the steel deck, but not pinholes have developed,
paint the affected area with a rust inhibiting paint after removing all surface scale and rust.

b. Where rusting has caused small holes to develop in steel deck, brush on a rust inhibiting paint to affected areas and reinforce with galvanized steel sheets, 18 ga. Fasten sheets with galvanized 10-16 X 3/4” hex washer head screws or approved equal.

c. Where rusting has caused extensive holes to develop in steel deck, replaced affected sections with new steel deck sections of matching configuration and of equal or better strength characteristics. Fasten sections in place with galvanized 12-24 X 1-1/4” hex head washer screws or approved equal. New deck replacement sections will cover a minimum of three joists (two spans) and will lap into existing deck a minimum of 6” beyond the outside supporting joist. No single span replacement will be allowed.

d. Where puddle welds are ineffective, refasten deck sections to bar joist with galvanized 12-24 X 1-1/4” hex washer head screws or approved equal.

e. Fasten loose side laps at 36” o.c. with galvanized hex washer head screws, as required.

f. Where deck has been deformed, replaced affected sections with new steel deck sections of matching configuration and of equal or better strength characteristics. Fasten sections in place with galvanized 12-24 X 1-1/4” hex head washer screws or approved equal. New deck replacement sections will cover a minimum of three joists (two spans) and will lap into existing deck a minimum of 6” beyond the outside supporting joist. No single span replacement will be allowed.

g. Where opening in deck is to be closed, replace with new steel deck sections of matching configuration and of equal or better strength characteristics. Fasten sections in place with galvanized 12-24 X 1-1/4” hex head washer screws or approved equal. New deck replacement sections will cover a minimum of three joists (two spans) and will lap into existing deck a minimum of 6” beyond the outside supporting joist. No single span replacement will be allowed.

3.4 WORKMANSHIP

A. All insulation Work shall be accomplished with non-working Foreman overseeing the work of workers who are thoroughly skilled in the application of specified materials. All workmanship to be of the very best and shall be done in such a manner as to fulfill the requirements of the Drawings and Specifications.

B. Weather Condition Limitations: Proceed with insulation Work only when existing and forecasted weather conditions will permit Work to be performed in accordance with the
requirements of this Specification.

C. After starting the Work, the Contractor shall be responsible for complete moisture integrity of the insulation system. Therefore, the Contractor shall:

1. Establish and follow application procedures to ensure that adequate quantities of materials are used.

2. Maintain competent Foreman continuously supervising the Work, with authority to discard unsuitable materials and remove unsatisfactory workmen from the Project.

3. Observe all fire precautions involving the storage and handling of insulation materials. Provide adequate quantity of fire extinguishers at the worksite, especially at the kettles, torches, or open flames.

4. Comply with current insulation safety standards at all times.

5. Supervise installation of and be responsible for seeing that roof mechanical and electrical equipment, roof drains, etc. are properly set without damage to the roof. Make roof and flashing repairs as necessary and advise the Engineer in writing of all potential leaks as may be caused by other trades not under the Contractor’s control.

6. Under no conditions shall any insulation materials be applied before sunrise, or at anytime when there are indications of moisture present (rain, mist, dew, frost, and snow).

7. Install only as much insulation material as can be completed and covered in accordance with the requirements of this Specification in any one day or work period.

8. Insure that all wheeled equipment on the roof be equipped with pneumatic tires.

9. Permit no traffic over, nor stack roofing equipment or materials on completed new surfaces without adequate protection with 1/2” plywood.

10. The Contractor shall install flashings at openings, projections and walls adjoining new Work every day or work period. If circumstances do not allow this, these areas shall be made watertight at the end of each day or work period.

11. At the end of each day’s Work, install temporary water cut-offs at all points where the roof membrane does not abut a wall, wood edge member or expansion joint. Water cut-offs shall consist of EPDM membrane and shall extend at least 6” onto the roof deck or
vapor retarder. The water cut-off shall be removed completely before continuing the roof installation. If breaks occur in the water cut-offs or any other part of the roof membrane and water damages the roof insulation, all damaged roof insulation, vapor retarder and roof membrane over the damaged insulation shall be removed and replaced with new materials.

12. Comply with other workmanship requirements as outlined in other Sections of this specification.

3.5 OTHER REPAIRS AND CONSTRUCTION

A. Furnish new wood nailers and blocking for roof installation areas and details applicable.

B. Install new lumber in place of existing rotted or otherwise deteriorated lumber not originally scheduled for replacement. Repairs shall be by Change Order.

C. Install new wood nailers to match height of total insulation thickness at applicable areas.

D. Assure all existing structural material is sound and secured properly prior to construction. Notify the Engineer of any inconsistencies.

3.7 ROOF INSULATION - INSTALLATION

A. Install the base layer of insulation as required. Stagger all insulation joints over the existing Expanded Polystyrene insulation. Mechanically fasten all layers to the metal deck.

B. Install tapered insulation for saddles and crickets in foam adhesive as required.

C. Install 1/2” cover board as required, atop previous layers of insulation, including saddles and crickets. Cut or score insulation boards to conform to angles of new substrate.

D. Ensure close fit and alignment of all insulation boards limiting any gaps to 1/8” maximum. Stagger all board joints within the field of the roof. Offset the end and side joints a minimum of 6” from the joints of the preceding layer.

E. Ensure consistent height of insulation boards and wood blocking. Limit elevation differences to 8” maximum.

F. Cover all installed insulation with roof membrane by the end of each working day and before rain showers commence.

--- END OF SECTION ---
PART 1 -- GENERAL

1.1 CONDITIONS OF THE CONTRACT

A. The conditions of the Contract (General, Supplementary and Other Conditions) and the requirements of Division 1, are hereby made a part of this Section. Applicable provisions of Division 1 shall govern Work under this Section.

1.2 WORK INCLUDED

A. This Section includes all labor, material, equipment and related services necessary to perform the following Work:

1. Furnish and install new fully adhered EPDM roof membrane.
2. Furnish and install new fully adhered EPDM roof flashing.
3. Furnish and install new lead flashings at all drains and vent details.
4. Coordinate the installation of new metal Work incidental to the roofing Work.
5. Repair or replace adjacent roof areas that are damaged by the roofing Contractor.

1.3 RELATED SECTIONS

A. Section 02070 - Demolition.
B. Section 07205 - Insulation.
C. Section 07620 - Sheet Metal Flashing and Trim.
D. Section 07900 - Sealants.

1.4 QUALITY ASSURANCE

A. The membrane Manufacturer shall have a minimum ten (10) years experience specializing in elastomeric sheet roof membranes.
B. The Contractor shall have a minimum five (5) years documented experience specializing in elastomeric sheet roof membranes.
C. The roof system must be applied by a roofing Contractor authorized by the roof system Manufacturer.
D. All components used in the roof system shall be approved by the membrane Manufacturer.
E. At the start of new membrane installation, Manufacturer’s Representative shall visit the job site to ensure that the installation begins correctly with all installation procedures and guidelines being followed and notify the Engineer of his findings. Failure to notify hereby constitutes acceptance of the Work of his licensed applicator (the Contractor) by the Manufacturer.

F. Upon 50 percent completion of the Project, the roof membrane Manufacturer’s Representative shall inspect the installation for adherence to installation procedures and guidelines. The installation shall be inspected more frequently if deemed necessary by the Manufacturer, Engineer, Owner or Contractor.

G. Upon completion of the installation, an inspection shall be made by a representative of the roof membrane Manufacturer to ascertain that the roof system has been installed according to the applicable roof membrane Manufacturer’s specifications.

H. All the above indicated job visits shall be documented in writing by the roof membrane Manufacturer’s Representative indicating all problems, concerns, recommendations and directives given to the roofing Contractor regarding roof system installation. Copies shall be provided to Engineer within ten (10) days of the inspection date.

I. It is the roofing Contractor’s responsibility to arrange the Manufacturer’s inspections.

J. There shall be no deviation made from this Specification or the approved shop drawing without prior written approval by the Manufacturer and Engineer.

K. Shop drawings of proposed alternate details shall be submitted to the Engineer for approval prior to the start of construction.

L. Proposed alternate detail and application procedures shall comply with Specification, Drawings and Manufacturer’s recommendations.

M. The Contractor shall keep a copy of the membrane Manufacturer’s installation instructions and these Specifications on site at all times.

1.5 REGULATORY REQUIREMENTS

A. Materials and construction shall meet the following:


2. Factory Mutual Engineering Corporation (FM): Windstorm Resistance Classification, FM Data Sheets 1-28 (September 1991 Revision) and 1-49 (Class I-90 Construction); Fire Classification, Class 1 (FM Approval Standards).


4. Regional, State, and Local Building Codes and/or Ordinances.
1.6 REFERENCES

A. References shall refer to the most recent standard.
   2. Federal Specifications (FS).
   3. Factory Mutual System (FM).

1.7 SPECIAL ROOF CONTRACTOR REQUIREMENTS

A. The Contractor shall provide a Project Foreman with a minimum of five (5) years documented experience in the supervision of roof system installation and shall be knowledgeable in the type of roof system specified herein.

B. The Contractor shall not change the Foreman or crew without prior approval of the Engineer.

C. The Contractor’s Foreman shall be present on the job site during the majority of work hours and shall be accessible at all times to ensure good project coordination and communication.

D. During the workday should the weather conditions appear to be changing adversely, the Foreman shall take preventative measures to allow the roof to be closed to a watertight condition to avoid exposure of buildings, equipment and materials.

E. All Work that requires saw cutting, vacuuming and other similar functions that create substantial noise and/or vibration shall be coordinated well in advance of the work with the Owner and Engineer.

F. Prior to the start of any roof project, and daily after the start, the Contractor shall review the type of space below the roof being worked on to ensure that all special requirements because of occupancy type are complied with prior to the start of the Work.

G. Take all necessary precautions to protect the Owner’s property as well as adjacent property, including trees, shrubs, buildings, sanitary and storm sewers, water piping, gas piping, electric conduit or cable, etc., from any and all damage which may result due to work on this Project.

H. Repair any Work, damaged by failure to provide proper and adequate protection, to its original state to the satisfaction of the Owner or remove and replace with new Work at the Contractor’s expense.
1.8 SUBMITTALS

A. Submit shop drawings as required. Drawings shall show roof edge condition details, roof penetration flashing details, standard roof section and all other details required for proper roof system installation that are not shown in or that differ from the Specification and Drawings.

B. Submit a list of materials for use in the Work.

C. Submit product data for membrane and base flashing with temperature range for application of membrane.

D. Submit membrane Manufacturer’s installation instructions.

E. A total of three (3) copies of each submittal is required.

1.9 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Deliver all materials in Manufacturer’s original, unopened containers with Manufacturer’s labels intact and legible.

B. Materials shall be stored so as to protect them completely from damage by the elements and temperatures. Storage of materials on ground and/or rooftop shall be protected with waterproof (canvas) covering and stored on raised platforms. The use of pallets or similar type equipment will be acceptable.

1. Store cements, primers and Sealants between 40°F and 80°F. Should they be exposed to low temperatures, return to room temperature for several days prior to use.

2. Waterproof (canvas) covering shall be applied in a watertight manner and securely tied at the end of each work day or work period.

3. Use of Manufacturer’s product protection wrapping is not acceptable for worksite type protection. The wrapping shall be side-punctured or end-punctured or slashed before covering with canvas.

4. No tears in the waterproof (canvas) covering will be allowed.

C. Material storage in warehouse, storage trailer or tent is recommended.

D. Keep lids tightly sealed on all emulsions, solvent based adhesives, and cements to keep volatiles from escaping.

E. Stir adhesives thoroughly before using. Use mechanical methods of stirring, hand stirring with a paddle will not be acceptable.

F. Single ply adhesives have a limited shelf life. The shelf life of the unused portion of
material remaining in a previously opened container might be as low as overnight for some products. Remove all materials from the job site that are older than six months from the date of production.

G. Altering the formulation of any adhesive by adding solvents is strictly prohibited. Any roofing installed using field altered adhesives will be removed.

1.10 ENVIRONMENTAL REQUIREMENTS

A. Do not apply roof membrane, or base flashings during inclement weather or when air temperature is below (or is expected to be below) 40°F (5°C).

B. Do not start tear off of existing materials when inclement weather is expected.

1.11 GUARANTEES, WARRANTIES, CERTIFICATES

A. Furnish two copies of the following to the Engineer:

1. Contractor’s Warranty: The Contractor shall warrant, in writing, that the roof system shall remain leak free for a period of two (2) years following completion and that the roof system has been installed according to material Manufacturer’s current specifications. The warranty shall cover labor and materials. The MRCA printed guarantee shall be used as a standard.

2. Membrane Manufacturer’s Warranty: The roof system Manufacturer shall furnish an Original Cost of Installation of Manufacturer’s Materials Roofing Guarantee. The guarantee shall include the costs of repairs or replacement of both the membrane and the insulation damaged as a result of the membrane failure and necessary to stop leaks which occur during a period of ten (10) years from the date of completion, as a result of workmanship or deterioration of the membrane system or base flashing. The guarantee shall cover both labor and materials.

3. Membrane Manufacturer’s Owner Service Manual: Provide for the Owner an informational manual to include Manufacturer’s approved emergency repair procedures and materials, maintenance procedures and customer service information.

PART 2 -- PRODUCTS

The Contractor is responsible for furnishing the following materials in the amount required for completion of the entire Project specified herein.

2.1 ACCEPTABLE MANUFACTURERS

A. Provide products by Manufacturers specified herein which meet or exceed standards as set forth in this Section. No materials specified or approved shall contain asbestos.

B. All materials shall be new unless noted otherwise.
2.2 MATERIALS

A. Surface Membrane and Base Flashing: ASTM D4637 ethylene propylene diene monomer (EPDM) 0.060 inch thickness; in compliance with RMA RP-1 minimum requirements and a UL Class A fire rating, such as “RubberGard” by Firestone Building Products Company or approved equal.

B. Miscellaneous Flashing: ASTM D4637 uncured EPDM elastomeric form flashing with pre-applied adhesive, 0.060” thickness, such as “EPDM Form Flash” by Firestone Building Products Company or approved equal.

C. Tapes: Membrane splicing tape, such as “QuickSeam Splice Tape” by Firestone Building Products Company, or approved equal. Flashing tapes, such as “QuickSeam Flashing” and “QuickSeam Curb Flashing” by Firestone Building Products Company or approved equal. Walk pads, such as “QuickSeam Walkway Pad” by Firestone Building Products Company or approved equal.

D. Cleaners, Primers, Adhesives, Sealants, and Other Accessory and Miscellaneous Component Materials: As required and recommended by the membrane Manufacturer to provide a complete watertight roofing system and as required by the membrane Manufacturer to provide the Owner with the warranty as specified.

E. Vapor Barrier: Firestone V-Force, Self-adhered, Vapor Barrier Membrane. Class I vapor retarder (perm rating = .02) as recognized by the IBC. Primer required prior to installation.

F. Fasteners (Miscellaneous):

1. Fasteners such as nails, screws, bolts, etc. shall be compatible with the roof membrane and flashing system. They shall be of type and size as shown on the Drawings, recommended by the roof membrane Manufacturer or specified herein.

2. Screws used to secure metal to blocking shall be No. 8 minimum, galvanized penetrating wood blocking a minimum 1-1/2” and shall have watertight neoprene washers under head. The installed withdrawal resistance shall be a minimum of 150 pounds per screw.

3. Nails used to secure wood such as fascias, cant strips, blocking and nailers to other wood members shall be galvanized and long enough to penetrate 1-1/4”. Two rows are required, staggered when feasible. Spacing in any one row shall not exceed 24”. Spacing shall not exceed 12”, 8’ each way from outside corners. Withdrawal resistance shall be 100 pounds per nail minimum. (Lag screws of equivalent strength may be used if desired.)

4. Fasteners used to secure lumber to masonry or concrete shall be 1/2” minimum diameter metal expansion stud anchors in pre-drilled holes such as Kwik-Bolt II Stud Expansion Anchor by Hilti, Inc. or approved equal. Space fasteners at 12” o.c.
5. Fasteners used to secure lumber to metal deck shall be self-drilling, self-tapping, organic fluoropolymer coated screws (minimum 30 Kesternich Cycles) with a minimum 0.201” shank diameter such as Type 14-10 Heavy Duty All Purpose screw manufactured by Olympic Fasteners (2-1/4” length required for 2x nailer or blocking). Space fasteners at 12” o.c. (maximum). AND/OR nut, bolt and washer assemblies, 1/2” minimum diameter, spaced 4’ o.c. and have galvanized metal or stainless-steel consistency. Stagger if lumber is 6” or wider. At outside corners fasteners shall be spaced 2’ o.c., 8’ each way from the corner. Minimum withdrawal resistance shall be 800 pounds per fastener.

6. Fasteners used to secure metal to metal shall be hardened, self-tapping, sheet metal gimlet point type, with hex/washer head and be of compatible material.

7. Fasteners used to secure sheathing paper and base sheet to wood deck shall be square head cap nails with annular thread, 1-1/4” minimum length required.

8. Fasteners used to secure base sheet to light weight concrete deck shall be “Tube-Loc Nail” by Simplex Nails and Manufacturing Company, with 1” diameter cap, 1-1/2” length required (1 fastener per sq. ft.)

9. Other fasteners not specifically described shall be as selected by the Contractor subject to approval by the Engineer. All fasteners shall meet the requirements set forth in FM Data Sheets 1-28 and 1-49 as appropriate.

F. Expansion Joint Cover: Expandable 28 gage stainless steel/EPDM bellows type such as “EJ-4” (with fabricated corners) by Schuller Roofing Systems.

G. Roof Scuttle: 3’-0” X 3’-0”, Model “SS” by Bilco Company, prime painted galvanized steel or approved equal.

H. Roof Drain Assemblies: Obtain replacement clamps, rings and strainers from original Manufacturer if possible. All strainers shall be cast iron.

I. Lumber, Nailers and Blocking: #2 grade wood (lumber) or better with salt preservative pressure treatment (0.40 pcf minimum retention).

J. Plywood: 5/8” APA exterior rated 4-ply CDX with salt preservative pressure treatment (0.40 pcf minimum retention).

K. Polyvinyl Chloride (PVC) Piping: Conforming to requirements for Schedule 40, DWV pattern, ASTM D1785 and D2665.

L. EPDM Boot Flashing: Pre-molded round EPDM penetration flashing conforming to Rubber Manufacturers Association (RMA) minimum specifications such as “Sure-Seal Molded Pipe Flashing” by Carlisle Corporation or “Pipe Boot” by Firestone Building Products Company.
M. Other Materials: All other materials, not specifically described but required for a complete and proper installation of the work in this Section shall be as selected by the Contractor subject to approval by the Engineer.

PART 3 – EXECUTION

3.1 DEFINITIONS

A. Bond: The adhesive and cohesive forces holding two roofing components in intimate contact.

B. The term “phased construction” or “phased application” shall mean the roofing system construction or application process in which all parts of cross-section of a roofing system (including vapor retarder), roof insulation, roof membrane and surfacing are not completed for a particular roof area during one day or work period.

3.2 EXAMINATION

A. The Contractor shall have the sole responsibility for the accuracy of all measurements and for the estimate of material quantities required and necessary to satisfy the requirements of these Specifications.

3.3 WORKMANSHIP

A. All roofing work shall be accomplished with a non-working Foreman overseeing the work of the felt setters, mop men, felt layer operators and kettle men who are thoroughly skilled in the application of specified materials. All workmanship to be of the very best and shall be done in such a manner as to fulfill the requirements of the Drawings and Specifications.

B. Weather Condition Limitations: Proceed with roofing work only when existing and forecasted weather conditions will permit work to be performed in accordance with the requirements of this Specification.

C. After starting the Work, the Contractor shall be responsible for complete moisture integrity of the roofing and flashing membrane and for providing a properly applied roof. Therefore, the Contractor shall:

1. Establish and follow application procedures to ensure that adequate quantities of materials are used.

2. Maintain competent Foreman continuously supervising the Work, with authority to discard unsuitable materials and remove unsatisfactory workmen from the Project.

3. Observe all fire precautions involving the storage and handling of roofing materials. Provide adequate quantity of fire extinguishers at worksite, especially at the kettles, torches or open flames.
4. Comply with current roofing safety standards at all times.

5. Supervise installation of and be responsible for seeing that roof mechanical and electrical equipment, roof drains, etc. are properly set without damage to the roof. Make roof and flashing repairs as necessary and advise the Engineer in writing of all potential leaks as may be caused by other trades not under the Contractor’s control.

6. Under no conditions shall any roofing materials be applied before sunrise, or at anytime when there are indications of moisture present (rain, mist, dew, frost, and snow).

7. Install only as much roofing material as can be completed and covered in accordance with the requirements of this Specification in any one day or work period.

8. All seams shall be a minimum 6” wide. The adhesive tape shall be installed in strict accordance with the Manufacturer’s directions.

9. Apply roof membrane so that the direction of water flow is over, and not against the laps. Closely follow the Manufacturer’s requirements for adhesive tape and sealant application.

10. Insure that all wheeled equipment on the roof be equipped with pneumatic tires.

11. Permit no traffic over, not stack roofing equipment or materials on completed new roof surfaces without adequate protection with 1/2” plywood.

12. Insure that all fishmouths are cut (do not attempt to walk down) and objects causing separation between reinforcing plies are removed. Patch the areas if the cut is made after the interply mopping has set up.

13. The Contractor shall install flashing at openings, projections and walls adjoining new roofing every day or work period. If circumstances do not allow this, these areas shall be made watertight at the end of each day or work period.

14. At the end of each day’s Work, install temporary water cut-offs at all points where the roof membrane does not abut a wall, wood edge member or expansion joint. The water cut-off shall be removed completely before continuing the roof installation. If breaks occur in the water cut-offs or any other part of the roof membrane and water damages the roof insulation, all damaged roof insulation, vapor retarder and roof membrane over the damaged insulation shall be removed and replaced with new materials.

15. Comply with other workmanship requirements as outlined in other Sections of this Specification.
3.3 HEALTH AND SAFETY PRECAUTIONS

A. Single ply roofing adhesives, cements and sealants contain ingredients which can be toxic and are extremely flammable. Ensure that vapors are not allowed to enter the building at air intake vents or other points of access. Absolutely no smoking is allowed on the entire roof for the duration of the Project.

3.4 ROOF MEMBRANE INSTALLATION

A. Roll roof sheets out over prepared substrate and allow membrane to relax for a minimum of 30 minutes.

B. Fully adhere membrane to insulation per Manufacturer’s detailed instructions.

C. Eliminate air bubbles, wrinkles and fishmouths.

D. Clean membrane lap seams (joints) to remove dirt and talc from the lap area.

E. Apply adhesive tape to membrane lap seams in strict accordance with the Manufacturer’s directions.

F. Check all seams with a probe. Ensure that roof sheets are fully bonded.

G. Seal exposed edges of each roof sheet with a uniform fillet of seam seal.

3.5 BASE FLASHING INSTALLATION

A. Install new wood blocking and metal where required and as specified in other sections of this Specification.

B. All rooftop equipment (including plumbing vents, base flashings, exhaust fans, skylights, vents, etc.) shall be raised by installing Contractor with specified and/or approved material to provide minimum of 8” between surface membrane and top of base flashing.

C. Install base flashing according to the Drawings and roof membrane Manufacturer’s requirements.

D. Extend plumbing vents as necessary to assure a minimum of 8” of flashing height as measured from surface membrane to top of vent stack. Furnish and install PVC piping with EPDM couplers as required.

E. Prime all sheet metal that is to be stripped into the roof membrane as required. Allow primer to dry before stripping in.

F. Comply with applicable recommendations of Factory Mutual Prevention Data 1-49.

07531-10 Elastomeric Sheet Roofing – Fully Adhered
G. All flashing on section being re-roofed shall be completed or made watertight by the end of the working day.

3.6 MISCELLANEOUS DETAILS

A. Roof Drains

1. Disassemble and remove domes and clamping collars. Clean and examine sumps and drain components. Replace all missing or broken components. Install new clamps and bolts.

2. Install and seal roof membrane and flashings at drains according to the Drawings.

3. All roof drain systems shall be installed to allow positive water flow into the roof drain from the roof surface.

4. Replace strainers in drains at the end of the working day.

--- END OF SECTION ---
PART 1 -- GENERAL

1.1 CONDITIONS OF THE CONTRACT

A. The Conditions of the Contract (General, Supplementary and Other Conditions) and the requirements of Division 1 are hereby made a part of this Section. Applicable provisions of Division 1 shall govern Work under this Section.

1.2 WORK INCLUDED

A. This Section includes all labor, material, equipment and related services necessary to furnish and install the following Work.

1. Sheet metal gravel stop, fascia and edge.
2. Sheet metal coping.
3. Sheet metal trim.
4. Sheet metal counter flashings and receivers.
5. Sheet metal wall panels.
6. Sheet metal expansion joint cover assembly.
7. Miscellaneous sheet metal and accessories associated with roofing.

1.3 RELATED SECTIONS

A. Section 02070 - Demolition.
B. Section 07201 - Insulation.
C. Section 07531 - Elastomeric Sheet Roofing - Fully Adhered
D. Section 07900 - Sealants.

1.4 QUALITY ASSURANCE

A. Perform flashing and sheet metal work in coordination with installer performing roofing.

B. There shall be no deviation made from this Specification or the approved shop drawing without prior written approval by the Manufacturer and Engineer.

C. Shop drawings of proposed alternate details shall be submitted to Engineer for approval prior to start of construction.
D. Proposed alternate details and application procedures shall comply with the Specifications, Drawings and Manufacturer’s recommendations.

1.5 REFERENCES

A. References shall refer to the most recent standard.


3. Sheet Metal and Air Conditioning Contractor’s National Association (SMACNA).

1.6 SPECIAL CONTRACTOR REQUIREMENTS

A. The Contractor shall provide a Project Foreman with a minimum of five (5) years documented experience in the supervision of sheet metal installation and shall be knowledgeable in the type of work specified herein.

B. The Contractor shall not change Foreman or crew without prior approval of the Engineer.

C. The Contractor’s Foreman shall be present on the job site during the majority of the Work hours and shall be accessible at all times to ensure good Project coordination and communication.

D. All Work that requires saw cutting, vacuuming and other similar functions that create substantial noise and/or vibration shall be coordinated well in advance of the Work with the Owner and Engineer.

E. Prior to the start of any project and daily after the start, the Contractor shall review the type of space below the roof being worked on to ensure that all special requirements because of occupancy type are complied with prior to the start of the Work.

F. Take all necessary precautions to protect the Owner’s property as well as adjacent property, including trees, shrubs, buildings, sanitary and storm sewers, water piping, gas piping, electric conduit or cable, etc. from any and all damage which may result due to Work on this Project.

G. Repair any Work, damaged by failure to provide proper and adequate protection, to its original state to the satisfaction of the Owner or remove and replace with new Work at the Contractor’s expense.
1.7 SUBMITTALS

A. Submit shop drawings as required. Drawings shall show all details required for proper roof system installation that are not shown in or that differ from the Specifications and Drawings. Submit shop drawings clearly detailing shaping, joining, length of sections, fastening and installation details.

B. Submit a list of materials for use in the Work.

C. Submit standard color samples for approval.

D. Submit shop drawing and sample of gravelstop, fascia and edge.

E. Submit shop drawing and sample of coping.

F. Submit shop drawing and sample of counterflashing and receiver.

G. Submit shop drawing of sheet metal expansion joint cover assembly.

H. A total of three (3) copies of each submittal drawing are required.

1.8 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Delivery and Storage of Materials

1. Deliver all materials in their original unopened containers with all markings intact.

2. Store all materials in a dry place or otherwise protect from water or extreme humidities.

3. Stack metal at least 4” above the ground on pallets and cover with a breathable covering, such as canvas. Covering shall extend to grade on all sides.

4. Store cements, adhesives and sealants in the manner and temperature range recommended by the individual Manufacturers.

5. Remove damaged materials from the site and replace with new.

B. Handling Materials

1. Handle metal sections to avoid bending, breaking or otherwise damaging them during transportation and installation.

2. Do not store or transport materials on the roof in a manner that may exceed the live load capacity of the deck system or the structure. The Engineer, during routine inspections, may make recommendations as to loading.
3. Do not transport materials over or store materials on a finished section without prior approval of the Engineer.

1.9 GUARANTEES, WARRANTIES, CERTIFICATES

A. Furnish two copies of the following to the Engineer:

1. Contractor’s Warranty: The Contractor shall warrant, in writing, the workmanship for a period of two (2) years following completion and that the Work has been installed according to material Manufacturer’s current specifications. The warranty shall cover labor and materials.

2. Manufacturer’s Warranty: Provide Manufacturer’s standard warranty guaranteeing color, fade, chalking and film integrity for a period of 20 years when tested against the Weatherometer Method 6152, acceptable per FED TEST METHOD 141 for prefinished metals with resin coating.

PART 2 – PRODUCTS

The Contractor is responsible for furnishing the following materials in the amount required for completion of the entire Project specified herein.

2.1 ACCEPTABLE MANUFACTURERS AND MATERIALS

A. Provide products by Manufacturers specified herein which meet or exceed standards as set forth in this Section. **No materials specified or approved shall contain asbestos.**

B. All materials shall be new unless noted otherwise.

2.2 MATERIALS

A. Gravel Stop, Fascia, Edge, Coping, Expansion Joint Cover Assembly and Counterflushing: 24 gage factory painted galvanized steel with “Kynar 500” resin coating. Submit color to Owner and Engineer for approval.

    --- OR ---

0.050 inch factory painted aluminum with Kynar 500 resin coating. 1.0 ± 0.1 mil total dry film thickness required and 0.3 to 0.4 mil dry film thickness required for reverse side wash coat. Submit color to Owner and Engineer for approval.

B. Miscellaneous Sheet Metal: Galvanized steel, ASTM A525 Class G-90 zinc coating, 24 gage with minimum 1.25 oz. per square foot galvanized coating.

C. Continuous Cleat: 22 gage galvanized steel with minimum 1.25 oz. per square foot galvanized coating.

D. Fasteners (Miscellaneous)
1. Fasteners such as nails, screws, etc. shall be of same material as metal flashing on which they are used. They shall be of type and size as shown on the Drawings or specified herein.

2. Screws used to secure metal to blocking shall be #8 minimum, penetrate wood blocking minimum 1-1/2” and shall have metal washers and watertight neoprene washers under hex head. The installed withdrawal resistance shall be a minimum of 150 pounds per screw.

3. Fasteners used to secure metal to metal shall be hardened, self-tapping, sheet metal gimlet point type, with hex/washer head and be of compatible material.

4. Fasteners used to secure sheet metal to masonry or stone shall be 1/4” minimum diameter metal expansion stud anchors in pre-drilled holes such as “Kwik-Bolt II Stud Expansion Anchor” by Hiltli, Inc. or approved equal. Space fasteners at 24” o.c. maximum spacing.

E. Solder: FS QQ-S-571 or ASTM B32. Use 50/50 for all applicable work unless otherwise specified.

F. Soldering Flux: FS O-F-506, type best suited for specific material.

G. Other Materials: All other materials not specifically described but required for a complete and proper installation of the Work in this Section, shall be as selected by the Contractor subject to the approval by the Engineer.

2.3 FABRICATION

A. Form sections square, true and accurate to size, free from distortion and other defects detrimental to appearance or performance.

B. Provide cross-break to top surface of coping metal and at all exposed surfaces of all metals which exceed 8” in cross dimension.

C. Wall Panel Assembly

   1. Fabricate side lap joints in male/female configuration for air and water tightness and structural integrity between adjacent panels.

   2. Fabricate side lap joints to permit concealed fastening of panels to structure.

   3. Fabricate panels with a flatness deviation not to exceed 0.030” in 18” in any direction when measured with a metal straight edge.

   4. Panels exhibiting rippling, waving or oil canning exceeding 0.030” in 18” in any direction when measured with a metal straight edge will be rejected.
PART 3 – EXECUTION

3.1 EXAMINATION

A. Examine supporting members and substrate for layout, alignment and soundness.

B. Verify that surfaces are free from debris and unnecessary protrusions.

3.2 INSTALLATION

A. Counterflashing

1. Saw-cut mortar joints to form new reglet approximately 1” minimum uniform depth at elevation of a minimum 10” above the surface of the roof membrane, as shown on the Drawings.

2. Secure springlocked reglet receivers in clean and sound saw cuts at mortar joint.

3. The reglet receiver shall be notched and lapped at all corners and joints.

4. Secure flashings to reglet receivers using specified type fasteners at 18” o.c. maximum.

5. Fit flashing tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.

6. The counterflashing shall be notched and lapped at inside corners and joints and seamed at outside corners.

7. Maintain lines of constant elevation around entire perimeter unless noted otherwise on the Drawings.

8. Apply continuous bead of sealant to masonry/metal intersection at top of reglet. Tool to smooth finish.

9. Where existing structural expansion joint intersects sheet metal work, provide “slip joint” in sheet metal work to accommodate movement of the structure.

B. Coping

1. Install EPDM (Adhered) and cap flashing over parapet as shown on the Drawings and bond at all laps and seams.

2. Install continuous cleat at location(s) as shown on the Drawings.

3. Coping section lengths shall be contained to 10’ lengths or less. Secure each length at 2’ centers through oversized slotted holes on the roof side of the section.
4. Cover Plate seams and end joints. Lap joints minimum 3”.

5. Maintain lines of constant elevation around entire perimeter.

6. Where existing structural expansion joint intersects sheet metal work provide “slip joint” in sheet metal work to accommodate movement of the structure.

C. Scuppers

1. Lock seams and end joints. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles. Hem all exposed edges.

2. Solder seams at all vertical and horizontal surfaces.

3. Insert into joints to form tight fit. Secure in place with specified type fasteners.

4. Seal joints around scupper edge with continuous 5/8” bead of sealant, then tool.

D. Sheet Metal Expansion Joint Cover Assembly

1. Where existing structural expansion joint intersects sheet metal work provide “slip joint” in sheet metal work to accommodate movement of the structure.

E. Gravel Stop, Fascia and Edge

1. Install Work with laps of 1-1/2” minimum dimension.

2. Install continuous cleat at location(s) as shown on the Drawings.

3. Secure in place using specified type fasteners as shown on the Drawings.

4. Section lengths shall be contained to 10’ lengths or less. Permit movement of metal by allowing 1” between section lengths and securing each length twice at its mid-point through the top surface into the substrate beneath.

5. The flashing shall be notched and lapped at inside corners and joints and seamed at outside corners.

6. Fit flashing tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.

7. Maintain lines of constant elevation around entire perimeter.

8. Where existing structural expansion joint intersects sheet metal work at hand, discontinue fascia at intersection and bridge joint with slipcover to match new sheet metal section profile.

--- END OF SECTION ---

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PART 1 – GENERAL

1.1 CONDITIONS OF THE CONTRACT

A. The Conditions of the Contract (General, Supplementary and Other Conditions) and the requirements of Division 1 are hereby made a part of this Section. Applicable provisions of Division 1 shall govern Work under this Section.

1.2 WORK INCLUDED

A. This Section includes all labor, materials and equipment necessary to perform the following Work:

   1. Removal of all existing caulking/sealant to be replaced.
   2. Preparation of all surfaces to receive new sealant work.
   3. Application of the joint waterproofing sealant.
   4. Clean up.

1.3 RELATED SECTIONS

A. Section 02070 - Demolition.

B. Section 07531 - Elastomeric Sheet Roofing - Fully Adhered

C. Section 07620 - Sheet Metal Flashing and Trim.

1.4 QUALITY ASSURANCE

A. The Manufacturer of the sealant system shall have a minimum of five (5) years experience in the manufacture of waterproof coatings and sealants.

1.5 SUBMITTALS

A. Manufacturer’s Literature: Submit two (2) complete sets of Manufacturer’s literature and technical data for the sealant system.

B. Contractor’s Certificate: Submit copies of “Licensed Applicator’s Certificate” issued by the Manufacturer.

C. A total of three (3) copies of each submittal is required, unless noted otherwise.
1.6 PRODUCT DELIVERY, HANDLING AND STORAGE

A. Delivery and Storage of Materials

1. Deliver all materials in their original unopened containers with all markings intact.

2. All materials must be stored in a dry place or otherwise protected from water or extreme humidities.

3. Stack material on pallets at least 4” above the ground and cover with a breathable covering, such as canvas.

4. Store sealants in the manner and temperature range recommended by the Manufacturer.

B. Handling Materials

1. Do not store or transport materials on the roof in a manner that may exceed the live load capacity of the deck system or the structure. The Engineer, during routine inspections, may make recommendations as to loading.

2. Do not transport materials over or store materials on a finished section without prior approval of Engineer.

1.7 ENVIRONMENTAL REQUIREMENTS

A. The Contractor shall follow the sealant Manufacturer’s recommendations with regard to surface preparation and to the various moisture and temperature limitations of the materials.

B. Install the sealant material under conditions where rain is not anticipated within eight hours of application and substrate surface temperatures are above 40°F and below 110°F.

1.8 GUARANTEES, WARRANTIES, CERTIFICATES

A. The sealant Manufacturer and the Contractor shall warrant the performance of the coating system for a period of five (5) years starting from the date of acceptance by the Engineer. Such warranty shall include material as well as labor for application. Damage and/or failure due to acts of God and vandalism, may be excluded from such warranty.

PART 2 – PRODUCTS

The Contractor is responsible for furnishing the following materials in the amount required for completion of the entire Project specified herein.
2.1 ACCEPTABLE MANUFACTURERS

A. Components of the materials as specified herein shall be products of a single approved Manufacturer or shall be approved by the Manufacturer as compatible with components produced by him and that such components shall be permissible for use under the terms of the warranty.

B. Provide products by Manufacturers specified herein which meet or exceed standards as set forth in this Section. No material specified or approved shall contain asbestos.

2.2 MATERIALS

A. Sealant: A hybrid multi-component chemically curing polyurethane joint sealant meeting the requirements of ASTM C920 Type M, Grade P, Class 25 Standards. Sealant material shall be polyurethane elastomer based, meeting or exceeding minimum physical properties as listed in Section 2.03, and capable of producing a seamless waterproof joint seal. Color shall be chosen to most closely match that of the adjacent concrete/masonry. OR non-staining and no-tack, soft type with high elongation properties and shall be so designated on the label by the Manufacturer such as “Sikaflex 1a” by SIKA Corp., “Sikaflex 2c NS/SL” by SIKA Corp., “Sonolastic NP1” by Sonneborn Building Products, “Dynatrol II” by Pecora Corp., or “Dimonic” by Tremco, Inc. Follow all Manufacturer’s previously submitted recommendations for type required at joints. Use non-sag at all joints. All sealants must take latex and oil base paint.

B. Joint Cleaning Compound: As recommended by the sealant Manufacturer for the joint surfaces to be cleaned.

C. Joint Primer/Sealer: As recommended by the sealant Manufacturer for the joint surface to be primed or sealed.

D. Bond Breaker Tape: Polyethylene tape or other plastic tape as recommended by the sealant Manufacturer to be applied to sealant-contact surfaces where bond to the substrate or joint filler must be avoided for proper performance of sealant. Provide self-adhesive tape where applicable.

E. Sealant Backer Rod: Compressible rod stock polyethylene foam, polyethylene jacketed and polyurethane foam or other flexible, permanent, durable non-absorptive material as recommended for the compatibility with sealant by the sealant Manufacturer; which will control the joint depth for sealant placement, break bond of sealant at bottom of joint, form optimum shape of sealant bead on back side, and provide a highly compressible backer to minimize the possibility of sealant extrusion when the joint is compressed. Backer rod shall be at least 1/2” larger than the width of the joint.

F. Pitch Pan Sealant: Two-part, self-leveling, Type 1, LP liquid polysulfide polymer sealant such as “LP Polysulfide Base Sealant” by Morton Thiokol, Inc. or approved equal.
G. Pitch Pan Grout: Non-shrink epoxy grout conforming to ASTM C827 such as “Five Star Epoxy Grout” by U. S. Grout Corporation or approved equal.

2.3 TYPICAL PERFORMANCE CHARACTERISTICS

A. T-S-00227E and 19-GP-24 test method:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesion-In-Peel Mortar</td>
<td>6.3 kg (14 lbs)</td>
</tr>
<tr>
<td>Adhesion-In-Peel Anodized</td>
<td>8.2 kg (18 lbs)</td>
</tr>
<tr>
<td>Adhesion-In-Peel Granite</td>
<td>7.3 kg (16 lbs)</td>
</tr>
<tr>
<td>Adhesion-In-Peel Minimum</td>
<td>2.26 kg (5 lbs)</td>
</tr>
<tr>
<td>Durability (Bond and Cohesion)</td>
<td>Passed (on mortar, granite and anodized aluminum at ± 25% movement)</td>
</tr>
<tr>
<td>Sagging</td>
<td>None up to 50°C (122°F)</td>
</tr>
<tr>
<td>Hardness</td>
<td>25 (Shore A) after 7 days at 24°C (75°F), plus 21 days at 70°C (158°F)</td>
</tr>
<tr>
<td>Percent Solids</td>
<td>96% after 7 days at 24°C (75°F), plus 21 days at 70°C (158°F)</td>
</tr>
<tr>
<td>Pot Life</td>
<td>Up to 7 hours at 24°C (75°F)</td>
</tr>
<tr>
<td>Tack-Free Time</td>
<td>Less than 72 hours at 24°C (75°F)</td>
</tr>
<tr>
<td>Low Temperature Flexibility</td>
<td>-54°C (-65°F)</td>
</tr>
<tr>
<td>Staining</td>
<td>None</td>
</tr>
</tbody>
</table>

B. Other Test Methods

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardness (ASTM D2240)</td>
<td>Average 35 (Shore A) after 5 years</td>
</tr>
<tr>
<td>Extension and Compression and Cycle TRC-ST/450</td>
<td>1/2” X 1/2” (12 mm X 12 mm) at 24°C (75°F) will withstand 100 cycles of 40% extension and 25% compression</td>
</tr>
<tr>
<td>Ultra-Violet Resistance TRC-ST/448</td>
<td>No adverse effects after 5 weeks’ exposure to 14-25 E-Viton of UV energy at 70°C (158°F)</td>
</tr>
<tr>
<td>Accelerated Aging ASTM E42, Method E</td>
<td>No adhesive or cohesive failure, nor significant changes at 8,000 hours</td>
</tr>
</tbody>
</table>
PART 3 – EXECUTION

3.1 EXAMINATION

A. The Contractor shall have the sole responsibility for the accuracy of all measurements and for the estimate of material quantities required and necessary to satisfy the requirements of these Specifications.

3.2 SEQUENCING/SCHEDULING

A. Remove only as much Work as can be restored to a weathertight condition each day or before showers commence.

B. All Work shall be completed each day on the section being worked on.

C. The Contractor shall not proceed with the Work until all unsatisfactory conditions detrimental to the proper and timely completion of the Work have been corrected.

3.3 SUBSTRATE PREPARATION

A. Remove all debris from working surfaces. Remove all loose materials including spalling concrete and old epoxy patches.

B. Thoroughly clean all surface areas involved to remove dirt, oils, grease, heavy laitance, for release agent, curing compound, and other contaminants, which would interfere with the application and performance of the sealant, in accordance with the Manufacturer’s recommendations.

C. Remove all foreign projections in the joint by grinding or other suitable methods.

3.4 SEALANT APPLICATION

A. All material shall be applied in strict accordance with the Manufacturer’s recommendations.

B. All surfaces to receive the sealant system shall be air-dried a minimum of 24 hours immediately prior to performing Work.

C. Where Manufacturer’s specifications are more stringent or require more material than specified herein, follow the Manufacturer’s specifications.

D. Concrete Primer

1. Apply the concrete primer at the rate of 225 square feet per gallon. Evenly apply two consecutive coats to the joint interface to produce a continuous film.

2. Allow the primer to dry for 45 minutes or until tack-free.
3. Do not apply more primer than can be coated over within 8 hours.

4. Do not apply primer to adjacent surfaces not scheduled for sealant to prevent staining.

E. Joint Backing

1. Joint backing shall be used to control the depth of joint to the recommended dimension.

2. Select a size, to allow for 25% minimum compression of the backing when inserted into the joint.

3. Where depth of joint will not permit use of joint backing, a bond-breaker tape must be installed to prevent three-sided adhesion.

F. Sealant

1. Mix according to Manufacturer’s detailed instructions.


3. Apply with conventional sealant equipment, filling joint completely.

G. Tooling

1. Immediately after application, tooling shall be employed to insure firm, full contact with the inner faces of the joint.

2. Dry tooling is preferred. Tooling agents can be used.

H. Pitch Pans

1. Fill pitch pans with non-shrink grout to a maximum depth of 3/4” below top of pan.

2. Install pourable, self-leveling sealant flush with top of pitch pan.

I. Cleaning

1. Remove immediately all excess sealant adjacent to the joint with “Xylol” or “Toluol” as work progresses.

2. Avoid staining of adjacent areas.

3. At the conclusion of the sealant Work, remove all tools, scaffolding, equipment, construction materials and construction debris from the site.

--- END OF SECTION ---

07900-6
PART 1 -- GENERAL

1.1 CONDITIONS OF THE CONTRACT

A. The conditions of the Contract (General, Supplementary and Other Conditions) and the requirements of Division 1 are hereby made a part of this Section. Applicable provisions of Division 1 shall govern Work under this Section.

1.2 WORK INCLUDED

A. This Section applies to interior storm water piping and the installation of new roof drains. The Work includes, but is not necessarily limited to, the furnishing and installing of all plumbing and roof drains as shown on the Drawings and specified herein. The following summary is included to indicate the main items and shall not be considered as all-inclusive. The Contractor shall be responsible for determining all items and quantities required.

1. Install new roof drains and overflow drains as shown on the Drawings.

2. Furnish and install conductor piping from new primary roof drain to existing building storm drainage system. At overflow drains furnish and install conductor piping from the roof drain directly to the building exterior as required by state and local plumbing codes and regulations. Coordinate all drain installation with a qualified plumber.

3. Furnish and install sleeves, inserts, anchorage and all items required for the installation and which are embedded in the work of other trades.

1.3 RELATED SECTIONS

A. Section 02070 - Demolition.

B. Section 07201 - Insulation.

C. Section 07531 - Elastomeric Sheet Roofing - Fully Adhered

D. Section 07620 - Sheet Metal Flashing and Trim.

E. Section 07900 - Sealants.

1.4 QUALITY ASSURANCE

A. Compliance with applicable portions of the National Standard Plumbing Code pertaining to materials, construction and installation of products.

B. Compliance with all State and Local plumbing codes and regulations applicable to the execution of this Specification.
C. Compliance with all applicable American National Standards Institute (ANSI) pertaining to products and installation.

1.5 STORAGE OF MATERIALS

A. Do not store pipe or fittings in direct sunlight for extended periods.

B. Store pipe in such a manner as to prevent sagging or bending.

C. Pipe shall be stored in area designated by the Owner and Engineer.

1.6 SUBMITTALS

A. Submit Manufacturer’s technical data for roof drains, storm water piping system, including joints, fittings, hangers, supports, anchors and associated accessories.

B. Submit Manufacturer’s installation instructions.

C. A total of three (3) copies of each submittal are required.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Provide products by Manufacturer, which meet or exceed standards as set forth in this Section.

B. All materials herein specified shall be new unless otherwise noted.

2.2 MATERIALS

A. Roof Drain: Four inch (4”) cast iron component assembly complete with dome, strainer deck clamp, flashing clamp and necessary hardware such as “Model RD-220” by Tech Specialties, or approved equal. Verify interior drain size prior to installation.

B. Pipe and Fittings: Polyvinyl Chloride (PVC) drainage pipe shall be 4” in diameter. PVC pipe and fittings shall meet requirements defined and described for Schedule 40, DWV pattern, ASTM Specifications D1785 and D1665 with ASTM D438 fittings with pattern conforming to ASTM D311. Pipe and fittings shall be made from virgin Type 1, Grade 1, or Type 1, Grade 2 polyvinyl chloride compounds, as defined and described in ASTM Specification D1784. Provide factory-fabricated pipe and fittings of type, class and pressure rating indicated for each service and pipe size. Where not otherwise indicated, comply with governing regulations and industry standards for selections, and with pipe Manufacturer’s recommendations.
C. Adapters/Connectors: Connection to Nonplastic Pipe - Only approved types of fittings and adapters, designed for the specific transition intended shall be used.

D. Solvent Cement: As recommended by the PVC pipe Manufacturer and shall meet the requirements of ASTM Specification D2564. Solvent shall be packaged in one-quart containers or smaller for field use. If thinning is required, use only the thinner supplied by the cement Manufacturer for the specific cement being thinned.

E. Hangers and Supports: Hangers shall be steel and finished with PVC coating. Hanger rods shall be prefinished and 3/8” diameter minimum. Hangers and pipe clamps shall not compress, distort, cut or abrade the piping and shall allow free movement of the pipe.

**PART 3 -- EXECUTION**

3.1 INSTALLATION

A. Install roof drains as indicated on the Drawings, Specifications and per Manufacturer’s recommendations. Drains shall be set true and level. Coordinate closely with the roofing Contractor to prevent damage to the roof system.

B. Connect storm piping and overflow drain piping to all new drains. All piping shall be pitched to drain at minimum slope of 1/4” per foot, unless noted otherwise on the Drawings. Run all piping parallel with building lines, unless shown otherwise on the Drawings. Align all piping components without strain. Do not bend or pull pipe into position after being solvent welded.

C. Cut pipe square with saws of pipe cutters designed specifically for this material. Protect pipe and fittings from serrated holding devices and abrasion. Remove all burrs, dust and moisture from surfaces to be cemented.

D. Joints shall be made as quickly as possible after application of cement. Pipe shall be inserted to the full depth of the socket. Remove excess solvent cement from the exterior of all joints with a clean, dry cloth. Allow 15 minutes for joints to develop good handling strength.

E. Cutting threads on PVC pipe or in fittings are not allowed. Molded threads or adapter fittings for transition to threaded construction is permitted.

F. Only approved thread tape or lubricant specifically designed for use with PVC shall be used. Conventional pipe thread compounds, putty linseed oil base products and unknown mixtures shall be avoided.

G. Where a threaded joint is made, obtain maximum hand tightening plus additional tightening with a strap wrench not to exceed one full turn.
H. Supports for all piping shall be at intervals of not more than 4’, at ends of branches and at change of direction or elevation. Supports shall allow free movement of piping to allow for thermal expansion and movement in all piping installations.

I. Provide plugs or caps for all openings during the construction phase. The temporary plug shall be plastic or equivalent.

3.2 TESTING

A. A water test shall be applied to the system either in its entirety or in sections. The piping shall be plugged and submitted to a 10’ head of water located at the highest point. Provide a separate standpipe above the highest point being tested or extend the system to obtain the required 10’ head of water. The water shall be kept for at least 30 minutes before the inspection starts.

B. Defective work or materials shall be replaced or repaired as necessary and retested. Repairs shall be made with new materials. No caulking of screwed joints or holes will be acceptable.

C. When freezing, temperatures prevent testing with water, the test shall be made with air. A pressure of 10 psi shall be applied and maintained for 15 minutes without loss of pressure. A mercury column gage shall be used to register air pressure.

--- END OF SECTION ---
Appendix 2 - Federal Non-Discrimination Requirements
Appendix 3 - Federal Wage Decision
APPENDIX # 1

931 EAST MAIN ROOF PROJECT

FEDERAL LABOR STANDARDS PROVISIONS
Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conforming under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination;
(2) The classification is utilized in the area by the construction industry; and
(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control number 1215-0140.)
(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)
(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part
of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract in the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract. HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof), records of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section l(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee’s social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(b) Each payroll submitted shall be accompanied by a “Statement of Compliance,” signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;
(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid no less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid no less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman’s hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withholds approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by
the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration . . . makes, utters or publishes any statement knowing the same to be false . . . shall be fined not more than $5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any compliant or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds $100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.
(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds $100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.
Use of Volunteers

24 CFR Part 70 implements section 955 of the National Affordable Housing Act which provides for an exemption from the requirement to pay prevailing wage rates for volunteers utilized on projects funded by the Community Development Block Grant programs.

Volunteers are defined as individuals who perform service for a public or private entity for civic, charitable, or humanitarian reasons, without promise, expectation, or receipt of compensation for services rendered, on a HUD-assisted or insured project which is subject to a requirement to pay prevailing wage rates. Individuals shall be considered volunteers only when their services are offered freely and without pressure and coercion, direct or implied from an employer.

An individual shall not be considered a volunteer if the individual is otherwise employed at anytime in the construction or maintenance work for which the individual volunteers.

24 CFR Part 70.4 has established procedures for implementing prevailing wage exemptions for volunteers. The procedures include:

a. Local or State agencies or private parties whose employees are otherwise subject to Davis-Bacon or HUD-determined prevailing wage rates which propose to use volunteers and wish to pay the volunteer's expenses, reasonable benefits, or nominal fees shall request a determination from HUD that these payments meet the criteria established by HUD. A written determination shall be provided to the requester by the Department within ten days of receipt by the Department of sufficient information to allow for the determination.

b. A determination under paragraph (a) shall not be construed in any way as limiting the use of bona fide volunteers on HUD-assisted construction, but rather is required to ensure that the Department performs its appropriate responsibilities under Reorganization Plan No. 14 of 1950 and related Department of Labor Regulations in title 29 CFR part 5, regarding the administration and enforcement of the Davis-Bacon and related Acts, and its responsibility for the administration and enforcement of HUD-determined or adopted wage rates in the operation of public housing assisted under the United States Housing Act of 1937.

c. For a project covered by prevailing wage rate requirements in which all the work is to be done by volunteers and there are no paid construction employees, the local or State funding agency (or, if none, the entity that employs the volunteers) shall record in the pertinent project file the name and address of the agency sponsoring the project, a description of the project (location, cost, nature of the work), and the number of volunteers and the hours of work they performed. The entity responsible for recording this information shall also provide a copy of this information to the City for forwarding to HUD.

d. For a project covered by prevailing wage rate requirements in which there is to be a mix of paid workers and volunteers, the local or State funding agency (or, if none, the entity responsible for generating certified payrolls) shall provide HUD the information in paragraph (c) of this section, along with the names of the volunteers.

e. Volunteers who receive no expenses, benefits or fees described in (b) and are otherwise bona fide shall be recorded as in (c) or (d).
APPENDIX # 2

931 EAST MAIN ROOF PROJECT

NON-DISCRIMINATION, EQUAL OPPORTUNITY AND FAIR HOUSING,
MINORITY/WOMEN BUSINESS ENTERPRISES,
NON-DISCRIMINATION ON THE BASIS OF DISABILITY, AND SECTION 3
REQUIREMENTS
EXHIBIT 9 (Federal Funds)

NON-DISCRIMINATION, EQUAL OPPORTUNITY AND FAIR HOUSING, MINORITY/WOMEN BUSINESS ENTERPRISES, NON-DISCRIMINATION ON THE BASIS OF DISABILITY, AND SECTION 3 REQUIREMENTS

Non-Discrimination

Consistent with Federal regulations and City ordinance, the Contractor may not, directly or through contractual licensing or other arrangements, take any of the following actions on the grounds of race, national origin or ancestry, citizenship status, color, religion or atheism, sex, age, handicap/disability, marital status, source of income, arrest record (limited to actions regarding employment or public accommodations but not applicable to actions regarding housing), conviction record (limited to actions regarding employment or public accommodations but not applicable to actions regarding housing), social security number (limited to actions regarding employment or public accommodations but not applicable to actions regarding housing), less than honorable discharge, physical appearance, sexual orientation, gender identity, genetic identity, political beliefs, familial status, student status, domestic partnership status, receipt of rental assistance, homelessness, unemployment status (limited to actions regarding employment but not applicable to actions regarding housing or public accommodations), credit history (limited to actions regarding employment but not applicable to actions regarding housing or public accommodations), status as a victim of domestic abuse, sexual assault or stalking, as defined in MGO 39.03:

1. Deny any individual any facilities, services, financial aid or other benefits provided under the program or activity;
2. Provide any facilities, services, financial aid or other benefits which are different, or are provided in a different form, from that provided to others under the program or activity;
3. Subject an individual to segregated or separate treatment in any facility, or in any matter of process related to receipt of any service or benefit under the program or activity;
4. Restrict an individual’s access to, or enjoyment of, any advantage or privilege enjoyed by others in connection with facilities, services, financial aid or other benefits under the program or activity;
5. Treat an individual differently from others in determining whether the individual satisfies any admission, enrollment, eligibility, membership, or other requirements or conditions which individuals must meet in order to be provided any facilities, services or other benefit provided under the program or activity;
6. Deny an individual an opportunity to participate in a program or activity as an employee;
7. Aid or otherwise perpetuate discrimination against an individual by providing Federal financial assistance to an agency, organization, or person that discriminates in providing any housing, aid, benefit, or service;
8. Otherwise limit an individual in the enjoyment of any right, privilege, advantage, or opportunity enjoyed by other individuals receiving the housing, aid, benefit, or service;
9. Use criteria or methods of administration that have the effect of subjecting persons to discrimination or have the effect of defeating or substantially impairing
accomplishment of the objectives of the program or activity with respect to persons who are members of the protected classes defined in MGO 39.03; or

10. Deny a person the opportunity to participate as a member of planning or advisory boards.

In determining the site or location of housing, accommodations, or facilities, the Contractor may not make selections that have the effect of excluding persons from, denying them the benefits of, or subjecting them to discrimination on the ground of race, national origin or ancestry, citizenship status, color, religion or atheism, sex, age, handicap/disability, marital status, source of income, arrest record (limited to actions regarding employment or public accommodations but not applicable to actions regarding housing), conviction record (limited to actions regarding employment or public accommodations but not applicable to actions regarding housing), social security number (limited to actions regarding employment or public accommodations but not applicable to actions regarding housing), less than honorable discharge, physical appearance, sexual orientation, gender identity, genetic identity, political beliefs, familial status, student status, domestic partnership status, receipt of rental assistance, homelessness, status as a victim of domestic abuse, sexual assault or stalking, as defined in MGO 39.03. The Contractor may not make selections that have the purpose or effect of defeating or substantially impairing the accomplishment of the objectives of Section 109 of Title I of the Housing and Community Development Act of 1974, 24 CFR part 6 and of this Attachment.

The Contractor may classify employees or applicants for employment, volunteers or applicants for volunteer service, applicants for or consumers of services, or applicants for board or committee membership in the Contractor's organization on the basis of membership in any of the protected classes defined in the MGO 39.03, only in those certain instances where such classification is a bona fide qualification reasonably necessary to the proper performance of the services contracted for.

**Equal Opportunity and Fair Housing**

Specifically, the Contractor hereby agrees to comply with the following as applicable:

1. The requirements of the Fair Housing Act (42 U.S.C. 3601-et seq) and implementing regulations at 24 CFR part 100; Executive Order 11063 (Equal Opportunity in Housing) and implementing regulations at 24 CFR part 107; and Title VI of the Civil Rights Act of 1964 (42 USC 2000d (Nondiscrimination in Federally Assisted Programs) and implementing regulations issued at 24 CFR part 1;

2. The prohibitions against discrimination on the basis of age under the Age Discrimination Act of 1975 (42 U.S.C. 6101-07) and implementing regulations at 24 CFR part 146, and the prohibitions against discrimination against handicapped individuals under section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and implementing regulations at 24 CFR part 8;

3. The requirements of Executive Order 11246 (Equal Employment Opportunity), as amended by Executive Order 13279 and 12086, and the implementing regulations issued at 41 CFR Chapter 60;

4. The requirements of City of Madison Equal Opportunities Ordinance 39.03; and

5. The requirements of City of Madison Landlord and Tenant Law, MGO Chapter 32, where appropriate.
Minority and Women Business Enterprises

Specifically, the Contractor hereby agrees to comply with the following as applicable:

1. The requirements of Executive Orders 11625 and 12432 (concerning Minority Business Enterprise), and 12138 (concerning Women's Business Enterprise), and of 24 CFR 85.36; and

   Accordingly, the Contractor hereby agrees to take affirmative steps to assure that women and minority businesses are utilized when possible as sources of supplies, equipment, construction and services. Affirmative steps shall include the following:
   a. Including qualified women's business enterprises and small and minority businesses on solicitation lists;
   b. Assuring that women's enterprises and small and minority businesses are solicited whenever they are potential sources;
   c. When economically feasible, dividing total requirements into smaller tasks or quantities so as to permit maximum participation by small and minority business, and women's business enterprises;
   d. Where the requirement permits, establishing delivery schedules which will encourage participation by women's business enterprises and small and minority business;
   e. Using the services and assistance of the Small Business Administration, and the U.S. Office of Minority Business Development Agency of the Department of Commerce; and
   f. If any subcontracts are to be let, requiring the prime Contractor to take the affirmative steps in a through e above.

For the purposes of these requirements, a Minority Business Enterprise (MBE) is defined as an enterprise that is at least 51 percent owned and controlled in its daily operation by members of the following groups: Black, Hispanic, Asian or Pacific Islander, American Indian, or Alaskan Natives. A Women Business Enterprise (WBE) is defined as an enterprise that is at least 51 percent owned and controlled in its daily operation by women. The City of Madison maintains an online directory of W/MBE businesses, which can be accessed at: http://www.cityofmadison.com/dcr/aaTBDir.cfm.

2. For CDBG funded Agreements, submit the CDBG Contractor, Subcontractor and Vendor Report Form to the CD Office on a quarterly or annual basis covering the period from October 1 to September 30 (Exhibit 9, Form A) by October 5th of each year. Exhibit 9, Form A can be accessed at: http://www.cityofmadison.com/cdbg/doc_library.html#Z

3. For HOME funded Agreements, submit the HOME Contractor and Subcontractor Report Form to the CD Office on an annual basis covering the period from January 1 to December 31 (Exhibit 9, Form B) with Project/Activity Completion Report for Housing Development Projects or by January 10th of each year for Subrecipient activities. Exhibit 9, Form B can be accessed at: http://www.cityofmadison.com/cdbg/doc_library.html#Z.
Nondiscrimination on Basis of Disability

Nondiscrimination Based on Disability. Contractor shall comply with Section 39.05, Madison General Ordinances, "Nondiscrimination Based on Disability in City-Assisted Programs and Activities." Under section 39.05(7) of the Madison General Ordinances, no City financial assistance shall be granted unless an Assurance of Compliance with Sec. 39.05 is provided by the applicant or recipient, prior to the granting of the City financial assistance.

Contractor hereby makes the following assurances: Contractor assures and certifies that it will comply with section 39.05 of the Madison General Ordinances, "Nondiscrimination Based on Disability in City Facilities and City-Assisted Programs and Activities," and agrees to ensure that any subcontractor who performs any part of this agreement complies with sec. 39.05, where applicable. This includes but is not limited to assuring compliance by the Contractor and any subcontractor, with section 39.05(4) of the Madison General Ordinances, "Discriminatory Actions Prohibited."

Contractor may not, in providing any aid, benefit or service, directly or through contractual, licensing or other arrangements, violate the prohibitions in Section 39.05(4), listed below:

Discriminatory Actions Prohibited: Contractor assures that, in providing any aid, benefit, or service, it shall not, directly or through contractual, licensing, or other arrangements, on the basis of disability:

1. Deny a qualified person with a disability the opportunity to participate in or benefit from the aid, benefit, or service;
2. Afford a qualified person with a disability an opportunity to participate in or benefit from the aid, benefit, or service, or the City facility, that is not equal to that afforded others;
3. Provide a qualified person with a disability with a City facility or an aid, benefit, or service that is not as effective as that provided to others;
4. Provide different or separate City facilities, or aid, benefits, or services to persons with a disability or to any class of persons with disabilities unless such action is necessary to provide qualified persons with a disability with City facilities, aid, benefits, or services that are as effective as those provided to others;
5. Aid or perpetuate discrimination against a qualified person with a disability by providing significant assistance to any agency, organization, or person that discriminates on the basis of disability in providing any aid, benefit, or service to beneficiaries of the recipient's program;
6. Deny a qualified person with a disability the opportunity to participate as a member of planning or advisory boards; or
7. Otherwise limit a qualified person with a disability in the enjoyment of any right, privilege, advantage, or opportunity enjoyed by others receiving an aid, benefit, or service from a recipient, or by others using City facilities.

Contractor shall post notices in an accessible format to applicants, beneficiaries, and other persons, describing the applicable provisions of Sec. 39.05 of the Madison General Ordinances, in the manner prescribed by section 711 of the Civil Rights Act of 1964 (42 USCA Sec 2000e-10).
A. Employment Provisions

1. No qualified individual with handicaps shall, solely on the basis of handicap, be subjected to discrimination in employment under any program or activity that receives Federal financial assistance from the Department.

2. A Contractor shall make reasonable accommodation to the known physical or mental limitations of an otherwise qualified applicant with handicaps or employee with handicaps, unless the Contractor can demonstrate that the accommodation would impose an undue hardship on the operation of its program.

3. A Contractor may not use any employment test or other selection criterion that screens out or tends to screen out individuals with handicaps or any class of individuals with handicaps unless the Contractor demonstrates that the test score, or other selection criteria, as used by the Contractor is job related for the position in question.

B. Accessibility

The Contractor agrees to comply with the provisions of local, State and Federal law regarding accessibility including, but not limited to the Rehabilitation Act, the Fair Housing Amendments Act, the Architectural Barriers Act, the Americans with Disabilities Act, Madison General Ordinance 39.05, the Wisconsin Open Housing Law and all applicable implementing regulations thereto. The primary provision of Section 504 of the Rehabilitation Act of 1973, as amended, requires the following:

1. **Existing facilities**
   
   A Contractor shall operate each program or activity receiving Federal financial assistance so that the program or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities. This paragraph does not:

   a. Necessarily require a Contractor to make each of its existing facilities accessible to and usable by individuals with disabilities;

   b. In the case of historic preservation programs or activities, require the Contractor to take any action that would result in a substantial impairment of significant historic features of a historic property; or

   c. Require a Contractor to take any action that it can demonstrate would result in a fundamental alteration in the nature of its program or activity or in undue financial and administrative burdens. If an action would result in such an alteration or such burdens, the Contractor shall take any action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits and services of the program or activity.

   d. A Contractor may comply with the requirements of this section in its programs and activities receiving Federal financial assistance through such means as redesign of equipment, location of programs or services to accessible facilities or accessible portions of facilities, assignment of aides to beneficiaries, home visits, the addition or redesign of equipment (e.g., appliances or furnishings) changes in management policies or procedures, acquisition or construction of additional facilities, or alterations to existing facilities on a selective basis, or any other methods that result in making its program or activity accessible to individuals with disabilities. A Contractor is not required to make structural changes to existing facilities where other methods are effective in achieving compliance with this section. In choosing among available methods for meeting the requirements of
this section, the Contractor shall give priority to those methods that offer programs and activities to qualified individuals with disabilities in the most integrated setting appropriate.

2. Non-Housing Facilities
   a. New construction - New non-housing facilities shall be designed and constructed to be readily accessible to and usable by individuals with disabilities.
   b. Alterations to facilities - Alterations to existing non-housing facilities shall, to the maximum extent feasible, be made to be readily accessible to and usable by individuals with disabilities. For purposes of this paragraph, the phrase "to the maximum extent feasible" shall not be interpreted as requiring that a Contractor make a non-housing facility, or element thereof, accessible if doing so would impose undue financial and administrative burdens on the operation of the Contractor's program or activity.

3. Housing Facilities
   In addition, where housing units are being constructed or renovated the following provisions apply in the appropriate situation:
   a. New Construction
      i. New multifamily housing projects (including public housing projects as required by 24 CFR 8.25) shall be designed and constructed to be readily accessible to and usable by individuals with disabilities.
      ii. Subject to paragraph (c) of this section, a minimum of five percent of the total dwelling units or at least one unit in a multifamily housing project, whichever is greater, shall be made accessible for persons with mobility impairments. A unit that is on an accessible route and is adaptable and otherwise in compliance with the standards set forth in 24 CFR 8.32 is accessible for purposes of this section. An additional two percent of the units (but not less than one unit) in such a project shall be accessible for persons with hearing or vision impairments. In addition, the entire project must comply with the design requirements of the Wisconsin Open Housing Law.
      iii. The City and HUD may prescribe a higher percentage or number than that prescribed in paragraph (2) of this section for any area upon request therefore by any affected Contractor or by any State or local government or agency thereof based upon demonstration to their reasonable satisfaction of a need for a higher percentage or number, based on census data or other available current data (including a currently effective Consolidated Plan), or in response to evidence of a need for a higher percentage or number received in any other manner. In reviewing such request or otherwise assessing the existence of such needs, HUD or the City shall take into account the expected needs of eligible persons with and without disabilities.
   b. Substantial Rehab
      If alterations are undertaken to a project (including a public housing project as required by 24 CFR 8.25(a)(2) that has 15 or more units and the cost of the alterations is 75 percent or more of the replacement cost of the completed facility, then the provisions of 24 CFR 8.22 shall apply. In addition, any project of 3 or more units, where more than 50% of the interior square footage is to be
remodeled, must comply in total with the design requirements of the Wisconsin Open Housing Law.

c. Other Rehab

i. Alterations to dwelling units in a multifamily housing project shall, to the maximum extent feasible, be made to be readily accessible to and usable by individuals with disabilities. If alterations of single elements or spaces of a dwelling unit, when considered together, amount to an alteration of a dwelling unit, the entire dwelling unit shall be made accessible. Once five percent of the dwelling units in a project are readily accessible to and usable by individuals with mobility impairments, then no additional elements of dwelling units, or entire dwelling units, are required to be accessible under this paragraph. Alterations to common areas or parts of facilities that affect accessibility of existing housing facilities shall, to the maximum extent feasible, be made to be accessible to and usable by individuals with disabilities. For purposes of this paragraph, the phrase to the maximum extent feasible shall not be interpreted as requiring that a Contractor make a dwelling unit, common area, facility or element thereof accessible if doing so would impose undue financial and administrative burdens on the operation of the multifamily housing project. In addition, any project of 3 or more units must comply with the design requirements of the Wisconsin Open Housing Law.

ii. The City and HUD may prescribe a higher percentage or number than that prescribed in paragraph a. above for any area upon request therefore by an affected Contractor or by any State or local government or agency thereof based upon demonstration to the reasonable satisfaction of HUD of a need for a higher percentage or number, based on census data or other available current data (including a currently effective Consolidated Plan), or in response to evidence of a need for a higher percentage or number received in any other manner. In reviewing such request or otherwise assessing the existence of such needs, HUD and the City shall take into account the expected needs of eligible persons with and without disabilities.

**Equal Opportunity for Businesses and Lower Income Persons**

(HUD Act of 1968 Section 3)

The purpose of Section 3 of the Housing and Urban Development Act of 1968, {12U.S.C.1701u}(section3} and implementing regulations at 24 C.F.R.135}, “is to ensure that employment and other economic opportunities generated by certain HUD financial assistance shall, to the greatest extent feasible, and consistent with existing Federal, State and local laws and regulations, be directed to low-and very low-income persons, particularly those who are recipients of government assistance for housing, and to business concerns which provide economic opportunities to low-and very low-income persons.”

**Section 3 Clause Requirement**

All Section 3 covered contracts (contracts to direct recipients of federal funds in excess of $200,000 for Section 3 covered projects, and subcontracts providing assistance for housing rehabilitation, housing construction, or other public construction projects in excess of $100,000) shall include the following clause (referred to as the Section 3 clause in 24 CFR 135.38):
A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

B. The parties to this contract will comply with HUD’s regulations in 24 CFR part 135, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

C. The contractor will send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers’ representative of the contractor’s commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

D. The contractor will include this Section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor’s obligations under 24 CFR part 135.

F. Noncompliance with HUD’s regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

Specifically, the Contractor hereby agrees to comply with the following as applicable:


2. Submit with this agreement Section 3 Project Implementation Plan (Local Jobs for Local People: Section 3: Policies, Procedures, and Plan Guidebook, Appendix D).
APPENDIX # 3

931 EAST MAIN ROOF PROJECT

FEDERAL WAGE DECISION

(REQUIRED MINIMUM LABOR WAGE RATES (AS OF AUGUST 13, 2018)
General Decision Number: WI180005 08/03/2018 WI5

Superseded General Decision Number: WI20170005

State: Wisconsin

Construction Type: Building

County: Dane County in Wisconsin.

BUILDING CONSTRUCTION PROJECTS (does not include residential construction consisting of single family homes and apartments up to and including 4 stories)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

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ASBE0205-001 06/01/2001

Asbestos Removal
worker/hazardous material handler
--- Includes preparation, wetting, stripping, removal, scraping, vacuuming, bagging and disposing of all insulation materials from mechanical systems, whether they contain asbestos or not.............. $ 17.90 4.45

BOIL0107-001 01/01/2017

https://www.wdol.gov/wdol/scafiles/davisbacon/WI5.dvb?v=5 8/13/2018
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<td>Tile Layer</td>
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<td><strong>CARPENTER</strong></td>
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<td>(Including Acoustical work and Drywall hanging; Excluding Batt Insulation)</td>
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<tr>
<td>CARPENTER &amp; SOFT FLOOR</td>
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<tr>
<td>LAYER</td>
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<td>MILLWRIGHT</td>
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<td>PILE DRIVERMAN</td>
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<td><strong>TELEDATA SYSTEM INSTALLER</strong></td>
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<td>Installer/Technician</td>
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<td>14.01</td>
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<td>Low voltage construction, installation, maintenance and removal of teledata facilities (voice, data, and video) including outside plant, telephone and data inside wire, interconnect, terminal equipment, central offices, PBX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated systems digital network).</td>
<td></td>
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<td><strong>ELEVATOR MECHANIC</strong></td>
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<td>$50.47</td>
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https://www.wdol.gov/wdol/scafiles/davisbacon/WI5.dvb?v=5 8/13/2018
FOOTNOTE:
PAID VACATION: Employer contributes 8% of basic hourly rate as vacation pay for employees with more than 5 years or more of service, and 6% for less than 5 years of service.

* ENGT0139-002 06/04/2018

<table>
<thead>
<tr>
<th>Rates</th>
<th>Fringes</th>
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<tr>
<td>OPERATOR: Power Equipment</td>
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<tr>
<td>Group 1:..........................$ 40.72</td>
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<td>Group 2:..........................$ 39.47</td>
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<td>Group 3:..........................$ 38.17</td>
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<td>Group 4:..........................$ 37.64</td>
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<td>Group 5:..........................$ 35.57</td>
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<tr>
<td>Group 6:..........................$ 34.04</td>
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HAZARDOUS WASTE PREMIUMS:
EPA Level "A" Protection: $3.00 per hour
EPA Level "B" Protection: $2.00 per hour
EPA Level "C" Protection: $1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of over 100 tons; Cranes, Tower Cranes, and Derricks with boom, leads and/or jib lengths 176 ft or longer.

GROUP 2: Backhoes (Excavators) weighing 130,000 lbs & over; Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or less; Cranes, Tower Cranes, and Derricks with boom, leads, and/or jib lengths 175 ft or less; Caisson Rigs; Pile Driver

GROUP 3: Backhoes (Excavators) weighing under 130,000 lbs; Travelling Crane (bridge type); Milling Machine; Concrete Paver over 27 E; Concrete Spreader and Distributor; Concrete Laser Screed; Concrete Grinder and Planing Machine; Slipform Curb and Gutter Machine; Boring Machine (Directional); Dredge Operator; Skid Rigs; Over 46 meter Concrete Pump.

GROUP 4: Hydraulic Backhoe (tractor or truck mounted); Hydraulic Crane, 10 tons or less; Tractor, Bulldozer, or End Loader (over 40 hp); Motor Patrol; Scraper Operator; Bituminous Plant and Paver Operator; Screed-Milling Machine; Roller over 5 tons; Concrete Pumps 46 meter & under; Grout Pumps; Rotec Type Machine; Hydro Blaster, 10,000 psi and over; Rotary Drill Operator; Percussion Drilling Machine; Air Track Drill with or without integral hammer; Blaster; Boring Machine (vertical or horizontal); Side Boom; Trencher, wheel type or chain type having 8 inch or larger bucket; Rail Leveling Machine (Railroad); Tie Placer; Tie Extractor; Tie Tamper; Stone Leveler; Straddle Carrier; Material Hoists; Stack Hoist; Man Hoists; Mechanic
and Welder; Off Road Material Haulers

GROUP 5: Tractor, Bulldozer, or Endloader (under 40 hp); Tamper; Compactors, riding type; Stump Chipper, large; Roller; Rubber Tread; Backfiller; Trencher, chain type (bucket under 8 inch); Concrete Auto Breaker, large; Concrete Finishing Machine (road type); Concrete Batch Hopper; Concrete Conveyor Systems; Concrete Mixers, 14S or over; Pumps, Screw Type and Gypsum; Hydrohammers, small; Brooms and Sweepers; Lift Slab Machine; Roller under 5 tons; Industrial Locomotives; Fireman (Pile Drivers and Derricks); Pumps (well points); Hoists, automatic; A-Frames and Winch Trucks; Hoists (tuggers); Boats (Tug, Safety, Work Barges and Launches); Assistant Engineer

GROUP 6: Shouldering Machine Operator; Farm or Industrial Tractor mounted equipment; Post Hole Digger; Auger (vertical and horizontal); Skid Steer Loader with or without attachments; Robotic Tool Carrier with or without attachments; Power Pack Vibratory/ULtra Sound Driver and Extractor; Fireman (Asphalt Plants); Screed Operator; Stone Crushers and Screening Plants; Air, Electric, Hydraulic Jacks (Slip Form); Prestress Machines; Air Compressor, 400 CFM or over; Refrigeration Plant/Freeze Machine; Boiler Operators (temporary heat); Forklifts; Welding Machines; Generators; Pumps over 3"; Compressors, under 400 CFM; Heaters, Mechanical; Combination small equipment operator; Winches, small electric; Oiler; Greaser; Rotary Drill Tender; Conveyor; Elevator Operator

IRON0383-002 06/01/2017

<table>
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<tr>
<th>Rates</th>
<th>Fringes</th>
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LAB00464-001 06/04/2018

<table>
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<tbody>
<tr>
<td>$28.13</td>
<td>17.20</td>
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Laborer, General $28.13 17.20
Laborer; Asbestos/hazardous material remover (Preparation, removal, and encapsulation of hazardous materials from non-mechanical systems) $25.88 17.20

PAIN0802-001 06/01/2017

<table>
<thead>
<tr>
<th>Rates</th>
<th>Fringes</th>
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<tbody>
<tr>
<td>$28.25</td>
<td>17.72</td>
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</tbody>
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PAINTER

Brush, Roller $28.25 17.72

PREMIUM RATES [Add to Basic Hourly Rate]

Swing Work $0.25
Drywall Taper $0.30
Paperhanger $0.40

https://www.wdol.gov/ wdol/ scfiles/ davisbacon/ W15.dvb?v=5 8/13/2018
Steel, Spray $1.00

PAIN0941-001 06/01/2017
Rates Fringes
GLAZIER ...................... $ 30.27 17.72
17.72
PLAS0599-001 06/01/2017
Rates Fringes
CEMENT MASON/CONCRETE FINISHER... $ 34.43 19.93
PLASTERER ................... $ 33.70 23.13
PLUM0075-007 06/01/2015
Rates Fringes
PLUMBER (Including HVAC work)... $ 38.82 20.12
PLUM0601-007 06/04/2017
Rates Fringes
PIPEFITTER (Including HVAC work) ...................... $ 47.08 20.89
SFWIO669-002 04/01/2016
Rates Fringes
SPRINKLER FITTER ................. $ 39.48 19.36
SHEE0018-009 06/01/2018
Rates Fringes
Sheet Metal Worker (Including HVAC Duct work and Technicians)... $ 38.00 28.09
TEAM0662-003 06/01/2018
Rates Fringes
TRUCK DRIVER
1 & 2 Axles ...................... $ 28.12 21.20
3 or more Axles ................ $ 28.27 21.20
SUWI2002-011 01/23/2002
Rates Fringes
Asbestos Worker/Heat and Frost Insulator ....... $ 25.36 8.37
Laborers:


8/13/2018
Concrete Worker $16.34 3.59
Landscape $8.73 4.90

ROOFER $18.01 3.28
Tile & Marble Finisher $13.89 7.58

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number,
005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling
On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party’s position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION
TO: All Bidders

FROM: SRI

DATE: July 28, 2018

1. General:

   The following change to the Project Specification and Design Drawings was made to accommodate a minor revision of the project scope

   Drawings:

   Contractor shall install 4 new overflow scuppers. Verify locations prior to installation.

   **Barrel Roof Area Only**

   Contractor shall provide and install a new vapor barrier membrane system over the existing wood roof deck as per the project specification and as listed below.

   1. Mechanically fasten a new ½” Polyisocyanurate Insulation Cover Board to the existing wood roof deck using a 1-90 wind uplift pattern. 12 fasteners per 4’ X 8’ rigid insulation board. Stagger insulation joints.
   2. Install a new peel and stick, self-adhered membrane vapor barrier atop the new ½” Polyisocyanurate Insulation Cover Board. Properly prime the surface of the cover board prior to installation.
   3. Install the subsequent layers of new insulation boards above the vapor barrier in spray foam adhesive in lieu of mechanically fastening.
TO: All Bidders

FROM: SRI

DATE: July 28, 2018

1. General:

The following change to the Project Specification and Design Drawings were made to accommodate a revision of the project scope.

A. Barrel Roof Area Only

Add a lump sum cost, line item on the Section 00400 Bid Form to provide and install a vapor barrier membrane system over the existing wood roof deck on the barrel roof area as specified below. (Do not include the total cost in with your base bid.)

1. Mechanically fasten a new ½” Polyisocyanurate Insulation Cover Board to the existing wood roof deck using a 1-90 wind uplift pattern. 12 fasteners per 4’ X 8’ rigid insulation board. Stagger insulation joints.

2. Install a new peel and stick, self-adhered membrane vapor barrier atop the new ½” Polyisocyanurate Insulation Cover Board. Properly prime the surface of the cover board prior to installation.

3. Install the subsequent layers of new insulation boards above the vapor barrier in spray foam adhesive in lieu of mechanically fastening.

B. Large Skylights

Skylight Flashing Detail 6/2, to read: New skylight curb as specified by the skylight manufacturer.

Design drawings, Revise Design Note #7, to read: Contractor shall remove and dispose of the existing skylights and curbs to the roof deck and install (3) new skylights and support curbs at each of the existing skylight locations. Contractor is responsible for all modifications and bracing supports associated with the work.

Skylight type and manufacturer: SunWave Daylighting System and Support Curbs, fixed skylight by Firestone Building Products.
TO: All Bidders

FROM: CWD

DATE: August 27, 2018

1. General:

The following change to the Project Specification and Design Drawings were made to accommodate a revision of the project scope.

**Design drawings:**

Remove and dispose of the existing clay tile coping and complete the parapet wall coping according to Detail 1/1 Parapet Flashing Detail, in lieu of Detail 2/1 Parapet Flashing Detail on the design drawings.

**Design Notes:**

**Note #8, to read:** Contractor shall supply and install (2) new interior roof drain assemblies. In lieu of (4).

**Note #6, Omit note #6:** Contractor shall provide and install a new Bilco Type S roof hatch, OSHA approved steel enclosed ladder and safety railing.