PROJECT MANUAL
FOR
DES MOINES PUBLIC SCHOOLS
McCORMBS MIDDLE SCHOOL
RE-ROOF PROJECT
201 COUNTY LINE ROAD
DES MOINES, IOWA 50320

BID # B8691

Owner
Des Moines Independent Community School District
2100 Fleur Drive
Des Moines, Iowa 50321

ARCHITECT
Angelo Architectural Associates, LLC
12314 Ridgeview Drive
Urbandale, Iowa 50323
Ph. 515-250-6950
E-mail: mthiessena1@mchsi.com
Angelo Job No. 2107
November 18, 2021
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<tr>
<td>A1.1</td>
<td>Roof Plan</td>
<td>November 18, 2021</td>
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<td>A2.1</td>
<td>Roof Details</td>
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<td>A2.3</td>
<td>Roof Details</td>
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END OF SECTION 00015
NOTICE IS HEREBY GIVEN: Sealed proposals will be received by the Purchasing Agent of the Des Moines Independent Community School District at his office, Des Moines Independent Community School District, 1917 Dean Avenue, Des Moines, Iowa 50316 until three o'clock p.m. on the 14th day of December 2021, for the construction/repair and/or installation of the following improvement(s):

Bid Number: B8691 McCombs Middle School – Re-Roof Project

Commencing November 18, 2021 copies of the plans and specifications for the Project are on file with and available from Beeline and Blue 2507 Ingersoll Avenue, Des Moines, Iowa 50312. Plans may also be inspected at the following locations: Construction Update Internet plan room; F. W. Dodge Corporation scan services; or at the school district’s facility management office 1917 Dean Avenue, Des Moines, Iowa 50316. Bids must be submitted on the approved bid form available in the plans and specifications. No oral, facsimile, telegraphic or telephonic bids or modifications will be considered.

Bidders will be required to provide a security deposit, in the form of an approved Bid Bond, cashiers or certified check, or certified share draft in the amount of five percent (5%) of the amount of each bid, in a separate attached envelope.

A Mandatory Pre-Bid Conference will be held at 3:00 PM, Thursday, December 2, 2021 at McCombs Middle School, 201 County Line Road, Des Moines, IA 50320. Meet at the main office entrance. Note: Mandatory Pre-Bid attendance is required by the Owner for all Contractors desiring to submit a bid for this project, by having a company representative attend this Pre-Bid Meeting. If any Contractor desiring to submit a bid and cannot attend the scheduled Pre-Bid meeting, they may call the Owner at 515-204-8764 and speak with Dave Breese about scheduling another time prior to the December 2, 2021 Pre-Bid meeting. No additional Pre-bid meetings will be scheduled after December 2, 2021.

Lump-sum bids will be received under one contract as described in the specifications. Bids will be opened and read aloud immediately after specified closing time for receiving bids. All interested parties are invited to attend.

Consideration of the bids received and the award of contract or other action may be made by the Board of Directors of the Des Moines Independent Community School District upon the proposals received in accordance with the law and the plans and specifications at its meeting to be held at 6:00 p.m. on February 1, 2022 in the District Board Room at 1800 Grand Avenue Des Moines Iowa or at any other published and/or posted location of the Board meeting.

The Board of Directors may make the award to the lowest responsive, responsible bidder meeting specifications. The right is reserved to reject any or all bids, or any part thereof, and to waive informalities, and to enter into such contract or contracts as shall be deemed in the best interests of the Des Moines Independent Community School District.

By virtue of statutory authority, a preference will be given to products and provisions grown and coal produced within the State of Iowa, and to Iowa domestic labor.

All bids will be governed by applicable provisions in the Iowa Code and Board Policies.

Secretary of the Board	Des Moines Independent Community School District

END OF SECTION 00030
PART 1 - GENERAL

Des Moines Independent Community School District, State of Iowa, hereinafter called the “Owner,” has advertised for bids to be submitted for the construction work specified in the advertisement. Proposals to be entitled to consideration shall be in accordance with the following:

1.1 DEFINITIONS

A. Bids are sums stipulated in Proposals for which Bidders propose to perform the Work.

B. Unit Prices are sums included in Proposals as Bids per unit measure of materials and/or services, as required in the Bidding Documents.

C. Proposals are complete, properly executed forms including all information requested by the Owner.

D. Bidders are qualified contractors who submit Proposals to the Owner for Work as Prime Contractors on the Project.

E. Alternate Prices are lump sum prices included in the Proposals for labor, materials and/or services that are not included in the base bid.

1.2 EXAMINATION OF SITE and DOCUMENTS

Each Bidder shall visit the site of the proposed work and shall completely inform himself relative to construction hazards, procedure, labor, and all other conditions and factors, local and otherwise, which would affect prosecution and completion of the work and its cost. All visits to the site shall be coordinated through the Owner’s Representative. Such considerations shall include, without limitations, the arrangement and condition of existing structures and facilities; the procedure necessary for maintenance of uninterrupted, safe operation, use and occupancy of existing facilities; the availability and cost of labor; and facilities for transportation, handling and storage of materials and equipment. All such factors shall be properly investigated and considered in the preparation of the bid. Each bidder shall so fully examine the plans and specifications and acquaint himself with their requirements and with the conditions surrounding the construction on the site that he shall be fully familiar with and informed of all facilities, difficulties, and problems associated with or which might be incurred in the prosecution of the work. In case of disagreement between drawings and specifications or within either document itself, the better quality or greater quantity of work shall be figured in the bid (see GC. 6.04). It shall be the responsibility of the Bidder to direct the attention of the Architect and Owner in writing and at least seventy-two (72) hours prior to the time set for the opening of the bids, any seeming inconsistencies, ambiguous requirements, omissions, or any other matter which seems to require explanation, and to request clarification. The submission of a bid shall be taken as prima facie evidence of compliance with this requirement and as an acknowledgment that the Bidder has received all the required documents and has visited the site. There will be no subsequent financial adjustment for lack of such prior information.

1.3. INTERPRETATION

No oral interpretations will be made by anyone to any Bidder as to the true meaning or requirements of any part of the drawings, specifications or other proposed Contract Documents. Every request for an interpretation shall be made in writing and addressed and forwarded to the Owner’s Representative not later than seven (7) calendar days before the date fixed for opening of bids. The person submitting the request shall be responsible for its prompt delivery. Every interpretation made to a Bidder will be in the form of an addendum to the Contract Documents, which, if issued, will be sent as promptly as is
practicable to all persons to whom the drawings, specifications, and other proposed Contract Documents have been issued. All such addenda shall become part of the Contract Documents and their receipt shall be acknowledged in the Bid Proposal. The Owner will not be responsible for any other explanations or interpretations of the proposed Contract Documents.

1.4 PROPOSAL FORMS

Proposal forms included in the specification may be copied and used for submitting proposals. Proposals shall be made upon the forms provided therefore. Refer to Document 00311 Proposal Form Instructions, and Document 00311 Proposal Form. Any Proposal NOT submitted on required forms may be rejected.

Attention is directed to the fact that the Contract Documents contain one complete set of bidding and contract forms; these are sample forms included for the information of Bidders. They are not to be detached from the Contract Documents, filled out or executed.

Special attention is directed to the Form of Bid Bond (Document 00410) included in the bidding documents. Additional copies of this form may be secured from the Owner’s Representative, but the use of this particular form is not mandatory. Any similar standard form of a recognized responsible surety which contains the same stipulations and guarantees, the same execution of the contract and indemnification of the Owner in case of default, will be acceptable.

1.5 PREPARATION OF PROPOSAL FORMS

All proposal forms must be prepared in single copy and in conformity with and be based upon and submitted subject to all requirements of the Contract Documents. They must be fully completed with all blanks appropriately filled in. Each bid shall be legibly written or printed in ink on the separate form provided. No alterations in bids, or in the printed forms therefore, by erasures, interpolations, or otherwise will be acceptable unless each such alteration is signed or initialed by the Bidder; if initialed, the Owner may require the Bidder to identify any alteration so initialed. No alteration in any bid, or in the form on which it is submitted, shall be made after the bid has been submitted.

It will be the Bidder’s responsibility to secure any and all addenda from the Architect. The Bidder will be required to acknowledge receipt of all addenda. Owner reserves the right to reject any bid which is received which has not been based upon all addenda issued by the Architect.

No Bidder may submit more than one bid. Multiple bids under different names will not be accepted from one firm or association.

The Bidder is required to bid on all alternates and complete all blanks on the bid form. If alternates are called for on a type or method of construction as to which the Bidder does not desire to bid, the Bidder shall insert the words “NO BID.” In case the Bidder desires to bid on an alternate, it shall set forth in the space provided therefore, the amount to be added or deducted from the base bid or in the event that the Bidder does not desire to make a change from the base bid, it shall so indicate by using the words “NO CHANGE.” In the selection of alternates, the Owner reserves the right to select or reject any or all alternates in the proposal if, in the judgment of the Board of Directors, or its designees, the best interest of the School District will be so served.

1.6 BID PERFORMANCE GUARANTIES

Bid security (single copy) in the form of a certified or cashier's check, certified share draft, money or surety bond in the amount of at least five (5%) percent of the bid price, payable without condition or qualification to Des Moines Independent Community School District, shall accompany each bid in the
OUTER envelope, as evidence of good faith and as a guarantee that if awarded the contract, the Bidder will execute the Contract and give bond as required. The Bidder assumes all responsibility for furnishing acceptable bid security.

Bid security in the form of a bond (see Document 00410) will be accepted only if from a regularly established firm licensed to write such surety in the State of Iowa.

The bid security of each unsuccessful Bidder will be returned when the Construction Agreement is fully executed. The bid security will be voided but retained by the Owner, if, after the Notice of Contract Award, the Bidder shall enter into a Contract and file a satisfactory performance bond, labor and material payment bond, and certificates of required insurance, all within ten (10) calendar days after the date such notice is given by the Owner. The bid security of the second and third lowest responsible Bidders may be retained for not to exceed forty-five (45) days after opening, pending the execution of the Construction Agreement and submission of bond by the successful Bidder.

This bid security may be retained by the Owner as liquidated damages, if the bid is accepted and a contract thereon is awarded but the successful Bidder fails to enter into a contract in the form prescribed with legally responsible sureties, within ten (10) calendar days after date of Notice of Contract Award is given by the Owner.

The Owner shall require the Bidder to whom a Contract is awarded to furnish to the Owner both Performance and Labor and Material Payment bonds in the amount of one hundred (100%) percent of the Contract price, covering the faithful performance of the Contract and the payment of all obligations arising thereunder, and the Bidder will further provide warranties as required by the specifications or General Conditions.

The bonds shall be executed on the forms included with the Contract Documents (forms shall not be removed from the Contract Documents; Bidders may use copies of the bond forms included in the specifications). Accompanying each bond form shall be a “Power of Attorney” authorizing the attorney in fact to bind the surety company and certified to include the date of the bond.

1.7 LIST OF SUBCONTRACTORS AND SUPPLIERS OF LABOR AND MATERIAL

The lowest bidder for each contract shall, within twenty-four (24) hours following the bid opening, provide the Owner with the signed List of Subcontractors and Suppliers of Labor and Material on the form provided in Section 00100 Instructions to Bidders. Subcontractor is any entity performing 1-1/2% or more of the contract value. The List shall detail the quotations used in the preparation of the bid and whose services are proposed to be used in construction of the project. The List must be complete showing all sections in the Construction Documents. Failure to submit the List may preclude the bid from further consideration by the Owner. The Owner reserves the right to either disclose or not disclose the List of the successful Bidder.

Each Bidder shall identify and fully disclose on the List all those subcontractors and suppliers proposed for the work with which the Bidder is connected either directly or indirectly as part owner, participant in profits and losses or in any other manner financially or economically.

1.8 BACKGROUND INFORMATION

The lowest bidder for each contract shall, within twenty-four (24) hours following the bid opening, provide the Owner with the Background Information included in Section 00100 Instructions to Bidders. The Contractor must complete and fully disclose all information requested in the Background
Information. Failure to submit the Background Information may preclude the bid from further consideration by the Owner.

The Owner may make such investigations as deemed necessary to determine the ability and qualification of the Bidder. Bidders shall submit within twenty-four (24) hours, if requested by the Owner, such evidence of the Bidder's competency and practical knowledge to do the particular work covered by his proposal and of the Bidder's financial responsibility, resources, experience, organization and equipment to complete the proposed work. Failure to comply with this requirement may result in the rejection of consideration of such bid.

In determining the Bidder’s qualifications, the following factors, among others, will be considered: work previously completed by the Bidder; the qualifications of the proposed subcontractors for their work; Bidder references; and whether the Bidder (a) maintains a permanent place of business; (b) has adequate plant and equipment to do the work properly and expeditiously; (c) has the financial resources to meet all obligations incident to the work; (d) has appropriate technical experience; and (e) has adequate, competent, experienced staff and supervisors who will be committed to the work until completion.

Each Bidder may be required to show that he has handled former work and that no just claims have been prosecuted or are pending against such work. No bid will be accepted from a Bidder who is engaged on any work which would impair his ability to perform or finance this work or other work in progress.

The Owner reserves the right to reject any bid if the Owner determines, in its sole and absolute discretion, that the Bidder is not properly qualified to carry out the obligations of the Contract and/or to complete the work contemplated by the contract. Conditional bids will not be accepted.

1.9 PERMITS AND FEES

The School District shall secure and pay for the general building permit. Trade contractors will be responsible to obtain and pay for their specialty permits. The Owner is exempt from paying certain fees and it will be the contractor’s responsibility to acquaint himself with the laws and regulations governing said fees. Attention is directed to the requirements of the General Conditions regarding obtaining permits. The contractor shall obtain and pay for all fees associated with work in the Department of Transportation right of way.

1.10 TAXES

Sales and use taxes shall be excluded from the bid for all items incorporated into the final project. The Owner will provide sales tax exemption certificates as appropriate. See section 00700 General Conditions paragraph 12.04 for additional requirements.

1.11 SIGNATURE OF BIDDERS

Each Bidder shall sign and notarize the bid form, on the last page of the form and the bid bond. If the Bidder is an individual, the Bidder must sign in individual capacity. Bids by partnerships shall be signed with the partnership name followed by the signature and designation of one of the partners or other authorized representative. Bids by corporations shall be signed with the name of the corporation followed by the signature and designation of the president or other person authorized to bind the corporation and attested to by the secretary with corporate seal (if available). Bids by joint ventures shall be signed by each participant in the joint venture or by an authorized agent of each participant. The names of all persons signing should also be typed or printed below the signature. A bid by a person who
affixes to his signature the word “president,” “secretary,” “agent,” or other designation without disclosing his principal may be held to be the bid of the individual signing. When requested by the Owner, evidence of the authority of the person signing shall be furnished.

1.12 SUBMISSION OF BIDS

Bid Documents shall be enclosed in two envelopes (OUTER and INNER), each of which shall be sealed and clearly labeled “BID DOCUMENTS” and identified with the description of the work to which the proposal applies; the name of the project; the name and address of the Bidder; and the time of opening bids; all in prominent lettering so as to guard against opening prior to the stipulated time. The INNER envelope shall include the form of proposal (Document 00311) and shall be marked “BID ENCLOSED”. The “OUTER envelope” shall include the Bid Bond (Document 00410), along with the INNER envelope. If the OUTER envelope does NOT include the required document, the INNER “BID ENCLOSED” envelope will NOT BE OPENED. No responsibility shall attach to any employee of the Owner for the premature opening of any bid not prominently identified. The Bidder shall be responsible for placing his firm name and the name and number, if applicable, of the project and the time of the bidding on the outside of such bid envelope.

The Bid Documents shall be submitted at the time and location as noted in the Invitation to Bid. Bids received after the specified time of closing will be returned unopened.

1.13 WITHDRAWAL OF BIDS

Any Bidder may withdraw his bid if written request for withdrawal signed in the same manner and by the same person who signed the Bid Form is received by the individual of the School District requesting the bids prior to the time established for the opening of the bids.

No Bidder may withdraw his bid for forty-five (45) days after the scheduled time set for the opening thereof, or before award of the Contract, unless said award is delayed for a period exceeding forty-five (45) calendar days.

1.14 MODIFICATIONS

No oral, telephonic, or telegraphic modifications will be considered.

1.15 ACCEPTANCE OF BIDS

The Owner reserves the right to accept the bid which in its judgment is the most responsive responsible and best bid or to reject any and all bids and alternatives and to waive or disregard irregularities or informalities in any bid as it may deem to be in the best interest of the School District. The Board of Directors or its designees may consider as irregular any bid on which there is an alteration of, or departure from, the bid form. All proposals received after the specified time of closing shall be returned unopened.

Final determination of compliance with specifications will rest with the Owner.

1.16 APPLICABLE LAWS AND REGULATIONS

Each Bidder shall familiarize himself with all state and local laws, codes, ordinances, and regulations which might in any manner affect the work to be done; the materials to be supplied; the taxes, permits and fees to be paid; or the labor to be employed in and about the work. Any claim of misunderstanding or ignorance on the part of any successful Bidder will not in any way excuse such Bidder from the necessity of full compliance with every such law, code, ordinance, or regulation. All state laws, codes and
regulations and local ordinances, which are applicable, shall be complied with including but not limited to those specified in these documents.

1.17 INSURANCE

Throughout the life of the contract, the Contractor will be required to carry the types and amounts of insurance named in the General Conditions.

1.18 CONTRACTOR’S LICENSE

Any successful Bidder may be required by the Owner to obtain the necessary and applicable Contractor’s License from all appropriate governmental authorities and if required, shall not allow any subcontractor to commence work on his subcontract until all similar provisions required of the subcontractor have been obtained and approved.

1.19 POST-BID INTERVIEWS

Bidders in contention for contract awards may be asked to attend Post-Bid Interviews, submit Post-Bid Submittals in rough draft for review. (See Document 00500.)
BACKGROUND INFORMATION

All questions must be answered, and the data given must be clear and comprehensive. If necessary, questions may be answered on separate attached sheets. The bidder may submit any additional information.

1. When Organized ________________________________________________

2. If Corporation, Where Incorporated ______________________________________

3. How many years have you been engaged in the contracting business under your present firm or trade name? ____________________________

4. List all of the surety/bonding companies you have utilized in the last five (5) years ________

5. Have you ever been declared in default under a performance bond in the last five (5) years? ________ If so, describe the circumstances and which surety/bonding company was involved. Include the name and contact person of the owner(s). ________

6. Have you ever been previously found to be a non-responsive or non-responsible bidder under Iowa Code Chapter 26, Iowa Code Section 73A or other applicable law or governing authority? __________ If yes, please describe the circumstances ________

7. List all the projects over one million dollars ($1,000,000) you are currently under contract for, including the contract value, the scheduled completion date, contact person and phone number. Also list any experience in school construction similar to this project of any value. ________

8. Are you currently being investigated for or previously been found to have violated in the last five years any of the following state or federal laws: Iowa Minimum Wage Act, Iowa Non-English Speaking Employees Act, Iowa Child Labor Act, Iowa Labor Commissioner’s Right to Inspect Premises, Iowa Compensation Insurance Act, Employment Security Act, Iowa Competition Act, Iowa Income, Corporate and Sales Tax Code, a ‘willful’ violation of the Iowa or Federal Occupational Safety and Health Act, Iowa Employee Registration Requirements, Iowa Hazardous Chemical Risks Act, Iowa Wage Payment Collection Act, Federal Income and Corporate Tax Code, The National Labor Relations Act, The Drug-Free Workplace Act, The Employee Retirement Insurance Security Act, The Fair Labor Standards Act) Yes __________ No __________ If yes, please explain: __________________________

______________________________
9. Do you currently have any legal action pending which could impact your ability to perform this Project? _______________ If yes, please explain: ____________________________________________

_____________________________________________________________________________

No actions will be made on the basis of answers to the above questions without an inquiry and an opportunity to be heard regarding the circumstances of the matters reported.

The undersigned hereby authorizes and requests any person, firm or corporation to furnish any credit history and financial condition or other information required by the District in verification of the recitals comprising this statement of Background Information. The undersigned further authorizes the District to conduct any and all necessary investigations of the undersigned’s federal and state Occupational Safety and Health Act (OSHA) Compliance, including access to State and Federal records.

I hereby certify that the above information is true and correct to the best of my knowledge and that the District may rely on the information provided.

THIS STATEMENT MUST BE NOTARIZED.

NAME OF CONTRACTOR: ___________________________________________________________

________________________________________
BY:

Signature

Title

__________________________
Type/Print Name

Date

STATE OF IOWA, _________________ COUNTY, ss:

Subscribed and sworn to before me by the said ______________________ on this ___ day of ___

____________________, 20___.

________________________________________

Notary Public in and for the State of Iowa
LIST OF SUBCONTRACTORS AND SUPPLIERS OF LABOR AND MATERIAL

PROJECT: __________________________

CONTRACTOR NAME: __________________________

Pursuant to the provisions set forth in the Instructions to Bidders, The General Conditions, and the Proposal Form, the above-named contractor hereby designates below the names and locations of the place of business of each subcontractor. District may request subcontractor license number.

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Comments: __________________________________________________________

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END OF DOCUMENT 00100
PART 1 - GENERAL

1.1 TIME OF COMPLETION

A. It is to be understood that time is of the essence for this Contract and the Contractor will be required to perform the Work within the allowable time set forth in the Contract. In this connection, attention is directed to the provisions of the General Conditions and Supplementary General Conditions, if any, relative to delays, extensions of time, and liquidated damages. The successful bidder/contractor shall, within ten (10) days after the Notice of Contract Award, prepare and submit for the Owner's approval, a Preliminary Construction Schedule. The schedule shall indicate the time of performance and the completion dates of the various portions of the Work, and the dates upon which the Owner may expect to be allowed to occupy all or portions of the Project.

B. The Owner and the Contractor shall agree mutually on any changes in either the schedule or the rate of performance of the Work which might either favorably or adversely affect such schedule dates. No additional compensation or fee shall be paid by the Owner, for any completion of all or any portions of the Work earlier than scheduled unless otherwise specifically noted in Bid Documents.

1.2 PRELIMINARY CONSTRUCTION SCHEDULE

A. The Preliminary Construction Schedule indicates planned Substantial Completion dates for significant activities during the construction period. Substantial Completion of an activity is considered to be when the work of subsequent activities can proceed in accordance with the Project Construction Schedule.

1.3 CONSTRUCTION PROGRESS SCHEDULE

A. A detailed Construction Progress Schedule shall be submitted by the Contractor prior to the submission of the first request for payment. No partial payment on account of work performed shall be made until such detailed Construction Progress Schedule has been approved by the Owner. Refer to Section 01310 for format requirements. Construction sequence or timing of schedules received from contractors may be adjusted in the Project Construction Progress Schedule by the Owner’s Representative to facilitate sequencing and coordination of the overall Project.

B. During the construction period the Contractor is required to regularly provide information and input on scheduling and coordination of his work. The Construction Progress Schedule will detail the Contractor's performance between Project milestone dates. Construction Progress Schedules will be required with each Contractor’s Application for Payment.

C. The mandatory Project milestones are listed in this section.

PROJECT MILESTONES

A. Project Release: November 18, 2021
B. Mandatory Pre-bid Meeting: December 2, 2021 @ 3:00 p.m.
C. Bids Due: December 14, 2022 @ 3:00 p.m.
D. Notice of Award: February 1, 2022
E. Submit Bonds & Insurance: February 16, 2022
F. Project Commencement: June 1 – 7, 2022
G. Substantial Completion: August 5, 2022
H. Final Completion: August 12, 2022

I. Final Project Closet Documentation: September 16, 2022

J. Definitions:
   1. Construction Start date: Established date on which the Contractor shall actively begin the Work on site to be completed under this contract. The construction start date may be amended to permit the Contractor to begin work sooner than established herein, upon approval of the Owner.

   2. Substantial Completion date: Established date on which the Work, or designated portion(s) thereof, has been sufficiently completed in accordance with the Contract Documents so as to permit the owner to safely and legally occupy or utilize the Work for its intended use, subject only to minor punch list items the absence of completion which does not interfere with the Owner’s intended use of the project.

   3. Final Completion date: Established date on which all outstanding items of the Work - including activities established in the Contract Documents, punch lists and established closeout documentation – have been fully executed and submitted to the Owner.

1.5 LIQUIDATED DAMAGES

A. Substantial Completion: The Owner and the Contractor agree that this Agreement shall not provide for the imposition of liquidated damages based on the date of Substantial Completion.

   1. The contractor understands that if the date of Substantial Completion established by this Agreement (as may be amended by subsequent approved changes) is not attained, the Owner will suffer damages which are difficult to determine and accurately specify. The contractor agrees that if the Date of Substantial Completion is not attained, the Contractor shall pay the Owner actual damages, as determined by actual Owner expenses, to provide for the Project’s intended purpose after the established date of Substantial Completion, up to the date of actual Substantial Completion.

B. Final Completion: The Owner and the Contractor agree that this agreement shall not provide for the imposition of liquidated damages based on the Date of Final Completion.

   1. The Owner, at its election, may choose to execute the completion of outstanding punch list items remaining after the established date of Final Completion. All costs incurred by the Owner for Work completed after the Final Completion date will be deducted from the final payment owed to the contractor.

1.6 PHASING PLAN

The following general phasing concept has been developed in order to provide the Contractor with an overall concept of how the phasing will be required for work on this Project. The District will work with the General Contractor, awarded the Project, to define the final detailed schedule of when work will occur.
GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL INCLUDE THE NECESSARY PROJECT MANAGEMENT, LABOR, OVERTIME OR DOUBLE SHIFT REQUIREMENTS TO MEET THE PROJECT’S SUBSTANTIAL COMPLETION DATE. WITHIN LIMITATIONS NOTED BELOW, THE BUILDING IS AVAILABLE 24/7.

General notes:

- There will be students, teachers and staff in the McCombs Middle School building and activities in areas of the building during the construction period. Contractor activities shall not restrict full use of the parking lots, playgrounds and building by the school and visitors except as agreed to by the Owner’s representative and the contractor.

- Work can be done on all days.

- All hauling of equipment and materials on and off the roof and site and debris removal must insure the safety of the students, staff and visitors. Station personnel at areas of conflict when material or equipment is transferred on and off site and roof.

- The contractor may utilize the school parking lot during the summer break as directed by owner.

- Work to be coordinated through the Owner’s representative.

- All existing utility and communication services and distribution systems shall remain active during this work. Should a system be affected due to this work, the contractor shall make any required repairs to the system affected. Systems to maintain include in part: heating and ventilating, plumbing, electrical, temperature controls, fire alarm, security, intercoms, data / communications, and clock systems.

- As required, temporary interior and exterior construction barriers shall be installed to separate the school and public from the work areas. Interior barriers required around all openings were capped mechanical are removed and new roof deck installed. All partitions shall be constructed per Section 01500. Maintain and remove the partitions when no longer required. Patch adjacent surfaces as required. Daily temporary interior barriers are required inside the building if dangerous work is going on directly above or adjacent to an exit. The barrier must be constructed that if this exit is required for a fire event the exit it is still possible to exit the building thru that exit. Remove the barriers when no longer required. Patch adjacent surfaces as required.

- Emergency exiting as required by the City of Des Moines code officials must be kept available while work continues for the renovation. The contractor shall phase the work around the exits to maintain a level unobstructed path of travel at all times to the public right of way.

- Close Out: Completion of Closeout Documents and punch list. – August 5, 2022 – August 12, 2022. All punch list work after shall occur after school hours after August 12, 2022.

- Contractor shall clean all areas of the building, furniture and furnishings of dust and other debris that is the result of their construction work at the end of the project suitable to the Owner.

END OF DOCUMENT 00210
PART 1 - GENERAL

1.1 INFORMATION AVAILABLE TO BIDDERS

The following reports are available to bidders for information:

A. Abatement report available by request. Abatement will be performed by owner.

B. The Contractor is hereby notified that some or all of the buildings covered by this Construction Agreement may contain lead-based paint. Some or all of the buildings covered by this Construction Agreement may be considered child occupied facilities as that term is used by the United States Environmental Protection Agency ("EPA") and the Iowa Department of Public Health ("IDPH"). Starting April 2010, federal and state law will require contractors that disturb lead-based paint in homes, child care facilities and schools, built before 1978 to be certified and follow specific practices to prevent lead contamination. Further information regarding these requirements is available on the Iowa Department of Public Health website.

The Contractor is solely and fully responsible for the compliance with all applicable law and regulations regarding lead-based paint, including but not limited to those of EPA, IDPH and OSHA.

1.2 USE OF INFORMATION

A. All these documents made available by the Owner are for information only and are not a warranty of existing conditions.

B. Bidders may purchase a copy at cost of reproduction.

C. The data contained in the above items have been utilized in the preparation of construction documents. The Contractor may rely on the accuracy of the technical data contained in the report, but not upon non-technical data, interpretations or opinions contained therein, or for the completeness thereof for the Contractor's purposes.

D. Except as indicated in the preceding paragraph, Contractor has full responsibility with respect to subsurface conditions at the site.

END OF DOCUMENT 00220
PART 1 - GENERAL

1.1 PROPOSAL FORMS

A. Bidders are required to use the Proposal Form provided in Document 00311 or submit bid on the DMPS electronic portal. Contact Mark Mattiussi or Sarah Holland, Senior Supply Chain Analyst of DMPS at 515-242-7649 to become registered to submit a bid electronically. Additional proposal forms may be copied from this manual or obtained from the Owner’s Representative.

PART 2 - PROPOSAL FORMAT

2.1 BID PROPOSALS

A. The Proposal consists of all the following required documents:
   1. Proposal Form (Document 00311) Inner Envelope.

B. Bid documents shall be enclosed in two envelopes (OUTER and INNER), each of which shall be sealed and clearly labeled “BID DOCUMENTS” and identified with the name and Bid Number of the project; the name and address of the Bidder; and the time or opening bids. The INNER envelope shall contain the Bid Proposal. The OUTER envelope shall contain the Bid Bond and INNER envelope. If all supporting documents are not included, the inner envelope will not be opened.

   All information shall be in prominent lettering so as to guard against opening prior to the stipulated time. No responsibility shall attach to any employee of the Owner for the premature opening of any bid not prominently identified. The Bidder shall be responsible for placing his firm name and number, if applicable, of the project and the time of the bidding on the outside of such bid envelope.

C. All spaces provided on the Proposal Forms shall be filled in. If any space provided is not utilized by the Bidder, that space shall be filled in with the notation "NA" (Not Applicable).

D. The Proposal Forms shall be typewritten or manually printed in ink.

E. Where indicated, all amounts shall be expressed in words and in figures. In case of discrepancy, the words shall govern.

F. Bidders shall not make unsolicited notations or statements on the Proposal Forms. Alteration of the Proposal Forms is not permitted and may result in the proposal being considered non-responsive.

G. The person who signs the Proposal shall initial all changes to and erasures of the Bidder’s entries on the Proposal Forms.

H. Each Proposal shall include the legal name of the Bidder and a statement regarding whether the Bidder is a sole proprietor, a partnership, a corporation, or other type of legal entity. Proposals submitted by corporations shall have the state of incorporation noted. Any Bid submitted by an agent shall have a current Power of Attorney attached, certifying the agent’s power to bind the Bidder.

PART 3 - COMPLETION OF PROPOSAL FORMS

3.1 PROPOSAL FORM (DOCUMENT 00311)

A. Submit only one Proposal Form. Copies of the Proposal Form may be made.
B. Fill in the numbers and dates of all Addenda received and considered in the Proposal. Proposals must include acknowledgement of all Addenda issued prior to the Bid Date.

C. Type or print the signer’s name and title in the spaces provided below the signature.

D. Date the Form in the spaces provided.

E. Place the Contractor's name at the bottom of each page in the space provided.

F. Have the Bid Proposal Notarized.

G. Completed Proposal form to be included in the INNER envelope.

3.2 TSB (Targeted Small Business Participation) FORM (DOCUMENT 00312)
Indicate participation on bid form. Low bidder to provide participation documents along with 24 HR information.

A. Program Description

1. In accordance with the Code of Iowa, Articles 73.15 through 73.21 and as amended by Sec. 223 of House File 479, the Board of Education of the Des Moines Independent Community School District seeks to provide opportunities for Iowa Targeted Small Businesses in the award of all contracts. The Certified Iowa Targeted Small Business participation target is ten percent (10%) of the base bid.

B. Definitions

1. Targeted Small Business (TSB) means a small business which is fifty-one percent or more owned, operated, and actively managed by one or more women or minority persons. Certified in the above context means the TSB has been certified by the Iowa Department of Inspections and Appeals. A complete listing of all certified TSB's may be secured from the Iowa Department of Economic Development (515) 242-4700.

2. Small business means any enterprise located in this state which is operated for profit under a single management, and which has an annual gross income of less than three million dollars computed as the average of the three preceding fiscal years.

3. Minority person(s) means an individual who is Black, Hispanic, Asian or Pacific Islander, American Indian or Alaskan native.

4. Actively managed means exercising the power to make policy decisions affecting the business.

5. Operated means actively involved in the day-to-day management of the business.

C. Performance and Payment Bond Waiver

1. If Contractor is a TSB, the contractor may be eligible to receive a waiver of the performance and payment bond requirements pursuant to the provisions of the Iowa Satisfaction and Performance Bond Program, Section 12.44 of the Code of Iowa.

2. Certification of eligibility to participate in the Iowa Satisfaction and Performance Bond Program is determined by the Iowa Department of Inspection and Appeals.
D. Documentation

To document that a good faith effort has been made to meet the TSB participation goal, each prime bidder shall submit with their bid an executed copy of this form, completely filled out. Make additional copies of the form as required.

E. Place the Contractor’s name at the bottom of each page in the space provided.

F. Date the Form in the spaces provided.

G. Completed TSB form Page 1 must be signed and notarized by the person signing the Proposal Form.

H. Completed TSB forms to be included with the 24 hour information.

3.3 NON-COLLUSION AFFIDAVIT (DOCUMENT 00313)

By signing bid form, bidder acknowledges non-collusion.

A. Submit the Non-Collusion Affidavit on the form provided. Copies may be made.

B. Type or print the signer’s name and title in the spaces provided.

C. Place the Contractor’s name at the bottom of the page in the space provided.

D. Have the Non-Collusion Affidavit Notarized.

E. Completed Non-Collusion Affidavit to be included by low bidder with the 24 HR. information.

3.4 BIDDERS STATUS FORM (DOCUMENT 00314)

Indicate on bid form, bidders residency status.

A. Submit the fully completed Bidders Status From on the form provided. Copies may be made.

B. Place the Contractor’s name at the bottom of the page in the space provided.

C. Sign and date the Form in the space provided.

D. Completed Bidders Status Form to be included by low bidder along with the 24 Hr. information.

3.5 SUBMISSION OF PROPOSALS

A. Bidders shall bear full responsibility for delivering Proposals to the location for receipt of Proposals by the time and date for receipt of Proposals.

B. Owner will not provide telephones for use by Bidders when preparing their bid.

C. Telephone, faxed or oral bids will not be accepted.

3.6 MODIFICATION OR WITHDRAWAL OF PROPOSALS

A. Any Bidder may withdraw his bid if written request for withdrawal signed in the same manner and by the same person who signed the Bid Form is received by the individual of the School District requesting the bids prior to the time established for the opening of the Bids.

B. No Bidder may withdraw his bid for forty-five (45) days after the scheduled time set for the opening thereof, or before award of the Contract, unless said award is delayed for a period exceeding forty-five (45) calendar days.
C. Proposals that are withdrawn may be resubmitted before the time and date designated for the receipt of Proposals.

D. No oral, telephonic, telegraphic or FAXED modifications will be considered.

END OF DOCUMENT 00310
Members of the Board:

The undersigned has carefully examined the site, the proposed Contract Documents prepared by Studio Melee pertinent to the construction of the above referenced Project. Further, being familiar with all other conditions affecting the Work, the undersigned hereby proposes and agrees to furnish and provide all labor, materials, supervision, transportation, tools, equipment, services and other facilities necessary and required for the expeditious completion of the Work indicated above in strict conformity with said conditions and Contract Documents.

The undersigned has reviewed the work outlined in the Bidding Documents and fully understands the scope of work required in this Proposal. The undersigned acknowledges that the Proposal includes the work of all trades required for the work and understands the Owner Representative function as described in the Contract Documents. The undersigned understands that each bidder who is awarded a Contract shall be in fact a Prime Contractor, not a Subcontractor to the Des Moines Independent Community School District. The undersigned agrees that the proposal, if accepted by the Owner, will be the basis for a contract with the Owner to enter into such a contract in accordance with the intent of the Contract Documents.

The undersigned agrees to complete the work required, within the time indicated in the Contract Documents, subject to Liquidated Damages as specified in Documents 00210 and 00700.

The undersigned acknowledges the Iowa - Targeted Small Business program and actively pursued participation (document 00312). Yes ___ No ___ Low bidder to submit completed form with 24 HR. information.

The undersigned certifies that bidder has read and adheres to the terms of the Non-Collusion Affidavit (document 00313). Low bidder to submit completed form with 24 HR. information.

The undersigned has completed the Bidders Status worksheet (document 00314) and certifies the firm to be an Iowa:

Resident Bidder _____ Non-resident Bidder _____ Low bidder to submit completed form with 24 HR. information.

Enclosed in a separate envelope is a Bid Security for five percent (5%) of the amount of the Base Bid, made payable to the order of Des Moines Independent Community School District. It is to be left in escrow with the Owner as a guarantee that the undersigned will enter into a Contract and will furnish the specified insurance and bonds. The undersigned has notified the Owner Representative of any discrepancies or omissions, or of any doubt about the meaning of any of the Contract Documents, and has contacted the Owner Representative before bid date to verify the issuing of any clarifying Addenda.
The undersigned further acknowledges receipt of the following Addenda:

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<th>NO.</th>
<th>DATE</th>
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A CONTRACTOR CAN BE BID THE BASE BID (VENTED ROOF SYSTEM) OR THE ALTERNATE #1 (FULLY ADHERED ROOF SYSTEM), WHICH EVERY THEY DESIRE, IF THEY APPROVED BY THE ROOF MANUFACTURER TO INSTALL THE RELATED ROOF SYSTEM. IF CONTRACTOR IS APPROVED TO INSTALL BOTH OF THE SPECIFIED ROOF SYSTEMS BY THE RELATED ROOF MANUFACTURER, THE CONTRACTOR CAN BID BOTH THE BASE BID AND THE ALTERNATE #1. THE OWNER HAS NOT DETERMINED WHICH ROOF SYSTEM THE WILL SELECT. THEY WILL ANALZE THE BIDS AND MAKE A DECISION ON WHICH SYSTEM AND BID THEY WILL SELECT.

THE PRICE LISTED ON THE FORM BELOW FOR THE BASE BID OR ALTERNATE #1 SHALL BE THE COMPLETE PRICE FOR EITHER THE BASE BID OR ALTERNATE #1. NEITHER PRICE SHALL RELATE TO THE OTHER PRICE.

BASE BID - **BID NO. B8691**  DMPS – McCOMBS MIDDLE SCHOOL – RE_ROOF PROJECT.

The undersigned proposes to provide and construct the Work required, in accordance with said Contract Documents. State the amount for All the Materials and Labor to install a New VENTED TPO Roof System for required Roof Areas for the McCombs Middle School – Re-Roof Project as shown on Drawings & Specs:

the BASE BID lump sum price of:__________________________ Dollars

($__________________________), EXCLUDING ALL SALES TAXES. (Amount shall be shown in both words and figures. In case of discrepancy, the amount shown in words shall govern).

SCHEDULE OF ALTERNATES:

A. Alternate Bid No 1:  The undersigned proposes to provide and construct the Work required, in accordance with said Contract Documents. State the amount for All the Materials and Labor to install a New FULLY ADHERED TPO Roof System for required Roof Areas for the McCombs Middle School – Re-Roof Project as shown on Drawings & Specs:

the ALTERNATE BID #1 lump sum price of:__________________________ Dollars

($__________________________), EXCLUDING ALL SALES TAXES. (Amount shall be shown in both words and figures. In case of discrepancy, the amount shown in words shall govern).

Contractor Name

PROPOSAL FORM TO BE SUBMITTED IN INNER ENVELOPE
The following unit prices shall prevail should it become necessary to change quantities of work items from those as specified or as shown on the drawings. Price quoted shall include full compensation for labor, materials, tools, equipment, and incidentals required for a complete installation:

UNIT PRICE #1: Remove Wet Roof System per Square Foot: State the amount per square foot for removing and disposing of any wet 4” +/- thick tapered polyisocyanurate insulation, wet 3/4” perlite board, and associated Modified Bitumen Roof Membrane System above wet insulation that is not identified in Base Bid or Alternate Bids to be remove and replaced with mechanically attached with two or more new matching layers of tapered paper faced polyisocyanurate insulation and 60 mil TPO roof membrane sealed air tight to existing Bitumen Roof Membrane. The new roof replacement insulation shall match the existing roof insulation thickness and slope and be secured the existing roof deck for 90 mph wind warranty. Note, this Unit Price will be used to add or subtract wet roof system areas from the base or alternate bid of wet roof system area not shown on the drawings.

Cost per Square Foot_________________________________________Dollars ($__________________)

LIST OF SUBCONTRACTORS AND SUPPLIERS OF LABOR AND MATERIAL

The lowest bidder for each contract shall, within twenty-four (24) hours following the bid opening, provide the Owner with the List of Subcontractors and Suppliers of Labor and Material. Subcontractor is any entity performing 1-1/2% or more of the contract value. The List shall detail the quotations used in the preparation of the bid and whose services are proposed to be used in construction of the project. The List must be complete showing all sections in the Construction Documents. Failure to submit the List may preclude the bid from further consideration by the Owner. The Owner reserves the right to either disclose or not disclose the List of the successful Bidder.

Each Bidder shall identify and fully disclose on the List all those subcontractors and suppliers proposed for the work with which the Bidder is connected either directly or indirectly as part owner, participant in profits and losses or in any other manner financially or economically.

The forms for the List of Subcontractors and Suppliers of Labor and Materials are included in the Instruction to Bidders, Section 00100.

AGREEMENT

It is understood and agreed that if written notice of the Owner's acceptance of this proposal is mailed, telegraphed, or delivered to the undersigned after the opening of the bid, and within forty-five (45) days, or at any time thereafter before this bid is withdrawn, the undersigned will execute and deliver to the Owner an Agreement in accordance with the bid as accepted. The undersigned will also furnish and deliver to the Owner the Payment Bond, Performance Bond and Certificate of Insurance as specified in the Contract Documents, all within ten (10) working days after receipt of Notice of Contract Award. The work under the Contract shall be commenced by the undersigned bidder, if awarded the Contract, on the date to be stated in a Notice to Proceed, issued to the Contractor and shall be completed by the Contractor in the time

_________________________
Contractor Name

PROPOSAL FORM TO BE SUBMITTED IN INNER ENVELOPE
specified in the Contract Documents. In the event the bidder to whom an award is made fails or refuses to execute the Contract within the specified time frame; the Owner may declare the bidder’s bid security forfeited as damages caused by the failure of the bidder to enter into the Contract.

If this proposal is determined to be (preliminarily) the lowest responsible bid, the undersigned shall submit a listing of subcontractors and major materials suppliers in accordance with G.C. – 27.00 and the Instructions to Bidders within 24 hours of being notified of such finding by the Owner Representative.

The undersigned acknowledges the fact that the Owner reserves the right to accept or reject any and all proposals, to waive any informalities in receipt of this proposal, with or without cause or reason, and award the Contract on the basis stated in the Instructions to Bidders.

NOTE: If bidder is a corporation, the legal name of the corporation shall be set forth below, together with the signatures of authorized officers or agents. If bidder is a partnership, the true name of the firm shall be set forth below together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership. If bidder is an individual, his signature shall be placed below.

SUBMITTED BY: ___________________________________________________________

Name of Bidder

Address: ________________________________________________________________

Phone #: __________________________ Fax #: __________________________

Contractors, License No.: __________________________ Signature

License Expiration Date: __________________________ Position

If Corporation: State of Incorporation: __________________________

AFFIX CORPORATE SEAL HERE ➔

(IF APPLICABLE)

THIS STATEMENT MUST BE NOTARIZED.

STATE OF IOWA, ________________ COUNTY, ss:

Subscribed and sworn to before me by the said ________________ on this ____
______day of ________________, 202 __.

____________________________________
Notary Public in and for the State of Iowa

END OF DOCUMENT 00311
If bidder is awarded the contract for this project, the bidder proposes for owner approval the award of a subcontract to the following certified Iowa TSB's:

(if more room is needed, supply same information on second sheet and attach to this form)

<table>
<thead>
<tr>
<th>TSB Company Name</th>
<th>Address</th>
<th>Description of Work</th>
<th>Dollar Amount</th>
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<tbody>
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<td>1.</td>
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</table>

Bidder's Company Name

Bidder's Company Address

Bidder's Telephone No.

Signature (Same person who signs proposal)

Title

Type/Print Name

Date

THIS STATEMENT MUST BE NOTARIZED.

STATE OF ________________ COUNTY, ss:

Subscribed and sworn to before me by the said ________________________________ on this __________ day of __________________, 202__.

__________________________________________
Notary Public in and for the State of __________

__________________________________________
Contractor Name

Low bidder to submit form with 24 HR information
Bidders to supply all the following information

Bidder is _____ / is not _____ a certified Iowa Targeted Small Business, (TSB).

If bidder did not contact any certified Targeted Small Businesses, then state why:

The following TSB's were contacted and declined to participate:

(If more room is needed, supply same information on second sheet and attach to this form)

1. ______________________________________________________________________

TSB Company Name

Address

Contact Name

Date Contacted

Telephone No.

Reason given for declining participation

2. ______________________________________________________________________

TSB Company Name

Address

Contact Name

Date Contacted

Telephone No.

Reason given for declining participation

3. ______________________________________________________________________

TSB Company Name

Address

Contact Name

Date Contacted

Telephone No.

Reason given for declining participation

4. ______________________________________________________________________

TSB Company Name

Address

Contact Name

Date Contacted

Telephone No.

Reason given for declining participation

Low bidder to submit form with 24 HR information

Contractor Name
NON-COLLUSION AFFIDAVIT

The Contractor and/or the sub-contractors, as applicable, shall provide this affidavit:

NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID IN OUTER ENVELOPE.

State of Iowa )
               ) ss.
County of Polk )

________________________             being first duly sworn, deposes and says that he or she

(Name)

is ______________________________ of ___________________________________,

>Title) (Contractor)

the party making the foregoing bid that the bid is not made in the interest of, or on the behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereto to effectuate a collusive or sham bid."

The undersigned certifies under penalty of perjury that the foregoing is true and correct;

THIS STATEMENT MUST BE NOTARIZED.

NAME OF CONTRACTOR: ________________________________________________________________

BY: ________________________________________________________________________________

Signature                                                                                     Title

_____________________________________________________________________________________

Type/Print Name                                                                                   Date

STATE OF ____________________________ COUNTY, ss:

Subscribed and sworn to before me by the said ________________________________ on this ______
____ day of __________________, 202__.

__________________________________________

Notary Public in and for the State of __________________________

LOW BIDDER TO SUBMIT FORM WITH 24 HR INFORMATION

__________________________

Contractor Name
Bidder Status Form

To be completed by all bidders

Part A

Please answer “Yes” or “No” for each of the following:

- Yes ☐ No ☐ My company is authorized to transact business in Iowa.
  (To help you determine if your company is authorized, please review the worksheet on the next page).

- Yes ☐ No ☐ My company has an office to transact business in Iowa.

- Yes ☐ No ☐ My company’s office in Iowa is suitable for more than receiving mail, telephone calls, and e-mail.

- Yes ☐ No ☐ My company has been conducting business in Iowa for at least 3 years prior to the first request for bids on this project.

- Yes ☐ No ☐ My company is not a subsidiary of another business entity or my company is a subsidiary of another business entity that would qualify as a resident bidder in Iowa.

If you answered “Yes” for each question above, your company qualifies as a resident bidder. Please complete Parts B and D of this form.

If you answered “No” to one or more questions above, your company is a nonresident bidder. Please complete Parts C and D of this form.

To be completed by resident bidders

Part B

My company has maintained offices in Iowa during the past 3 years at the following addresses:

<table>
<thead>
<tr>
<th>Dates</th>
<th>Address</th>
<th>City, State, Zip</th>
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You may attach additional sheet(s) if needed.

To be completed by non-resident bidders

Part C

1. Name of home state or foreign country reported to the Iowa Secretary of State:

2. Does your company's home state or foreign country offer preferences to resident bidders, resident labor force preferences or any other type of preference to bidders or laborers? ☐ Yes ☐ No

3. If you answered “Yes” to question 2, identify each preference offered by your company's home state or foreign country and the appropriate legal citation.

You may attach additional sheet(s) if needed.

To be completed by all bidders

Part D

I certify that the statements made on this document are true and complete to the best of my knowledge and I know that my failure to provide accurate and truthful information may be a reason to reject my bid.

Firm Name: ________________________________

Signature: ________________________________ Date: ________________________________

You must submit the completed form to the governmental body requesting bids per 875 Iowa Administrative Code Chapter 156. This form has been approved by the Iowa Labor Commissioner.

209-6601 (09-15)
Worksheet: Authorization to Transact Business

This worksheet may be used to help complete Part A of the Resident Bidder Status form. If at least one of the following describes your business, you are authorized to transact business in Iowa.

☐ Yes ☐ No  My business is currently registered as a contractor with the Iowa Division of Labor.

☐ Yes ☐ No  My business is a sole proprietorship and I am an Iowa resident for Iowa income tax purposes.

☐ Yes ☐ No  My business is a general partnership or joint venture. More than 50 percent of the general partners or joint venture parties are residents of Iowa for Iowa income tax purposes.

☐ Yes ☐ No  My business is an active corporation with the Iowa Secretary of State and has paid all fees required by the Secretary of State, has filed its most recent biennial report, and has not filed articles of dissolution.

☐ Yes ☐ No  My business is a corporation whose articles of incorporation are filed in a state other than Iowa, the corporation has received a certificate of authority from the Iowa secretary of state, has filed its most recent biennial report with the secretary of state, and has neither received a certificate of withdrawal from the secretary of state nor had its authority revoked.

☐ Yes ☐ No  My business is a limited liability partnership which has filed a statement of qualification in this state and the statement has not been canceled.

☐ Yes ☐ No  My business is a limited liability partnership which has filed a statement of qualification in a state other than Iowa, has filed a statement of foreign qualification in Iowa and a statement of cancellation has not been filed.

☐ Yes ☐ No  My business is a limited partnership or limited liability limited partnership which has filed a certificate of limited partnership in this state, and has not filed a statement of termination.

☐ Yes ☐ No  My business is a limited partnership or a limited liability limited partnership whose certificate of limited partnership is filed in a state other than Iowa, the limited partnership or limited liability limited partnership has received notification from the Iowa secretary of state that the application for certificate of authority has been approved and no notice of cancellation has been filed by the limited partnership or the limited liability limited partnership.

☐ Yes ☐ No  My business is a limited liability company whose certificate of organization is filed in Iowa and has not filed a statement of termination.

☐ Yes ☐ No  My business is a limited liability company whose certificate of organization is filed in a state other than Iowa, has received a certificate of authority to transact business in Iowa and the certificate has not been revoked or canceled.

Low Bidder to submit form with 24 HR information.
Acknowledgment & Certification

The Company is providing services to the Des Moines Independent Community School District ("District") as a Contractor, vendor, supplier, provider or sub-provider and/or is operating or managing the operations of a Contractor, vendor, supplier or provider. The services provided by the Company may involve the presence of the Company’s employees upon the real property of the District.

The Company acknowledges that Iowa law prohibits a sex offender who has been convicted of a sex offense against a minor from being present upon the real property of the District. The Company further acknowledges that, pursuant to Iowa law, a sex offender who has been convicted of a sex offense against a minor shall not operate, manage, be employed by, or act as a Contractor or volunteer at the District.

The company hereby certifies that no one who is an owner, operator or manager of the Company has been convicted of a sex offense against a minor. The Company further certifies and agrees that it shall not permit any person who is a sex offender convicted of a sex offense against a minor to provide any services to the District in accordance with the prohibitions set forth above.

The Company further certifies that the Company has completed a satisfactory background check on the Company’s employees. The Company hereby agrees to provide the District with the Company’s background screening procedures including specific context and infractions that are reviewed by the Company. The District reserves the right to, but does not have the obligation to, conduct a District background check on Company employees as determined by the District in its sole discretion. The District reserves the right to restrict access of any Company employee upon the real property of the District if such employee does not clear the District’s background check.

The District reserves the right, but does not have the obligation to, to audit the Company’s background screening program at any time, whether announced or unannounced. The Company hereby agrees that the Company shall, upon request, permit an authorized District representative to review background screening records, including those of individual Company employees, in order to conduct a compliance review, audit or investigation, to the fullest extent permitted by law.

The Company shall ensure that the provisions of this Acknowledgment and Certification are extended to any and all subcontractors, consultants, or others the Company may engage if such engagement involves their presence upon the real property of the District.

The Company understands and agrees that violation of any of the provisions of this Acknowledgment and Certification shall constitute sufficient grounds for termination of any contract or subcontract without damages or penalty to the District.

This Acknowledgment and Certification is to be construed under the laws of the State of Iowa. If any portion hereof is held invalid, the balance of the document shall, notwithstanding, continue in full legal force and effect.

In signing this Acknowledgment and Certification, the person signing on behalf of the Company hereby acknowledges that he/she has read this entire document that he/she understands its terms, and that he/she not only has the authority to sign the document on behalf of the Company, but has signed it knowingly and voluntarily.
Signed: _________________________________

Print Name: _______________________________

Title: __________________________________

Date: ___________________________________
Draft Policy Regarding Background Checks of Applicants for Employment

The Des Moines Independent Community School District’s primary function is the education and care of the District’s students. The District considers student safety and well-being to be of paramount importance. Because of the requirements of Iowa law, and in order to further these compelling interests, the District’s hiring process includes requests for information regarding an applicant’s past criminal conviction(s). Background checks will be conducted as required by law and District policy/practice. Background checks will not be performed until a recommendation to hire has been made by the hiring team, after the interview process has occurred.

The District is also committed to equity in its entire employment process, including its hiring process. In order to achieve an equitable process with respect to the consideration of criminal convictions, while promoting the compelling interests of student safety and well-being, the District will consider an applicant’s criminal record in light of the following:

1. All applications will be considered on a case-by-case basis. While the District will endeavor to consider each applicant’s individual situation, it will also attempt to achieve equitable results between similarly-situated applicants.
2. Because honesty and candor are essential to the employer-employee relationship, failure of an applicant to disclose past criminal convictions on their application for employment and/or failure to cooperate with requests from the District to provide additional information necessary to the hiring process will generally result in a denial of employment.
3. Where an applicant’s application and/or background check result in a finding that the applicant has one or more criminal convictions, the District will issue a Pre-Adverse Action Notice to the employee, requesting that the employee provide the District with additional information relating to the conviction(s) prior to the District making a decision relating to the applicant’s employment. The applicant’s cooperation and candor are important if the applicant fails to provide additional information within the time requested, the District will make a decision based on the information available to it. Applicants should be aware that failure to promptly and voluntarily provide additional information will weigh heavily against hiring that applicant.
4. Once the District has received all available information relating to the applicant’s criminal background, the District will analyze all available information on a case-by-case basis. Factors examined by the District may include, but are not necessarily limited to all considerations that are job-related and consistent with business necessity, including specifically:
   a. The gravity of the offense/conduct,
   b. Whether the individual has a record of multiple convictions or a documented pattern indicating disregard or the law,
   c. Time since the offense(s),
   d. Whether there are any pending charges at the time of application,
   e. Nature of the job sought,
   f. How the offense(s) relates to the job,
   g. The population the applicant may interact with,
   h. Where applicable, evidence of rehabilitation
5. If the District determines not to move forward with employment, the applicant will receive a Final Adverse Action notice.
6. If an application is rejected due to an applicant’s past criminal conviction(s), that employee may be considered for employment no sooner than seven (7) years from the date of the most recent offense. All decisions will be made based on all information available to the
District at the time of the subsequent application.

END OF DOCUMENT 00315
BID BOND

KNOW ALL PERSONS BY THESE PRESENTS, that we __________________________ as Principal, and __________________________ as Surety, are held and firmly bound to the Des Moines Independent Community School District, hereinafter called the "School District," in the penal sum of __________________________ Dollars ($__________________), in lawful money of the United States, for the payment of which sum will and truly be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly, by these presents. The condition of this obligation is such that whereas the Principal has submitted the accompanying Bid, dated __________________________ for the project:

NOW, THEREFORE, if the Principal shall not withdraw said bid within the period specified therein after the opening of the same, or, if no period be specified, within forty-five (45) days after said opening, and shall, within the period specified therefore, or, if no period be specified, within seven (7) days after the prescribed forms are presented for signature, enter into a written Contract with the School District, in accordance with the bid, as accepted, and give bond with good and sufficient Surety or Sureties, as may be required for the faithful performance and proper fulfillment of such Contract, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

By virtue of statutory authority, the full amount of this Bid Bond shall be forfeited to the School District in liquidation of damages sustained in the event that the afore described bidder, Principal, fails to execute the Contract and provide the bond as provided in the Specifications or by law.

IN WITNESS WHEREOF, the parties have executed this instrument under their several seals this the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by the undersigned representatives pursuant to authority of the governing bodies.

(date) 
Principal
By: __________________________

(date) 
Surety
By: __________________________

(Attach Power of Attorney of agent executing Bond)

END OF DOCUMENT 00410
PART 1 - GENERAL

1.1 OWNER/CONTRACTOR AGREEMENT

   A. The Agreement between the Owner and each Contractor will be written on the Owner's standard Owner/Contractor Agreement Form. A sample of this form appears as Document 00510.

   B. The Owner/Contractor Agreement Form will be completed by the Owner and will be sent to the selected Contractor. A minimum of three (3) copies will be prepared for signing.

   C. The executed Owner/Contractor Agreement, along with the Contract Documents as defined in Document 00700, will be the entire, integrated Contract between the Owner and each Contractor.

   D. Upon receipt of an Owner/Contractor Agreement, the successful Bidder shall review it for completeness and accuracy, execute it, and return it to the Owner.

   E. The Owner will execute each Owner/Contractor Agreement after the Bidder and after all required post-bid documents, (see 1.2.C. below), have been submitted.

1.2 NOTICE OF CONTRACT AWARD

   A. The Owner shall issue a Notice to Proceed prior to the commencement of work under the Owner/Contractor Agreement.

   B. No Contractor shall commence work until all required bonds (Documents 00600, 00610 and 00620) and insurance (Document 00650) have been submitted to and accepted by the Owner.

   C. Upon receipt of a Notice to Proceed, and receipt of requisite bid documents, each Contractor shall commence work in accordance with the conditions contained in the Notice to Proceed.

END OF DOCUMENT 00500
CONSTRUCTION AGREEMENT

THIS AGREEMENT, made and entered into this ___ day of ______, 202__ by and between DES MOINES INDEPENDENT COMMUNITY SCHOOL DISTRICT (hereinafter designated as the “Owner”), and ______________________________ (hereinafter designated as the “Contractor”), in connection with the construction of ____________ complete with all work appurtenant thereto.

In consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties agree as follows:

CA - 1.00  SCPE OF THE WORK

The Contractor will furnish all tools, equipment, machinery, supplies, superintendence, insurance, transportation and other construction accessories, services and facilities specified or required to be incorporated in and form a permanent part of the completed work. In addition, the contractor shall provide and perform all necessary labor in a good, firm, substantial workmanlike manner and in accordance with the conditions and prices stated in the Bid Proposal and the requirements, stipulations, provisions and conditions of the Contract Documents as defined in the attached General Conditions. Said documents form the contract and are as fully a part thereof as if repeated verbatim herein. The Contractor shall perform, execute, construct and complete all things mentioned as to be done by the him in the Contract Documents, the Owner’s official award of this contract to the Contractor being based on the acceptance by the Owner of the Contractor’s bid, or part thereof.

CA - 2.00  THE CONTRACT DOCUMENTS

The Contract Documents shall consist of this written Agreement, which shall incorporate by this reference all of the instruments set out in Article 1 of the General Conditions as fully as if they were set out in this Agreement in full. All of the said documents and instruments are incorporated into this Agreement by the signature of the parties hereto.

CA - 3.00  TIME OF COMPLETION

The Contractor agrees to commence work under this Agreement by no later than ___________ and to substantially complete all work by no later than ____________.

CA - 4.00  LIQUIDATED DAMAGES

The Contractor understands and agrees that the completion of the entire project within the time provided is an essential feature of this Agreement. The Owner will sustain substantial damages, the amount of which is not possible to accurately determine at this time, if the work is not so completed.

The Contractor, therefore, agrees to proceed with due diligence, taking all precautions and making all necessary arrangements to insure the completion of the work within the prescribed time. The Contractor further agrees that should he fail to finally and fully complete the work within the time stipulated, the Owner shall be entitled to collect liquidated damages for the cost of delay, in accordance with the General Conditions of the Contract and as defined in the Contract Documents.

CA - 5.00  CONTRACT SUM

The Owner shall pay to the Contractor for performance of the work encompassed by this Agreement, and the Contractor will accept as full compensation therefor the lump sum of:

See Attachment “A”
subject to adjustment as provided by the Contract Documents, to be paid by progress payments in cash or its equivalent in the manner provided for in the Contract Documents.

CA - 6.00 ACCEPTANCE AND FINAL PAYMENT

A.) Early Release of Retained Funds - Upon Substantial Completion the Contractor may apply for a partial or full release of retained funds. The Contractor, the Architect, and the Owner shall inspect the work covered by the portion of funds requested. When the work is found to be acceptable under the Agreement, including the satisfactory completion of all items covered by the request, the Architect shall promptly certify such to the Owner, over his own signature. The certification shall state that that portion of work provided for in this Agreement has been completed in accordance with the Contract Documents and is accepted by the Architect under the terms and conditions therefore. The Owner shall have the right to withhold 1) an amount equal to 200% of the value of labor and materials yet to be provided on the project as determined by the Owner and its authorized representative and 2) an amount equal to 200% of the value of any Chapter 573 claims currently on file at the time the request for release of retained funds is approved. The balance found to be due the Contractor, and noted in said certificate, shall be due and payable. Approval of the retained balance will be made by resolution of the Owner’s Board of Directors within thirty (30) days, unless otherwise agreed to by the parties.

B) Final Payment of Retained Funds - Upon receipt of written notice that the work is ready for final inspection and acceptance, the Contractor, the Architect, and the Owner shall inspect the work. When the work is found to be acceptable under the Agreement, and the Agreement fully performed, including the satisfactory completion of all punch list items, the Architect shall promptly certify such to the Owner, over his own signature. The certification shall state that the work provided for in this Agreement has been completed in accordance with the Contract Documents and is accepted by the Architect under the terms and conditions thereafter. The entire balance found to be due the Contractor, and noted in said final certificate, shall be due and payable. Before issuance of the Owner’s Letter of Acceptance, the Contractor shall submit evidence satisfactory to the Owner that all payrolls, material bills, and other indebtedness connected with the work has been or will promptly be paid.

CA - 7.00 REPRESENTATIONS

The Contractor shall not extend the credit or faith of the Owner to any other persons or organizations.

CA - 8.00 ASSIGNMENT

The Contractor shall not assign all of his rights or obligations under this Agreement without the express written consent of the Owner. Upon any assignment even though consented to by the Owner, the Contractor shall remain liable for the performance of the work under this Agreement.

CA - 9.00 PARTIAL INVALIDITY

If any provisions of this Agreement are in violation of any statute or rule of law of the State of Iowa, then such provisions shall be deemed null and void to the extent that they may be in violation of law without invalidating the remaining provisions hereof.

CA - 10.00 WAIVER

No waiver of any breach of any one of the agreements, terms conditions or covenants of this Agreement by the Owner shall be deemed or imply or constitute a waiver of any other agreement, term, condition or covenant of this Agreement. The failure of the Owner to insist on strict performance of any
agreement, term, condition or covenant, herein set forth, shall not constitute, or be construed as a waiver of the Owner's rights thereafter to enforce any other default; neither shall such failure to insist upon strict performance be deemed sufficient grounds to enable the Contractor to forego or subvert or otherwise disregard any other agreement, term, condition or covenant of this Agreement.

CA - 11.00 ENTIRE AGREEMENT

The within Agreement, together with the Contract Documents as defined in Article 2.00 herein, constitute the entire agreement of the parties hereto. No modification, change, or alteration of the within Agreement shall be of any legal force or effect unless in writing, signed by all the parties hereto.

CA - 12.00 COUNTERPARTS

This Agreement may be executed in several counterparts and each such counterpart shall be deemed an original.

CA - 13.00 GOVERNING LAW

Venue for any and all legal actions regarding or arising out of the transaction covered herein shall be solely in the District Court in and for Polk County, State of Iowa. This transaction shall be governed by the laws of the state of Iowa.

CA - 14.00 ATTORNEYS' FEES

In the event it becomes necessary for either party to enforce any provisions or breach of this Agreement by commencing litigation, the prevailing party in such action shall be entitled to collect, as part of any judgment entered, its reasonable expert witness and attorneys' fees and costs.

CA - 15.00 NOTICES

All notices, requests, demands and other communications given or to be given under this Agreement shall be in writing. They shall be deemed to have been duly given when served if served personally, or on the second day after mailing if mailed by first class mail, registered or certified, postage prepaid, and properly addressed to the party to whom notice is to be given as set forth below.

If to Owner: Bill Good, Chief Operating Officer

If to Contractor, then to the individual at the address set forth in the signature block below.

Either party may change its address for purposes of notice by giving written notice to the other party in accordance with this paragraph.

CA - 16.00 BONDS

The Contractor shall furnish both a performance bond and a payment bond and shall pay the premium thereon. The performance bond shall guarantee the full performance of the contract.

CA – 17.00 DESIGNATED REPRESENTATIVE

The OWNER will designate a District representative who will be its authorized representative with the CONTRACTOR under this AGREEMENT.
IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first above written, and shall extend to and bind the parties, their successors, assigns and personal representatives.

DES MOINES INDEPENDENT COMMUNITY SCHOOL DISTRICT

By:__________________________________________ ATTEST:________________________
President, Board of Directors Secretary, Board of Directors

__________________________________________
Contractor Firm & Address:

__________________________________________
Attachment “A” to Document 00510

Construction Agreement
Des Moines Independent Community School District
(PROJECT NAME)

RE: Award of Bid No.

As recorded in the meeting minutes of the Board of Directors held on ____________, the following is a description of the base bid and alternates proposed by ________________ and accepted by the Board of Directors:

Base Bid:

Alternate

(Contractor Name). bid:

Base Bid: $

Total Contract Amount: $
PART 1 - GENERAL

1.1 BONDS

A. The Owner shall require the Bidder to whom a Contract is awarded to furnish both Performance and Labor and Material Payment bonds in the amount of one hundred percent, (100%), of the Contract price. Bonds shall cover the faithful performance of the Contract and the payment of all obligations arising thereunder. The Bidder will further provide warranties as required by the specifications or General Conditions.

B. The bonds shall be executed on the forms included with the Contract Documents (forms shall not be removed from the Contract Documents; Bidders shall obtain original copies of the bond forms from the Owner’s Representative). Accompanying each bond form shall be a “Power of Attorney” authorizing the attorney in fact to bind the surety company and certified to include the date of the bond.

C. Performance Bond shall be in the amount of one hundred percent (100%) of the total amount of work covered by this contract. It shall guarantee the faithful performance of the Contractor or manufacturer; and it shall insure the District during the work required by any Contract and for a period of one (1) year from the date of final acceptance of the work, against faulty or improper materials and/or workmanship that may be discovered during that time. If required, warranties extending beyond one years, such as for roofing, shall be as specified in the individual specification sections.

D. Payment Bond shall be in the amount of one hundred percent (100%) of the total amount of work covered by this contract; and shall be in accordance with the law of the State of Iowa to secure the payment of all claims for labor and materials used or consumed in the performance of this Contract.

E. Payment Bonds and Performance Bonds shall include:
   1. Full name and address of Contractor, Surety and Owner
   2. The Contract Date
   3. The exact amount of the Contract
   4. Signature of Contractor
   5. Corporate Seal if applicable
   6. Notarization of Contractor and Surety
   7. Power of Attorney
   8. Local contact for Surety, with name, phone number, and address to which legal notices may be sent.

1.2 BOND COSTS IN BIDS

A. Include all costs for Payment Bonds or Performance Bonds in the bid amounts.
KNOW ALL MEN BY THESE PRESENTS that

This Bond is issued simultaneously with a Performance Bond in favor of the Owner conditioned on the full and timely performance of the Contract.

KNOW ALL MEN BY THESE PRESENTS that

The Principal and the Owner have entered into a written Construction Agreement dated ________________________, 202__, together with related “Contract Documents” as defined therein (all of which are collectively referred to as the “Contract” and incorporated herein by this reference), for the following Project:

__________________________________ ____________________________________________

The condition of this obligation is such that, if the Principal shall at all times promptly make payment of all amounts, claims, or demands lawfully due to all persons, firms, associations, or corporations supplying or furnishing to the Principal or its subcontractors labor or materials, supplies, or equipment which are used, provided, or performed in the prosecution of the work provided for in the Contract and any and all duly authorized modifications of the Contract that may hereafter be made, then this obligation shall be null and void; otherwise, the Surety shall pay the full value of all such claims or demands and shall indemnify and hold the Owner harmless from all payments which the Owner may be required to make under the Contract or applicable law in excess of the Contract price not exceeding the amount of this obligation, together with interest as provided by law, as well as attorneys’ fees and costs incurred by the Owner in the resolution of any claim. All such subcontractors, laborers, and materialmen shall have rights under the within Bond as are set forth in the statutes and laws of the State of Iowa.

Further, each and every claimant, who institutes a lawsuit for compensation or payment under the terms payment under the terms hereof, as part of any court award, shall be entitled to reasonable attorneys’ fees and costs.

The undersigned Surety for value received hereby agrees that no extension of time, change in, addition to, or other modification of the terms of the Contract or work to be performed thereunder, or of the specifications, or of the Contract Documents, shall in any way affect its obligation on this Bond and the
Surety hereby waives notice of any such extension of time, change, addition, or modification.

Any notice which any party desires or is required to provide another shall be in writing and shall be effective upon receipt when delivered or transmitted by personal delivery, certified (return receipt) mail, or express mail service to the addresses set forth herein.

IN WITNESS WHEREOF, said Principal and Surety have executed this Bond, this ______ day of __________________, 20__.

ATTEST:

 Principal

 By: ________________________________

 Address: ________________________________

(SEAL)

ATTEST:

 (Surety)

 By: ________________________________

 Address: ________________________________

(SEAL)

Claims Telephone Number: ________________________________

Claims Fax Number: ________________________________

The fully executed Bond form must be accompanied by a current Power of Attorney.

END OF DOCUMENT 00610
PERFORMANCE BOND

Know All Men by These Presents That ___________________________ as Principal (the “Principal”), and ___________________________ (the “Surety”), a corporation organized and existing under the laws of the State of ___________________________, are heretofore known to the Surety as ___________________________, and authorized to transact business in the State of Iowa, as Surety (the “Surety”), jointly and severally, bind themselves, their heirs, personal representatives, successors, and assigns to the DES MOINES INDEPENDENT COMMUNITY SCHOOL DISTRICT, 2100 Fleur Drive, Des Moines, Iowa 50321, as Obligee (the “Owner”), in the principal amount of ___________________________ ($ ________________________ ) as adjusted by approved change orders (not to exceed 10 percent of the principal amount of this Bond unless expressly approved by the Surety, which approval shall not be unreasonably withheld) and interest as provided by law (collectively referred to herein as the “Penal Sum”), for the performance of the Construction Agreement between the Principal and the Owner, dated ____________________________, 202__, for the following (Project):

________________________________________________________

________________________

The condition of this obligation is such that, if the Principal shall at all times duly, promptly, and properly perform all the terms and conditions of the Contract and any authorized modifications thereof during the original term of the Contract, any extensions thereof that may be granted by the Owner, and during the term of any guarantee or warranty required under the Contract, the Principal and Surety shall have no obligation under this Bond, otherwise it shall remain in full force and effect.

The Surety for value received agrees that no extension of time, change in, addition to, or other alteration or modification of the terms of the Contract or work to be performed thereunder, or any other forbearance on the part of either the Owner or the Principal to the other shall in any way release or affect the Surety's liability or obligation on this Bond, and the Surety hereby waives notice of any such extension of time, change, addition, modification, alteration, or forbearance.

Whenever the Owner terminates the Contract in accordance with the terms thereof, the Surety shall, within fifteen (15) calendar days after written notice of such termination, notify the Owner in writing of its election to complete the Contract in accordance with its terms, or notify the Owner that the Surety elects not to complete the Contract. If the Surety fails to give the written notice so required within such fifteen (15) calendar day period, then it will be deemed to have elected not to complete the Contract. Should the Surety elect to complete the Contract, then it shall, within fifteen (15) additional calendar days following written notice of such election, obtain a contractor, subject to approval by the Owner in writing, to complete the original Contract in accordance with its terms and conditions and thereafter proceed with the work with due diligence and make available as the work progresses sufficient funds to pay the cost of completion less the balance of the Contract price. The Surety may not engage the Principal to complete the Contract, without
the prior written consent of the Owner, which consent may be withheld in the Owner's sole discretion.

If the Surety elects to complete the Contract, then it shall be entitled to receive the balance of the Contract price, less (i) any amounts paid by the Owner to the Principal; (ii) costs incurred by the Owner in correcting any defective work; (iii) any additional legal, design professional, and other costs incurred by the Owner resulting from the Principal's default; and (iv) liquidated damages caused by delayed performance or nonperformance of the Principal. Any progress payments, less retainage, due but not paid at the date of termination shall be paid to the Surety so long as the Surety has agreed to indemnify the Owner for the amount thereof and no other claims have been made to such funds by subcontractors or suppliers in accordance with the Contract or applicable law.

In the event the Surety elects not to complete the Contract, the Owner may then have the work completed by such means and in such manner, by contract with or without public bidding, or otherwise, as it may deem advisable. The Surety in such event shall at all times make available, as work progresses under the Contract between the Owner and its new contractor, sufficient funds, not to exceed the Penal Sum, to pay the cost of the completion of the Contract pursuant to its terms, together with the other amounts set forth in (i) through (iv) above, but in no event shall the Surety be responsible for the payment of any sums to the Owner until the Owner has paid in full its total obligation under the terms of the original Contract, plus change orders, less deductions and claims chargeable by law or by the Contract, if any, and less the retainage which will be disbursed as provided by the Contract Documents and applicable law.

The procedures set forth herein shall apply should there be a default and termination or a succession of defaults and terminations in fulfilling the terms and conditions of the work under the original Contract.

In the event there are negotiations between the Principal and/or the Surety and the Owner subsequent to the date of termination, each party shall appoint an authorized representative with authority to represent it during the negotiations. All written communications and official discussions between the parties shall be conducted by these authorized representatives. Any notice which any party desires or is required to provide another shall be in writing and shall be effective upon receipt when delivered or transmitted by personal delivery, certified (return receipt) mail, or express mail service to the addresses set forth herein.

Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work is located and shall be instituted before the expiration of three (3) years from the date on which final payment under the contract is made; provided, however, that this period may be extended by one (1) additional year by the Owner's giving written notice to the Surety within the three (3) year period of a potential claim. Any judgment recovered hereunder by the Owner shall include interest at the legal rate, together with reasonable attorneys' fees and costs.
No right action shall accrue under this Bond to or for the use of any person or entity other than the Owner or its successors and assigns.

IN WITNESS WHEREOF, the Principal and Surety have signed this Performance Bond as of the __________ day of __________________, 20__.

ATTEST:

__________________________________________
Principal

By: ______________________________________

Address: __________________________________

(SEAL)

__________________________________________

ATTEST:

__________________________________________
(Surety)

By: ______________________________________

Address: __________________________________

(SEAL)

__________________________________________

Claims Telephone Number: __________________

Claims Fax Number: _________________________

The fully executed bond form must be accompanied by a current Power of Attorney.

END OF DOCUMENT 00620
PART 1 - GENERAL

1.1 INSURANCE CERTIFICATES
A. Each Contractor shall provide insurance certificates to the Owner indicating that all required insurance coverage is in force prior to beginning work on the project.
B. Use a standard Insurance Certificate Form such as the "Acord" Form available from your insurance agent. Also include the Owner, the Architect, and their agents, representatives and employees to be added to the original certificate as additional named insurers.

1.2 CONTRACTOR'S LIABILITY INSURANCE
A. The Contractor shall purchase and maintain liability insurance to protect the Owner and the Architect, and their agents, representatives and employees from claims set forth below which may arise out of or result from the Contractor's operations under the contract whether such operations be by himself or by any subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable. The insurance required shall include contractual liability insurance applicable to the Contractor's obligations. Insurance requirements are set forth in the General Conditions, Paragraph GC-25.00.
B. The insurance required shall be primary and non-contributory to any insurance possessed or procured by the Owner and limits of liability shall be not less than those set forth.
C. Certificates of insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the work.

1.3 PROPERTY INSURANCE
A. The Owner will provide property insurance for losses and damages in excess of $100,000.00 in accordance with the General Conditions, Paragraph 25.03 of the contract documents. The contractor shall be responsible for and pay all losses and damages under $100,000.00.
B. The Owner will provide an endorsement listing the Architect as additional insured under all such policies of insurance.

END OF DOCUMENT 00650
## GENERAL CONDITIONS OF THE CONTRACT

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The Work shall be accomplished in accordance with the Contract Documents which shall be included in this Contract and shall consist of the Invitation to Bid, Instructions to Bidders, Bid Security, Proposal, Notice of Contract Award, Insurance Policies and Certificates, Notice to Proceed, Performance Bond, Labor and Material Payment Bond, Construction Agreement, the General Conditions of the Contract, Supplementary General Conditions, drawings and specifications, tests and engineering data, approved change orders, Contractor’s Requests for Payment, Architect’s Certificates, and all addenda issued by the Owner or Architect prior to the awarding of the Contract.

GC - 2.00 DEFINITIONS

Words, phrases, and other expressions used in these Contract Documents shall have meanings as follows:

2.01 “Contract” or “Contract Documents” shall include the items enumerated above under CONTRACT DOCUMENTS.

2.02 “Owner” shall mean the Des Moines Independent Community School District, named and designated as such in the Contract Documents acting through its duly authorized representatives.

2.03 “Contractor” shall mean the corporation, company, partnership, firm, entity, or individual named and designated as such in the Contract Documents which has entered directly into this Contract with the Owner for the performance of the Work covered thereby, and any persons or entities acting on its behalf.

2.04 “Subcontractor” shall mean and refer to a corporation, partnership, entity, or individual having a direct contract with the Contractor or another subcontractor for performing work and/or furnishing labor or material which is incorporated into the Work at the request of the Contractor or other subcontractor.

2.05 “Architect” shall mean the architects or engineers designated, appointed, or otherwise employed or delegated by the Owner, or its duly authorized representatives, acting within the scope of the particular duties entrusted to them in each case.

2.06 "Owner’s Representative" shall mean the person(s) designated by the District, acting within the scope of the particular duties entrusted to them, to provide services toward the management and implementation of the Work as the Owner’s designated representative.

2.07 “Notice to Proceed” shall be deemed to have been duly served if made in writing and delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if sent by registered or certified mail to the last known business address.

2.08 “The Work” shall mean the equipment, supplies, materials, labor, and services to be furnished under the Contract and the carrying out of all obligations imposed or required by the Contract Documents.
2.09 “The Project” is the total construction designed by the Architect of which the work performed under the Contract Documents may be the whole or a part.

2.10 All time limits stated in the Contract Documents are of the essence of the Contract and must be strictly adhered to.

2.11 The Contract shall be governed by the laws of the State of Iowa.

2.12 The date of Final Completion of a Project is the date when construction is certified by the Architect to be finally completed in accordance with Contract Documents, as modified by any change orders agreed to by the parties and when the Owner has fully accepted the Project for the use for which it was intended. Such date will be set forth on a Letter of Final Acceptance issued by the Owner.

2.13 “Drawings” or “plans” shall mean all (a) graphic and pictorial portions of the Contract furnished by the Owner and/or Architect as a basis for the award of Contract; (b) supplementary drawings furnished by the Owner and/or Architect to clarify and to define in greater detail the intent of the Contract drawings and specifications; (c) drawings furnished by the Owner to the Contractor during the progress of the Work; and (d) engineering data and drawings submitted by the Contractor during the progress of the Work, provided such drawings are acceptable to the Architect.

2.14 “Specifications” are the written technical information concerning materials, components, systems, and equipment as indicated on the drawings or plans and which state the quality, performance, characteristics, and installations to be achieved by application of construction methods.

2.15 “Substantial Completion” is:

2.15.1 Established date on which the Work or designated portions thereof has been sufficiently completed in accordance with the Contract Documents so as permit the Owner to safely and legally occupy or utilize the Work for its intended use, subject only to minor punch list items the absence of completion which does not interfere with the Owner’s intended use of the Project.

2.15.2 as defined in Iowa Code Chapter 26 for purposes of early release of retainage only.

GC - 3.00 ORAL STATEMENTS

It is understood and agreed that the written terms and provisions of the Contract Documents shall supersede all oral statements of representatives of the Owner, and oral statements shall not be effective or be construed as being a part of this Contract.

GC - 4.00 REFERENCE STANDARDS

Reference to the standards of any technical society, organization, or association, or to codes of local or state authorities, shall mean the latest standard, code, specification, or tentative standard adopted and published at the date of the Contract Documents unless specifically stated otherwise.
GC – 6.00 EXECUTION, CORRELATION, INTENT, AND INTERPRETATION OF CONTRACT

DOCUMENTS AND COMPLETION DATE

6.01 Execution. The Contract Documents shall be signed in multiple copies as directed by the Owner. Within ten (10) days of Notice of Contract Award, the Contractor shall submit to the Owner a minimum of five (5) fully executed original sets of the Construction Agreement; Performance Bond and Labor and Material Payment Bond with original Power of Attorney; and certificates of required insurance coverages. The date of the Contract for purposes of these documents shall be the date of the Notice of Contract Award letter. The Owner will execute the Construction Agreement, assemble all copies, and distribute the Contract Documents. The Contractor shall not commence the Work until he receives the Notice to Proceed.

6.02 Correlation. By submitting the bid, the Contractor represents that he has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Contract Documents.

6.03 Intent. The intention of the Contract Documents is to include all labor and materials, tools, equipment, construction equipment, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Work. Materials or work described in words which as applied have a well-known technical or trade meaning shall be held to refer to such recognized standards.

The organization of the specifications into divisions, sections, and articles, as the case may be, and the arrangement of drawings shall not control the Contractor in dividing the work among subcontractors or in establishing the extent of work to be performed by any trade.

It is intended that even though Work is not covered under any heading, division, section, article, branch, class, or trade of the specifications, it shall nevertheless be supplied if it is required elsewhere in the Contract Documents or is reasonably inferable there from as being necessary to produce the intended results.

The specifications and drawings are intended to supplement but not necessarily duplicate each other/ Any work exhibited in one and not the other shall be executed as if it had been set forth in both, so that the Work will be constructed according to the complete design.
DESMOINES INDEPENDENT COMMUNITY SCHOOL DISTRICT

McCOMBS MIDDLE SCHOOL – RE-ROOF PROJECT

6.04 Interpretation. Should anything necessary for a clear understanding of the Work be omitted from the specifications and drawings, or should the requirements appear to be in conflict, the Contractor shall secure written interpretations or instructions from the Architect before proceeding with the Work affected thereby. It is understood and agreed that the Work shall be performed according to the true intent of the Contract Documents.

Where a conflict occurs between or within standards, specifications, and drawings, the more stringent or higher quality requirements shall apply. The precedence of the Construction Documents is in the following sequence:

1. Addenda to the drawings and specifications take precedence over the original Construction Documents.
2. Specifications take precedence over drawings, except in cases of error.
3. In the drawings, the precedence shall be drawings of larger scale over those of smaller scale and noted materials over graphic indications.
4. Any work mentioned in the specifications and not shown on the drawings or shown on the drawings and not mentioned in the specifications shall be of like effect as if shown or mentioned in both. The Contractor shall examine the specifications and drawings and check all dimensions and notify the Architect and the Owner of any discrepancies between the specifications and drawings and any deficiencies, omissions, or errors before any work is commenced.

6.05 All work on the Project shall be finally completed within the times indicated in the construction documents.

GC - 7.00 DRAWINGS AND SPECIFICATIONS

7.01 Copies Furnished. Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, all copies of drawings and specifications and addenda reasonably necessary for the execution of the Work.

7.02 Ownership of Drawings. All drawings, specifications, and copies thereof furnished by the Architect are the property of the Owner, whether the work for which they are made is executed or not and are not to be used on other work except by written agreement with the Owner.

7.03 Drawings and Specifications Available on the Site. The Contractor shall maintain at the site for the Owner and the Architect one copy of all drawings, specifications, addenda, approved shop drawings, change orders, and other modifications, in good order and marked to record all changes made during construction. The Contractor shall also keep on the site all applicable standards, codes, manufacturer’s or other specifications referenced in the Contract Documents. The drawings, marked to record all changes made during construction, shall be delivered to the Architect for the Owner upon completion of the Work.
Figured Dimensions to Govern. Dimensions and elevations shown on the drawings shall be accurately followed. Where dimensions are not indicated, Contractor shall immediately request clarification from the Architect so as not to delay the Work and Contractor shall not proceed with such work until the necessary dimensions have been obtained from the Architect.

Contractor to Check Drawings and Schedules. The Contractor shall check all dimensions, elevations, and quantities shown on the drawings and furnished by the Architect, and shall notify the Architect in a timely manner of any discrepancy between the drawings and the conditions on the ground, or any error or omission in drawings, or in the layout as given by stakes, points, or instructions, which he may discover. Before ordering any material or doing any work, the Contractor shall verify all measurements at the building and shall be responsible for the correctness of same. No extra charge or compensation will be allowed on account of difference between actual dimensions and measurements taken in the field. Any difference which may be found shall be submitted to the Architect in a timely manner for consideration before proceeding with the Work. The Contractor will not be allowed to take advantage of any error or omission in the drawings or Contract Documents. Full instructions will be furnished by the Architect should such error or omission be discovered and the Contractor shall carry out such instructions as if originally specified.

Detail Drawings and Instructions. Upon the contractor’s written report, the Architect shall furnish, within 10 working days, additional instructions by means of drawings or otherwise, necessary for the proper execution of the Work. All such drawings and instructions shall be consistent with the Contract Documents, true developments thereof, and reasonably inferable therefrom. The Work shall be executed in conformity therewith, and the Contractor shall do no work without proper drawings and instructions.

Project Record Drawings. The Contractor shall maintain a Contract set of drawings at the site with all changes or deviations from the original drawings neatly marked thereon in a contrasting color. The Contractor shall also maintain a Contract set of specifications at the site, noting therein by appropriate section, the names, models, and other distinguishing characteristics of the products actually incorporated into the Work. This set of drawings and specifications shall be updated daily as the job progresses and shall be made available to the Owner and Architect for inspection at all times. Upon completion of the Work and before final payment, this Project Record set of drawings and specifications shall be delivered to the Architect.

Contractors’ Review of Drawings, Plans and Specifications. Contractor’s review of drawings, plans and specifications developed by the Architect and/or the Design Team under this Agreement shall be made in Contractor’s capacity as a contractor and not as a licensed design professional.
8.01 **Shop Drawings.** Shop drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures, manufacturer's literature, product data, and any other information which are prepared by the Contractor or any subcontractor, manufacturer, supplier, or distributor, and which illustrate some portion of the Work. Said drawings will be submitted in a format agreeable to the Owner and Owner’s Representative.

8.02 **Samples.** Samples are physical examples furnished by the Contractor to illustrate materials, finishes, equipment, or workmanship, and to establish standards by which the Work will be judged.

8.03 **Subcontractor.** The Contractor shall require each subcontractor to prepare, stamp with approval, and submit to the Contractor with reasonable promptness and in orderly sequence so as to cause no delay in the Work or in the work of any other subcontractor, all shop drawings and samples on all shop fabricated items and on all matters, required by the Contract Documents or subsequently by the Architect as covered by modifications. Shop drawings and samples will properly identify specified items. At the time of submission, the subcontractor shall inform the Contractor, the Architect and the Owner’s Representative in writing of any deviation in the shop drawings or samples from the requirements of the Contract Documents. Substitutions will be allowed only in accordance with the provisions of Section 36.00 hereinafter.

The Contractor shall also require each subcontractor to prepare and transmit sufficient sets of sepia transparencies, reverse printed, and prints of all shop drawings which are specially drawn for this Project, including detailed fabrication and erection drawings, setting drawings, diagrammatic drawings, material schedules, and samples to the Contractor to meet the Project construction schedule and the subcontractors' Contract schedule, or shall present, in writing, valid reasons for any delay. Sepias shall not be folded, but shall be rolled and transmitted in a tube suitable for mailing.

All shop drawings for all equipment and/or materials in a given system shall be submitted at one time, each complete set in a separate brochure. Complete maintenance/warranty data are to be submitted to the Contractor for distribution to the Owner's Representative for review by the Architect and final acceptance by the Owner.

Each sheet of shop drawings shall identify the Project, subcontractor, and fabricator or manufacturer and the date of the drawings. All shop drawings shall be numbered in sequence and each sheet shall indicate the total number of sheets in the set.

The shop drawings shall indicate types, gauges, and finish of all materials. Where a shop coat of paint is required, its brand name, manufacturer's identification number, and type shall be indicated. Sufficient data in each set of shop drawings shall be included to permit a detailed study of the system submitted and its conformance to the Contract Documents and design intent.

The Contractor will review, approve, stamp, and then submit the sepia transparencies, prints, and samples to the Owner's Representative and Architect for approval with copies
to the Owner. After review, the Owner’s Representative will then return the sepia transparencies to the Contractor with the Owner’s Representative’s and Architect’s appropriate comments. Those returned for correction shall be corrected and resubmitted. Upon receiving the approved sepia sets from the Owner’s Representative, the Contractor will make requested sets of prints for distribution to appropriate subcontractors, fabricators, manufacturers, and suppliers who require them for coordination of their work.

8.04 Verification. By approving and submitting shop drawings and samples, the Contractor thereby represents that it has determined and verified all field measurements, field construction criteria, dimensions, elevations, quantities, materials, catalog numbers, and similar data, as shown on the drawings and specifications furnished by the Architect and that he has checked and coordinated each shop drawing and sample with the requirements of the Work and of the Contract Documents.

8.05 Architect Review. The Architect will review and approve shop drawings and samples with reasonable promptness so as to cause no delay, but only for conformance with the design concept of the Project and with the information given in the Contract Documents. The Architect’s approval of a separate item shall not indicate approval of an assembly in which the item functions. On the completion of the Work, the Owner’s Representative shall be furnished three corrected copies of all shop or setting drawings showing the as-built condition of the Work. The Owner’s Representative, after the Architect’s review, will furnish one of these copies to the Owner. Architect will keep one copy.

8.06 Corrections. The Contractor shall make any corrections required by the Architect and shall resubmit the required number of corrected copies of shop drawings or new samples until approved. The Contractor shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections requested by the Architect on previous submissions.

8.07 Contractor’s Responsibility. The Architect’s approval of shop drawings or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Architect in writing in a separate letter attached to the submittal of such deviation at the time of submittal and the Architect has given written approval to the specific deviation, nor shall the Architect’s approval relieve the Contractor from responsibility for errors or omissions in the shop drawings or samples.

8.08 Architect Approval Required. No portion of the Work requiring the submission of a shop drawing or sample shall be commenced until such submittal has been approved by the Architect. All such portions of the Work shall be in accordance with approved shop drawings and samples. All material finishes and samples will be approved at one time. The Contractor shall submit all items requiring approval of finishes, color, material, etc., with sufficient lead time to allow simultaneous consideration and preparation of complete finish Color Schedule. No approvals of single items will be considered.
9.01 Contractor’s Responsibility. Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, tools, equipment, machinery, transportation, and other facilities necessary for the proper execution and completion of the Work. The Contractor shall provide and pay for all the temporary facilities required to supply all the power, light, water, and heat needed by him and the subcontractors for their work and shall install and maintain all such facilities in such manner as to protect the public and workers and conform with any applicable laws and regulations. If temporary heat and/or protection is required for the expeditious prosecution of the Work and before the permanent heating apparatus is available for use, the temporary heating apparatus shall be installed and operated in such a manner that the finish work and/or construction will not be damaged thereby.

Unless otherwise specified, the Contractor shall pay for all the power, light, and water used by him and the subcontractors, without regard to whether such items are metered by temporary or permanent meters. The cutoff date on permanent meters shall be either the agreed date of full occupancy by the Owner or the date of final acceptance of the Project, whichever shall be the earlier date. Upon completion of the Work, the Contractor shall remove all such temporary facilities from the site.

9.02 Materials. Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of the highest quality. The Contractor shall furnish satisfactory evidence as to the kind and quality of materials. Samples shall be furnished, when specified, and the work shall be in accordance with those samples which have been approved.

9.03 Facilities and Storage. The Contractor shall provide and maintain, in a neat and sanitary condition, adequate temporary toilet facilities for the use of any and all employees engaged on the Work, in strict compliance with the requirements of all applicable codes, regulations, laws, and ordinances. In no event may present toilet facilities of any existing building at the site of the Work be used by employees of the Contractor or subcontractors. Upon completion of the Work, he shall remove all such temporary facilities from the site and disinfect the premises.

The Contractor shall provide suitable temporary facilities and quarters for workmen and shall maintain on premises water-tight storage shed or sheds, tool houses for storage of building materials and tools which may be damaged by weather. The Contractor shall allow space for the erection of sheds and provide similar facilities for storage by subcontractors of their materials and tools. Storage of materials shall be confined to the site. These facilities or quarters shall further provide for protection against theft and damage of building materials and tools. Upon completion of the Work, the Contractor shall remove all such temporary facilities from the site.

The Contractor shall provide adequate, weatherproofed, heated, and well-lighted office space at the site of the Work, for the use of the Architect, Owner’s Representative, and the Owner.
The Contractor shall also provide telephone service at such office, which shall be available for the use of the Architect, Owner’s Representative, and the Owner, without charge, except for toll calls. Requirements of the office space are as listed in Section 01500 paragraph 1.26.

All of the foregoing facilities shall be of a quality and placed in locations acceptable to the Owner and Owner’s Representative.

9.04 Salvage of Materials. Owner reserves the right to salvage any and all materials, equipment, furnishings, and other elements to be removed from the site regardless if such removal is indicated in the plans, specifications, drawings or other Contract Documents.

GC - 10.00 EMPLOYEES

10.00A Qualifications. The Contractor and his subcontractors shall at all times enforce strict discipline and good order among his employees, and shall not employ on the Work any person considered by the Architect, Owner or Owner’s Representative to be unfit or not skilled in the work assigned. The Contractor shall also keep its employees and those of its subcontractor from socializing upon the site of the Work after normal work hours and from fraternizing at any time with staff, students, parents, and other persons who are at the school or the site of the Work.

10.00B No Contractor shall allow any of its employees listed on the Iowa Sex Offender Registry to perform work on District Projects. The District has interpreted an “unfit employee” for purposes of this Contract to be any employee currently listed on the Iowa Sex Offender Registry. The Contractor shall fill out and sign the “Acknowledgement and Certification” form located behind this section prior to executing the Agreement.

10.00C Employee background checks are the responsibility of the Contractor and his subcontractors.

10.01 Drug-Free Zone. The Des Moines Independent Community School District is a drug-free zone. In furtherance of this standard, the Contractor shall establish and maintain a safe and efficient work environment for all employees, free from the effects of alcohol, controlled substances, and illicit drugs. The manufacture, distribution, dispensing, possession, or use of alcohol, controlled substances, and illicit drugs is prohibited on or adjacent to the Project site and all of the Owner’s property at all times. Illicit drug use is the use of illegal drugs and the abuse of alcohol and other drugs, including anabolic steroids. Controlled substances are drugs specifically identified and regulated under state or federal law and include, but are not limited to, opiates, narcotics, cocaine, amphetamines and other stimulants, depressants, hallucinogenic substances, and marijuana. The Contractor will strictly enforce this prohibition among his own employees and his subcontractors and their employees at all times. Employees who violate these prohibitions will be subject to disciplinary action by their employers up to and including termination and may be denied access to the site of the Work.
10.02 No Smoking. Statewide smoking ban – Iowa Code Section 142D.3

1. Smoking now is prohibited in all areas of school buildings, including nonpublic schools, as well as all school grounds, parking lots, athletic fields, including inside any vehicle located on school grounds or school parking lots. No longer can a school designate a smoking area.

2. Smoking is prohibited inside all publicly owned vehicles, even if parked in a private drive.

3. Smoking is prohibited inside a private vehicle that is parked in a school parking lot.

The Iowa Department of Public Health (DPH) is in charge of writing administrative rules for the enforcement of this new law. DPH states that it will also provide sample “no smoking” signs that schools may download for free.

4. In addition, The use of tobacco and nicotine products; including, but not limited to, cigarettes, nicotine chew, snus, dissolvables, electronic cigarettes, any electronic or other devices that can be used to deliver nicotine to the person inhaling from the device, any other look-alike products in which the original product would include tobacco and/or nicotine and/or other nicotine products that are not approved by the Federal Drug Administration for tobacco cessation; on District property;including in District buildings, on District grounds, in District transportation vehicles, or at any District activity; is prohibited.

10.03 Equal Opportunity Policy. Because it is the desire of the Des Moines Independent Community School District to encourage equal employment policies, all Contractors, including suppliers supplying goods or services to the School District, are expected to comply with the spirit of equal opportunity employment, as well as with the letter of all applicable statutes and regulations. Compliance shall require Contractor not to discriminate and, in addition, to take reasonable affirmative action to ensure that members of minority groups are effectively accorded equal employment opportunities.

10.04 Responsibility for Employees. The Contractor shall be responsible to the Owner for the acts and omissions of all its employees. The Contractor shall further be responsible for the acts and omissions of all subcontractors, their agents and employees, and all other persons acting on behalf of the Contractor or subcontractors as set forth herein.

GC - 11.00 ROYALTIES AND PATENTS. The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent rights and shall hold the Owner harmless from loss on account thereof. If the Contractor has information that the process or article specified is an infringement of a patent, it shall be responsible for such loss unless it promptly gives such information to the Architect and Owner’s Representative.
SURVEYS, PERMITS, LAWS, REGULATIONS, AND TAXES

12.01 **Surveys.** The Contractor shall obtain from the Architect a copy of all surveys provided by the Owner describing property lines, elevation benchmarks, physical characteristics, and utility locations.

12.02 **Permits and Licenses.** General building permit will be secured and paid for by the Owner. Any other permits, governmental fees, and licenses necessary for the proper execution and completion of the Work shall be secured and paid for by the Contractor. Easements for permanent structures or permanent changes in existing facilities shall be secured, maintained and paid for by the Owner, unless otherwise specified. The Owner will negotiate and provide for all electrical, gas, water, and sewer mains for Contractor's connections. The Contractor is to arrange with the utility company for actual connection, make necessary connections, and pay for all inspection fees and permits in connection therewith as required by any governmental agency. In addition, the Contractor will furnish any material or items as required to complete all connections. The Contractor shall call for all required government inspections on a timely basis.

12.03 **Laws and Regulations.** The Contractor shall give all notices and comply with all laws, ordinances, rules, and regulations bearing on the conduct of the Work as drawn and specified. If the Contractor observes that the drawings and specifications are at variance therewith, it shall promptly notify the Architect and the Owner’s Representative in writing and any necessary changes shall be adjusted as provided in the Contract for changes in the Work. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Architect and the Owner’s Representative, it shall bear all costs arising therefrom and to correct same.

12.04 **Taxes.** The Owner is exempt from sales and use taxes (Section 423.3(31) Code of Iowa). The Owner will provide exemption certificates to Contractors for materials to be incorporated into the Project. The Contractor is subject to payment of Iowa income tax on income from this work in amounts prescribed by law. If the Contractor is a non-Iowa partnership, individual, association, or corporation, it shall furnish evidence prior to the execution of the Contract that bond or securities have been posted with the Iowa State Department of Revenue in the amount required by law.

BENCHMARKS, MONUMENTS, STAKES, AND MEASUREMENTS

13.01 ** Benchmarks.** The Contractor shall properly stake out the Work and provide and rigidly set benchmarks and batter boards as necessary for the proper performance of the Work. The Contractor shall remain responsible for their maintenance and their accuracy. A permanent benchmark, approved as to location and type by the Architect, from which all grades are to be taken, shall be established near the site of the Work by the Contractor. From this benchmark the Contractor shall ascertain all grades and levels to the building as needed. The Contract Documents shall include all necessary information to establish the benchmark.
13.02 Preservation of Monuments and Stakes. The Contractor shall carefully preserve all monuments, benchmarks, property markers, reference points, and stakes. In case of his destruction thereof, the Contractor will be charged with the expense of replacement and shall be responsible for any mistake or loss of time that may be caused. Permanent monuments or benchmarks which must be removed or disturbed shall be protected until properly referenced for relocation. The Contractor shall furnish materials and assistance for the proper replacement of such monuments or benchmarks.

13.03 Measurements. Before ordering any material or performing any work, the Contractor shall verify all measurements at the Project and shall be responsible for the accuracy of same. No extra charge or compensation shall be allowed because of any difference between actual dimensions and the measurements indicated in the drawings or specifications. Any discrepancies shall be submitted to the Architect, Owner and Owner’s Representative for consideration before proceeding with the Work.

GC - 14.00 PROTECTION OF WORK AND PROPERTY

The Contractor shall take all necessary precautions for the safety of, and shall provide all necessary protection to prevent damage, injury, or loss to all employees on the Project and all other persons who may be affected thereby; all the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody, or control of the Contractor or any of its subcontractors; and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

The Contractor shall comply with all applicable provisions of the Occupational Safety and Health Administration (OSHA) and all laws, ordinances, rules, regulations, and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss. It shall erect and maintain all necessary safeguards for the safety and protection of workmen, Owners, and users of adjacent facilities and the public and shall post danger signs and other warnings against hazards created by such features of construction as protruding nails, hoists, well holes, elevator shafts, hatchways, scaffolding, window openings, stairways, excavations, and falling materials; and shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor’s superintendent unless otherwise designated in writing by the Contractor to the Owner’s Representative.

The Contractor is hereby notified that some or all of the buildings covered by this Construction Agreement may contain lead-based paint. Some or all of the buildings covered by this Construction Agreement may be considered "targeted housing" as that term is used by the United States Environmental Protection Agency ("EPA") and the Iowa Department of Public Health ("IDPH"). The scope of work described herein is not "lead abatement" as that term is used by the EPA and IDPH in that the activities included are not designed to permanently eliminate lead-based paint hazards, but are designed to repair, restore or remodel a structure even though the activities may incidentally result in a reduction or elimination of lead-based hazards.
The Contractor is solely and fully responsible for the compliance with all applicable law and regulations regarding lead-based paint, including but not limited to those of EPA, IDPH and OSHA.

The Contractor shall be liable for and shall promptly repair, remedy, indemnify, and pay for all damage or loss to any person or property caused in whole or in part by the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, except damage or loss proximately caused by faulty drawings or specifications, or to the acts or omissions of the Owner, Owner’s Representative, or Architect and not attributable to any fault or negligence of the Contractor.

In an emergency affecting the safety of life or of the Work or of adjoining property, the Contractor, without special instruction or authorization from the Owner’s Representative, Owner or Architect, is hereby permitted to act, at his discretion, to prevent such threatened loss or injury; and he shall so act, without appeal, if so authorized or instructed. Any compensation, claimed by the Contractor on account of emergency work, shall be determined by agreement. Notification of and report of such emergencies shall be made immediately to the Owner’s Representative, Owner and Architect.

**GC - 15.00 ACCESS TO WORK**

**15.01 Access.** The Architect, Owner’s Representative, Owner, and their representatives shall at all times have access to the Work wherever it is in preparation or progress, and the Contractor shall provide proper facilities for such access so that the Architect and Owner’s Representative may perform their functions under the Contract Documents.

**15.02 Inspection.** If the specifications, the Architect’s instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give the Architect and Owner’s Representative timely notice of its readiness for checking by the Architect or inspection by another authority, and if the inspection is by another authority, of the date fixed for such inspection. All required certificates of inspection shall be secured by the Contractor. If any work should be covered up without approval or consent of the Architect, it must, if required by the Architect, be uncovered for examination at the Contractor’s expense.

Re-examination of questioned work may be ordered by the Owner through the Owner’s Representative, and if so ordered, the work must be uncovered by the Contractor. If work is found to be in accordance with the Contract Documents, the Owner shall pay the cost of re-examination and replacement. If such work is found not to be in accordance with the Contract Documents, the Contractor shall pay such cost.

**15.03 Testing.** Materials incorporated into the Project will be subject to routine tests as required to ensure their compliance with the specifications. Such tests may include, but shall not necessarily be restricted to, the following: Concrete: primary mix design, slump tests, cylinder compressions tests, and air entrainment tests; Steel: tensile tests; Welds: field inspection and x-ray examination; Soils: sub-soil investigation, physical analysis, and compaction tests; Asphalt pavement: physical analysis and compaction tests; and Roofing-Samples cut from in-place built-up roof.
Any other basic materials for which standard laboratory test procedures have been established may also be included if doubt as to their quality should arise.

Any testing of the above nature will be done at the discretion of the Owner who will bear all costs, unless otherwise provided in the Contract Documents. The Contractor shall be held responsible for providing samples of sufficient size for test purposes and for cooperating with the Owner or his representative in obtaining and preparing samples for tests. All tests will be in accordance with standard test procedures and will be performed by persons or firms selected by the Owner.

**GC - 16.00 CONTRACTOR'S SUPERINTENDENCE AND SUPERVISION**

During the progress of the Work, the Contractor shall ensure that a competent superintendent and any necessary assistants, all satisfactory to the Architect, Owner and the Owner’s Representative, are on the Project site at all times while work is in progress. The superintendent shall not be changed by the Contractor except with the consent of the Architect, Owner and Owner’s Representative, unless the superintendent proves to be unsatisfactory to the Contractor and ceases to be in its employ. The superintendent shall represent the Contractor in its absence, and all directions given to the superintendent shall be as binding as if given to the Contractor. The Architect, Owner and Owner’s Representative shall not be responsible for the acts or omissions of the superintendent or the superintendent’s assistants.

The Contractor shall provide full-time, qualified, and efficient supervision of the Work, using competent skill and attention. It shall direct, schedule, and coordinate the Work. It is responsible for determining and supervising all temporary and permanent erection and construction sequences, techniques, means, or methods. It shall coordinate the Work to ensure that all parts fit together properly and in accordance with the Contract Documents. It shall carefully study and compare all Contract Documents and other instructions and shall at once report to the Owner’s Representative any error, inconsistency, or omission which he may discover.

The superintendent shall see that the Work is carried out in accordance with the Contract Documents and in a thorough and first-class manner in every respect. The Contractor shall provide engineering, surveying, and coordination to accurately establish all lines, levels, and marks necessary to facilitate the operations of all concerned in the Contractor’s work. It shall lay out the Work in a manner satisfactory to the Architect, making permanent records of all lines and levels required for excavation, grading, and foundations, and for all other parts of the work. It shall determine the commencement and certify the proper completion of the various stages of construction.

The Contractor shall arrange for the foreman of each subcontractor (mechanical, electrical, masonry, plastering, painting, etc.) on the job to meet with the Owner’s Representative and the Architect at the job prior to any work being started by this particular subcontractor so that all phases of the subcontractor’s work can be thoroughly discussed and the quality of materials and workmanship expected can be completely understood and agreed upon.
17.01 Field Order Request. The Owner may, at any time, by a written FOR (Field Order Request) directed through the Architect and Owner’s Representative, without notice to the sureties and without invalidating the Contract, make changes in the drawings and/or specifications of this Contract within the general scope thereof; order extra work; or make changes by altering, adding to, or deducting from the Work. If such changes cause an increase or decrease in Contract amount, an equitable adjustment shall be made and the Contract shall be modified in writing accordingly. Any claim of the Contractor for adjustment under this clause must be asserted in writing within ten (10) days from the date of receipt by the Contractor of the notification of change. No FOR or other form of order or directive by the Owner, Owner’s Representative or Architect requiring additional compensable work to be performed, which causes the aggregate amount payable under the Contract Documents to exceed the amount appropriated for the original Construction Agreement shall be issued unless the Contractor is given written assurance by the Owner that lawful appropriations to cover the costs of the additional work have been made.

Any change or aggregate of changes which causes an increase or decrease greater that 15% of the Contract amount, shall be approved by the Board of Directors in writing.

17.02 Approvals. Field orders are to be approved by the Chief Operations Officer, the Architect and the Owner’s Representative. Refer to Section 01028 “Change Procedures” for the requirements associated with documenting Field Order Requests.

17.03 Minor Changes. In giving instructions, the Architects shall have authority to make minor changes in the Work, which do not involve extra cost, and which are not inconsistent with the purposes of the building or the Owner’s intent. Architect shall immediately notify Owner and Owner’s Representative in writing of any authorized minor changes in the Work. Otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order from the Owner and Owner’s Representative signed or countersigned by the Architect, or a written order from the Architect stating that the Owner and Owner’s Representative has authorized the extra work or change. No claim for an addition to the Contract sum shall be valid unless ordered or authorized in the manner set forth in this section.

17.04 Price Differential. The cost or credit resulting from a change in the Work shall be determined in one or more of the following ways:

a. By estimate, with a detailed cost breakdown as set forth in subparagraph c. below, and acceptance in a lump sum, with a mark-up to the Owner, for the Contractor and all affected subcontractors as outlined in Section 01028 “Change Procedures”.

b. By unit prices named in the Contract or subsequently agreed upon.
c. If the parties are unable to agree on one of the above methods, then the amount shall be determined by force account under the following formula:

i. The actual cost of all direct labor performed (including forepersons employed continuously on the Work, but not the salary, or any part thereof, of the Contractor’s superintendent) and the actual materials furnished for and used in such work, less all available cash, trade, or other discounts;

ii. Rental for the use of such items of equipment as have an individual value in excess of One Thousand Dollars ($1,000); provided that the amount of such rental charge and the length of time and probable cost of the use of such equipment shall have been authorized in writing by the Owner and the Owner’s Representative;

iii. All proportionate sums paid for royalties, permits, and inspection fees;

iv. All proportionate premiums for Public Liability Insurance, Worker’s Compensation, and other proper and necessary insurance, as well as all applicable payroll taxes;

v. Either a predetermined lump sum, fixed fee, or a negotiated percentage fee which fee shall be applied to the total of paragraphs in i., ii., and iii. only, and shall constitute full compensation to the Contractor for all costs and expenses, including all overhead and profit, which are not otherwise enumerated above. Subcontractors, if employed by the Contractor on this part of the Work, will receive such portion of the Contractor’s fee as may be agreed and paid to them by the Contractor.

vi. The Contractor shall keep and present, in such manner as the Owner and Owner’s Representative may direct, an accurate accounting of all of the foregoing costs, together with all supporting vouchers and other documentation, all subject to audit by the Owner.

**GC - 18.00 CLAIMS FOR EXTRA COST OR ADDITIONAL TIME**

18.01 Claims for Extra Cost or Time. If the Contractor claims that any instructions by drawings or otherwise, after the date of the Contract, involve extra costs under this Contract which were not included in the original bid, or requires an extension of the Contract time, he shall give the Owner, Architect and Owner’s Representative written notice thereof no later than seven (7) calendar days after the receipt of such instructions, and in any event before proceeding to execute the Work, except in an emergency endangering life or property, and the procedure shall then be as provided for changes in the Work. No such claim shall be valid unless so made. Any change in the Contract amount or Contract time must be authorized by change order. Contractor must list all claims on each Pay Application submitted.

18.02 Delays and Extensions of Time. If the Contractor is delayed at any time in the commencement or progress of the critical path of the Work by any act or neglect of the
Owner, Owner’s Representative or the Architect, or by any employee of each, or by any separate Contractor employed by the Owner, or by changes ordered in the Work, or by unavoidable casualties beyond the Contractor’s control which Contractor could not have avoided by the exercise of diligence, or by any cause which the Owner determines may justify the delay, then the completion date shall be extended in writing by Owner for such reasonable time as the Owner may determine. A time extension shall be Contractor’s sole remedy and compensation for all such delays.

Extension of the Contract completion time will be considered for delays due to weather conditions only when such conditions have had a material, adverse impact upon the critical path of the Construction Progress Schedule, are more unusually severe and extended than could have reasonably been anticipated based upon normal conditions for the relevant period of time, and only if a request for such an extension of time is received within seven (7) days of the first date of each delay. Actual adverse weather delay days must prevent work on critical activities for fifty percent (50%) or more of the Contractor’s scheduled work day. Determination of extension shall be made only after analyzing the ten-year average of data from NOAA and other sources for time period being claimed. Actual days over and above this ten-year average will be considered for time extension.

All requests for extension of time shall be subject to the Owner’s approval and shall be made in writing to the Owner’s Representative no more than seven (7) days after the occurrence causing the delay; otherwise they shall be waived. Any request for extension of time for a change in the Work or for any occurrence allegedly causing a delay as provided for herein must be substantiated by demonstrating the effect of the change or occurrence on the critical path of the Construction Progress Schedule.

If no schedule or agreement is made stating the dates upon which written interpretations or detail drawings shall be furnished, then no claim for delay shall be allowed on account of failure to furnish such interpretations or drawings until fifteen (15) days after demand is made for them, and not then unless such claim is reasonable.

Should the time for completion of the Contract be extended, the Owner reserves the right to occupy any part of the structure upon written notice to the Contractor from the Owner’s Representative, but only after the Architect and Owner’s Representative have made a thorough inspection accompanied by the Contractor’s superintendent to note any defects in workmanship or materials which are the responsibility of the Contractor. Any such partial occupancy shall not be deemed a waiver of any provision for liquidated damages for delay in substantial or final completion, as applicable.

When the whole or a portion of the Work is suspended for any reason, each Contractor shall properly cover over, secure, and protect all work as may be susceptible to damage from any cause.

This Article does not exclude the recovery of damages by the Owner for delay under other provisions of the Contract Documents.
19.01 Changed Conditions. The Contractor shall promptly, and before such conditions are disturbed, notify the Owner, Architect and Owner’s Representative in writing of: (1) sub-surface or latent physical conditions at the site differing materially from those indicated in the Contract Documents, or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents. The Owner, Owner’s Representative and the Architect shall promptly investigate the conditions, and if the Owner finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or the time required for, performance of the Work, an equitable adjustment shall be made and the Contract modified in writing accordingly. Any claim of the Contractor for adjustment hereunder shall not be allowed unless it has given notice as above required.

19.02 Asbestos and Hazardous Materials. If the Contractor, Architect or Owner’s Representative encounter or otherwise identify or suspect asbestos, asbestos-containing material, hazardous materials, except for lead-based paint, which is addressed in GC Article 14.00, or other unusual or unexpected conditions, Contractor, Architect or Owner’s Representative shall immediately notify the Owner and shall not continue work on the Project until authorized by Owner in writing.

GC - 20.00 CORRECTION OF WORK

20.01 Correction of Work Before and After Completion. The Architect, Owner and Owner’s Representative have the authority to reject work which is defective or does not conform to the Contract Documents. The Contractor, following written demand from the Owner’s Representative, shall promptly correct all work rejected by the Architect, Owner’s Representative or Owner as defective or as failing to conform to the Contract Documents whether observed before or after final completion and whether or not fabricated, installed, or completed. The Contractor shall bear all costs of correcting such rejected work, including the cost of the Architect’s, Owner’s Representative’s and/or Owner’s consultant’s additional services. If the Contractor proceeds to build in or cover the item which has been rejected, it shall be totally responsible for the cost of removal and replacement of said item and removal and replacement of all necessary work surrounding or covering the item in order to produce a first-class job.

20.02 Tests to Determine Conformance. Whenever in the opinion of the Architect, Owner’s Representative or the Owner, tests are essential to assure the professional evaluation of the Work which is subject to being rejected or condemned, the necessary number of tests will be performed by the consultants designated by the Owner. All parties to the Contract will comply with the methods and extent of the corrections submitted in writing to the Owner, Architect and the Owner’s Representative by the designated consultant. The cost of the tests will become the Contractor’s responsibility when corrections of any nature are recommended by the consultant to the investigated work; otherwise, the Owner will pay for all tests performed. Should such special testing, inspection, or
20.03 Removal of Rejected Work. The Contractor shall promptly remove from the premises all work rejected by the Architect or Owner as failing to conform to the Contract Documents whether physically in place or not. Thereafter, the Contractor shall promptly replace and re-execute such work in accordance with the Contract and without expense to the Owner. The Contractor shall further bear the expense of making good all work of other subcontractors found to be defective or destroyed or damaged by such removal or replacement.

If the Contractor does not remove such rejected work within a reasonable time, fixed by written notice from the Owner through the Owner’s Representative, the Owner may remove it and may store the material at the expense of the Contractor. If the Contractor does not pay the expenses of such removal within ten (10) days’ time thereafter, the Owner may, upon ten (10) days’ written notice, sell such materials at auction or at private sale. In such case, the Owner shall account to the Contractor for the net proceeds thereof, after deducting all the costs and expenses that should have been borne by the Contractor, including compensation for additional Architect or consultant services. If the net proceeds of sale do not cover all costs which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate change order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

20.04 Correction of Work After Final Payment. Neither the final estimate nor payment nor any provision in the Contract Documents shall relieve the Contractor of responsibility for faulty materials or workmanship and, unless otherwise specified, it shall remedy any defects due thereto and pay for any damage to other work or property resulting therefrom, which shall appear within a period of one (1) year from the date of final completion and acceptance. This warranty shall be in addition to and not in lieu of all other remedies available to the Owner.

20.05 Failure to Correct the Work. If the Contractor fails to correct such defective or nonconforming work, the Owner may correct it and otherwise proceed against the Contractor for the cost thereof in accordance with the provisions of these General Conditions.

20.06 Deductions for Uncorrected Work. If the Owner deems it inexpedient to correct work that has been damaged or is defective or has not been completed in accordance with the Contract Documents, an appropriate deduction from the Contract price shall be made and reflected by a change order, or, if the amount is determined after final payment, it shall be paid by the Contractor.
20.07 Additional Obligations. The obligations of the Contractor to correct the Work shall be in addition to, and not in limitation of, any other obligations imposed upon him by law, special guarantees, warranties, or other rights of the Owner.

GC - 21.00 OWNER’S RIGHT TO CARRY OUT WORK

If the Contractor should neglect to prosecute the Work properly or fail to perform any provision of this Contract, the Owner, after three (3) working days’ written notice to the Contractor, may, without prejudice to any other remedy it may have, make good such deficiencies and may deduct the reasonable cost thereof from the payment then or thereafter due the Contractor. In the event such work is performed by the Owner, the Owner’s employees, or by persons other than the Contractor at the Owner’s request, the Owner shall not be liable to the Contractor for inconvenience expense or subsequent cost of removal of such work. The amount to be deducted as cost of doing the Work shall include the cost of the Architect’s additional services made necessary by such default. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

GC - 22.00 OWNER’S RIGHT TO TERMINATE CONTRACT

22.01 With Cause. If the Contractor should be adjudged a bankrupt; or if it should make a general assignment for the benefit of his creditors without approval of the Owner; or if a receiver should be appointed on account of his insolvency; or if it should refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workers, competent supervision and superintendence of the Work, proper materials, or competent management of the Project; or if it should fail to make prompt payment to subcontractors or for material or labor; or disregard laws, ordinances, or the instructions of the Architect or Owner; or otherwise be guilty of a material violation of any provision of the Contract; then the Owner, when in its sole opinion sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor, and his surety, if any, seven (7) days’ written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools, and appliances thereon and finish the Work by whatever method the Owner may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the Work is finally completed and accepted by the Owner. If the unpaid balance of the Contract sum shall exceed the expense of completing the Work, including compensation for additional architectural, managerial, consultant, and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner. The expense incurred by the Owner, as herein provided, and the damages incurred through the Contractor’s default, shall be determined by the Owner.

22.02 Without Cause. Should conditions arise which in the Owner’s opinion make it necessary or advisable to discontinue work under the Contract Documents, the Owner may terminate the Contract in whole or in part without cause or fault by the Contractor by giving seven (7) calendar days’ written notice to the Contractor. The notice shall specify the date and extent to which the Contract is terminated. Upon any such termination, the
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Owner shall take possession of the site and all or any part of the materials and equipment delivered or en route to the site. In the event of termination under this paragraph 22.02, the Contractor shall be equitably paid for all work properly completed, based upon the approved Schedules of Values.

GC - 23.00

PAYMENT

23.01 Schedule of Values. Payments will be made on the valuation of the Work done. Before any Request for Payment will be considered, the Contractor shall submit to the Owner’s Representative a complete, itemized schedule of the values of the various parts of the Work, aggregating the total sum of the Contract and separating material costs from other costs. Such schedule shall include as costs the material costs of all subcontractors under such Contractor and the costs of all materials to be taken from the Contractor’s or subcontractors’ own stocks of material. The schedule shall be submitted on forms supplied by the Owner’s Representative and supported by such evidence as to its correctness as the Owner’s Representative, Architect or the Owner may direct. A separate line item shall be included in the schedule of values for overhead and profit. This schedule will be used for the estimates and payments provided for in these General Conditions. Along with such schedule the Contractor shall submit a schedule of values of estimated monthly application amounts for the course of the Work to assist the Owner in arranging payment.

23.02 Payments to Contractors. Payment to the Contractor will be made by the Owner from cash on hand from such sources as may be legally available, and from the proceeds of the Statewide Sales Tax for school infrastructure imposed by the State and authorized by the electors of the Des Moines Independent Community School District by it’s most current Revenue Purpose Statement. Payment shall be made to the Contractor based on monthly estimates in amounts equal to ninety-five percent (95%) of the Contract value of the Work completed, including materials and equipment delivered to the job during the preceding calendar month and will be based upon an Application for Payment prepared by the Contractor, subject to the approval of the Architect. One (1) copy of the Application for Payment shall be filed with the Owner’s Representative. The Architect and Owner’s Representative will certify to the Owner for payment the accuracy of each approved Application for Payment on or before eleven days prior to a regularly scheduled board meeting and within 7 working days. Such monthly payments shall in no way be construed as an act of acceptance for any part of the Work partially or totally completed. It is the policy of the Board of Directors of the Owner to schedule Certificates of Payment and accounting times to coincide with the regular meetings of the Board and to pay Contractor no more often than once per month. The Owner reserves the right to withhold payments at any time regardless of the Architect’s or Owner’s Representative’s recommendations.

The Contractor warrants and guarantees that title to all work, materials, and equipment covered by an Application for Payment, whether incorporated in the Project or not, will pass to the Owner upon the receipt of such payment by the Contractor, free and clear of
all liens, claims, security interests, or encumbrances; and that no work, materials, or equipment covered by a Request for Payment will have been acquired by the Contractor or by any other person performing the Work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person. This provision shall not be construed as relieving the Contractor from the sole responsibility for all materials and work upon which payments have been made or the restoration of any damaged work or as a waiver of the right of the Owner to require the fulfillment of all the terms of the Contract.

23.03 Document Submission. Contractor shall be responsible for submitting all required Contract Documents and Applications for Payment in forms acceptable to the Owner, including but not limited to, electronic submission.

23.04 Applications for Payment. No Application for Payment will be submitted to the Owner until and unless the Architect and Owner’s Representative have certified it. No approval of a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the Project by the Owner shall constitute an acceptance of any work not completed in accordance with the Contract Documents.

23.05 Payments Withheld. The Owner may withhold payment or the Architect may decline to approve an Application for Payment in whole or in part, or the Architect may withhold or nullify the whole or any part of any Application previously issued, because of subsequently discovered evidence or subsequent inspections, for such an amount or to such extent as may be necessary in the opinion of either to protect the Owner from loss on account of:

a. Defective work not remedied;
b. A reasonable doubt that the Contract can be completed for the balance then unpaid;
c. Damage to another Contractor;
d. Failure of the Contractor to prosecute any portion of the Work in a timely manner or in compliance with any approved schedules;
e. Failure of the Contractor to submit on a timely basis any documentation required by the Contract Documents, including, without limitation, monthly progress reports, schedule of values, potential claims or request for approval of subcontractors.

GC - 24.00 CONSTRUCTION SCHEDULE AND PROGRESS REPORTS

All time limits stated in the Contract Documents are of the essence of the Contract.

All work on the Project shall be finally completed within the times indicated in the Construction Documents.
The Contractor shall submit, within ten (10) calendar days after the date of the Notice of Contract Award in a format acceptable to the Owner, a Preliminary Construction Schedule for the Project. This schedule shall start with the date of the Notice of Contract Award, and the completion date shall be a date which will enable the Owner to accept the Work on the date specified in the Construction Agreement.

The Contractor shall submit a detailed Construction Progress Schedule prior to the first application for payment. The schedule shall portray fully a timetable representing the various elements in the schedule of values and shall provide for the expeditious and practicable execution of the Work. The time shown between the starting and completion dates of the various elements within the schedule shall represent one hundred percent (100%) completion of each element. The detailed Construction Progress Schedule shall indicate the critical path of the Work. This schedule shall be revised monthly during the progress of the Work. Monthly updates of the schedule shall be required as a Condition of Approval for the Contractor’ Application for Payment. Additional detailed schedules of separate elements of the Work may be requested at the Owner’s discretion.

In addition, the Contractor shall submit with the Request for Payment monthly progress reports. Basically, these reports shall reflect the Contractor’s “work in place” progress and will be certified by the Contractor or its superintendent as to the date and contents of such “work in place” progress report. If requested by the Owner, the monthly progress reports shall also include representative photographs of the actual work in place. Such reports shall depict progress and percentage of completion, consistent with the values and amounts contained on the counterpart Request for Payment. The subcontractors shall be supplied copies of the Contractor’s approved schedule. These subcontractors shall develop a similar schedule based on their respective work. Failure to submit an approved progress schedule or monthly progress report shall be deemed cause to reject Requests for Payment.

The Contractor shall schedule all work so as to reduce to a minimum any disruption in the use of the existing facilities and interruptions of utility service of any type. Where electrical or mechanical work performed under this Contract will necessitate interruptions of service to existing facilities, the Contractor shall furnish and install temporary service to such facilities or perform such work at such times when said existing utilities are not in normal use. This Contractor shall bear the cost of all overtime or inconvenience resulting therefrom.

25.00 INSURANCE

The Contractor shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of or result from the Contractor’s operations under the Contract, whether such operations be by himself or by any subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. All such insurance shall be subject to the approval of the Owner for adequacy of protection, and shall include a provision preventing cancellation without thirty (30) days’ prior notice to the Owner in writing.

25.01 Liability Insurance Requirements. The Contractor shall procure and maintain, at its own expense, until final completion and acceptance by the Owner, liability insurance as hereinafter specified. The liability insurance required is as follows:

a. Commercial General Liability Insurance. Contractor’s General Public Liability and Property Damage Insurance issued to the Contractor and protecting it from all
25.03 Property Insurance. The Owner shall pay for and maintain Property Insurance, covering property of every kind and description to be incorporated into the Work, including materials and supplies, used or to be used, as part of or incidental to the construction operations. The insurance shall exclude the Contractor’s and its subcontractors’ equipment, tools, and machinery, which are not incorporated into the Work. The
Property insurance shall be written under a ‘Special Cause of Loss Form’ to include perils of fire, lightning, windstorm, vandalism, and theft, as well as other perils normally covered by the standard Insurance Service Office Special Cause of Loss Form.

A loss insured under the Owner’s Property Insurance shall be adjusted by the Owner and made payable to the Owner on behalf of the Contractor and its subcontractors as their interests may appear. The Contractor shall pay subcontractors their just portions of any insurance proceeds received by the Owner and paid to the Contractor.

Unless the Owner agrees otherwise, in writing, all monies received shall be applied toward rebuilding or repairing the destroyed or damaged work.

The Owner, Contractor, its subcontractors and suppliers waive all rights against each other for damages caused by fire or other perils to the extent covered by the Property Insurance (for damages in excess of $100,000.00) obtained pursuant to this section or other property insurance applicable to the Work, except such rights as they may have to the proceeds of such insurance held by the Owner on their behalf. The Contractor shall require similar waivers of his subcontractors, sub-subcontractors, agents, and employees of any of them.

The deductible will be $100,000.00. Contractor is responsible for all losses and damages less than the deductible.

25.04 Installation Floater. The Contractor shall maintain an Installation Floater policy and Builder’s Risk policy covering the Work and Materials not yet installed in the building or not otherwise covered by Builders Risk insurance. The Floater should have a minimum limit of $100,000. The Floater shall cover the following areas:

A. Property in transit; and

B. Property stored off-site at a temporary location.

25.05 Comprehensive Automobile Liability. The Contractor shall pay for and maintain Comprehensive Automobile Liability Insurance, including owned, non-owned, and hired vehicles in the following amounts:

Bodily Injury and Property Damage: $1,000,000 combined single limit

25.06 All liability policies which include the Owner as an additional insured shall include a Governmental Immunities Endorsement (See the Standard Endorsements Figure 1070.5), pursuant to Chapter 670.4 of the Iowa Code, which endorsement shall include the following provisions:

a. Nonwaiver of Government Immunity. The insurance carrier expressly agrees and states that the purchase of this policy and including the Owner as an Additional Insured does not waive any of the defenses of governmental immunity available to the Owner under Iowa Code Section 670.4 as it now exists and as it may be amended from time to time.
b. **Claims Coverage.** The insurance carrier further agrees that this policy of insurance shall cover only those claims not subject to the defenses of governmental immunity under Iowa Code Section 670.4 as it now exists and as it may be amended from time to time.

c. **Assertion of Government Immunity.** The Owner shall be responsible for asserting any defense of governmental immunity, and may do so at any time and shall do so upon the timely written request of the insurance carrier.

d. **Non-Denial of Coverage.** The insurance carrier shall not deny coverage or deny any of the rights and benefits accruing to the Owner under this policy for reasons of governmental immunity unless and until a court of competent jurisdiction has ruled in favor of the defense(s) of governmental immunity asserted by the Owner.

This Government Immunities Endorsement shall be included on all Insurance policies which include the Owner as Additional Insured.

**25.07 Cancellation and Insurance Companies.** All policies of insurance carried by the Contractor shall provide for 30 days advance written notice of cancellation, non-renewal, or material change in insurance coverage directed to the Des Moines Independent Community School District. The Owner will accept the policies written only by sureties legally authorized in the State of Iowa.

**25.08** The Contractor and its subcontractors, sub-subcontractors and their supplies are responsible for all damage to their own tools, equipment, and vehicles of every type. The Contractor, its subcontractors, sub-subcontractors and their suppliers shall waive subrogation against the Owner for any damage to such equipment, tools, and vehicles including any insurance in force to cover such equipment.

**GC - 26.00 PERFORMANCE AND PAYMENT BONDS**

The Contractor shall, within ten (10) days of the Notice of Contract Award, furnish bonds to the Owner in the full amount of the Contract price, covering both the faithful performance of the Contract and the payment of all obligations for labor and materials arising thereunder, on such forms as the Owner may prescribe and with such sureties as the Owner may approve. Such bonds shall be duly executed by a qualified surety, conditioned upon the true and faithful performance of the Contract, and shall provide that if the Contractor or his subcontractors fail to duly pay for any labor, materials, or other supplies used or consumed by such Contractor or his subcontractors in the performance of the Work contracted to be done, the surety will pay the same in an amount not exceeding the sum specified in the bond, as adjusted by approved change orders, and together with interest as provided by law. The Performance Bond shall additionally guarantee that the Contractor shall remedy any omissions, correct any and all defects, and adjust and make operable all component parts of the Work falling under the requirements of his Contract which may be called to his attention within a period of twelve (12) months following the date of the Letter of Acceptance.
Nothing contained in the Contract Documents shall create any direct contractual relation between any subcontractor and the Owner.

GC - 27.00  

**SUBCONTRACTORS**

The Contractor shall, within twenty-four (24) hours following the bid opening, provide to the Owner a completed List of Subcontractors and Suppliers of Labor and Material, which details whose quotations it has used in preparation of his bid. The Contractor shall, before awarding any subcontracts, re-verify to the Owner and Architect in writing the names of subcontractors proposed for the Project. Any deviation from the original subcontractor and supplier list will not be allowed unless justification is submitted in writing to the Owner by the Contractor that the subcontractor or supplier is deemed unfit or unable to perform the specified work, is unwilling to enter into a subcontract, or is not in compliance with the Contract Documents. The Contractor shall not employ any subcontractors that the Owner or Architect may, within a reasonable time, object to as incompetent, unfit, or otherwise undesirable. Substitutions of subcontractors listed in the executed proposal form may not be made without written approval of the Owner.

The Owner shall, on request, furnish to a subcontractor, wherever practicable, evidence of the amounts certified on his account.

The Contractor agrees that it is as fully responsible to the Owner for the acts and omissions of his subcontractors and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by it.

The Contractor, at the conclusion of the Work and before final payment is made, shall furnish to the Owner a listing, giving names, contact persons, addresses, and telephone numbers of all subcontractors and material suppliers who furnished labor and materials on the Project with identification of the services rendered and materials provided.

Nothing contained in the Contract Documents shall create any direct contractual relation between any subcontractor and the Owner.

GC - 28.00  

**RELATIONS OF CONTRACTOR AND SUBCONTRACTOR**

The Contractor agrees to bind every subcontractor by a written agreement and require in his Contracts that every subcontractor be bound by the terms of the Construction Agreement, the General Conditions of the Contract, the Supplementary General Conditions, the drawings and specifications as far as applicable to his work, including the following provisions of this Article, unless specifically noted to the contrary in a subcontract approved in writing as adequate by the Owner.

The subcontractor agrees with the Contractor:

a. To be bound to the Contractor by the terms of the Construction Agreement, General Conditions of the Contract, the Supplementary General Conditions, the drawings and specifications, and any other Contract Documents, and to assume toward it all the obligations and responsibilities that it, by those documents, assumes toward the Owner;
The Contractor agrees:

b. To preserve and protect the rights of the Owner and the Architect under the Contract with respect to the Work to be performed under the subcontract so that the subcontracting thereof will not prejudice such rights;

c. To perform all Work in accordance with the requirements of the Contract Documents;

d. To submit to the Contractor applications for payment in such reasonable time as to enable the Contractor to apply for payment as specified in the General Conditions;

e. To make all claims for extras, for extensions of time, and for damages for delays or otherwise, to the Contractor in the manner provided in the General Conditions of the Contract and the Supplementary General Conditions for like claims by the Contractor upon the Owner, except that the time for making claims for extra cost is one week.

The Contractor agrees:

f. To be bound to the subcontractor by all the obligations that the Owner assumes to the Contractor under the Agreement, General Conditions of the Contract, the Supplementary General Conditions, the drawings and specifications, and by all the provisions thereof affording remedies and redress to the Contractor from the Owner.

g. To pay the subcontractor not later than seven (7) calendar days immediately following the payment of each certificate issued under the schedule of values described in these General Conditions, the amount allowed to the Contractor on account of the subcontractor’s work to the extent of the subcontractor’s interest therein.

h. To pay the subcontractor, upon the payment of Certificates, if issued otherwise than as in g. above, so that at all times his total payments shall be as large in proportion to the value of the Work done by it as the total amount certified to the Contractor is to the value of the Work done by it.

i. To pay the subcontractor to such extent as may be provided by the Contract Documents or the subcontract, if either of these provides for earlier or larger payments than the above.

j. To pay the subcontractor a just share of any insurance payment received by the Contractor, applicable to work performed by such subcontractor.

If the Owner knows or has reason to know the Contractor is not making timely payments to the subcontractors and/or suppliers, the Owner may require the Contractor to submit verified documentation evidencing that full and timely payments have been made to the subcontractors and suppliers and/or that legal justification exists for withholding payments. In addition, the Owner may contact the subcontractors and suppliers directly to obtain verification that payments have been made as required by law or the Contract Documents.

Nothing in this Article shall create any obligation on the part of the Owner to pay or to see to the payment of any sums to any subcontractor, nor shall it form the basis for any action by the subcontractor against the Owner on any contractual theories.
29.01 **Authority.** The Architect shall act on the Owner’s behalf through the Owner’s Representative during construction and until the expiration of the warranty period. The Architect has the authority to act on behalf of the Owner only to the extent expressly provided in the Contract Documents or otherwise in writing. The Architect, with written approval of the Owner, shall have authority through the Owner’s Representative to stop the Work whenever such stoppage may be necessary in the Architect’s reasonable opinion to ensure the proper execution of the Contract.

29.02 **Decisions.** The Architect shall be, in the first instance, the interpreter of the conditions of the Contract and the judge of its performance, although the Owner shall retain the final authority in decisions regarding such matters. The Architect shall, within a reasonable time, make recommendations to the Owner’s Representative on all claims of the Contractor and on all other matters relating to the execution and progress of the Work. All such decisions shall be subject to review by the Owner. The Architect’s decisions in matters relating to artistic effect, after consultation with the Owner, shall be final, if within the terms of the Contract Documents.

29.03 **Inspections.** The Contractor shall provide timely notice to the Owner, Owner’s Representative and the Architect when inspections are desirable or required by the terms of the Contract or the Architect’s and Owner’s Representative’s agreement with the Owner. Such notice shall be given in order to allow for the following reviews and inspections, among others:

a. Reviewing and approving shop drawings samples and other submissions for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents;

b. Inspection of bearing surfaces of excavations before footings are poured;

c. Inspection of reinforcing steel after installation and before concrete is placed;

d. Inspection of structural and architectural concrete before, during, and after pouring;

e. Evaluation of all laboratory reports;

f. Inspection of structural steel after erection and prior to its being covered or enclosed;

g. Inspection of mechanical work following its installation and prior to its being covered and enclosed;

h. Inspection of electrical work following its installation and prior to its being covered or enclosed; and

i. Inspection of exposed surfaces for compliance with the Construction Documents.
30.01 **Authority.** The Owner’s Representative shall be the District’s principal agent and shall act on the Owner’s behalf through the Program during construction and until the expiration of the warranty period. The Owner’s Representative has the authority to act on behalf of the Owner to the extent expressly authorized in the Contract Documents or otherwise expressed in writing. The Owner’s Representative, with written approval of the Owner, shall have authority to stop the Work whenever such stoppage may be necessary in the Owner’s Representative’s reasonable opinion to ensure the proper execution of the Contract.

30.02 **Administration.** The Owner’s Representative shall establish and implement procedures for reviewing and processing requests and making recommendations to the Owner and Architect with respect to clarifications and interpretations of the Contract Documents; shop drawings; samples and other submittals; contract schedule adjustments; change order and field order proposals; written proposals for substitutions; payment applications; and the maintenance of logs. Although the Owner shall retain the final authority in decisions regarding such matters, as the Owner’s representative, the Owner’s Representative shall be the party to whom all such information shall be submitted. The Owner’s Representative’s recommendation to the Owner shall relate to design considerations, matters of cost, scheduling and time of construction, and clarity, consistency and coordination of documentation.

30.03 **Inspections.** The Contractor shall provide timely notice to the Owner, Owner’s Representative and the Architect when inspections are desirable or required by the terms of the Contract or the Architect’s and Owner’s Representative’s agreement with the Owner. Such notice shall be given in order to allow for the following reviews and inspections, among others:

   a. Reviewing and approving shop drawings samples, product data and other submissions for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents;

   b. Inspection of bearing surfaces of excavations before footings are poured;

   c. Inspection of reinforcing steel after installation and before concrete is placed;

   d. Inspection of structural and architectural concrete before, during, and after pouring;

   e. Evaluation of all laboratory reports;

   f. Inspection of structural steel after erection and prior to its being covered or enclosed;

   g. Inspection of mechanical work following its installation and prior to its being covered and enclosed;
h. Inspection of electrical work following its installation and prior to its being covered or enclosed; and

i. Inspection of exposed surfaces for compliance with the Construction Documents.

j. Reviewing Project schedules and schedule changes.

k. Reviewing requests for change in the Contract including all change Orders and Field Orders.

l. Reviewing and making recommendations for pay requests.

m. Reviewing certificates and policies of insurance for compliance with the Contract Documents.

n. Inspecting the site for construction observations and supervision and preparing written and photographic documentation.

GC - 31.00  CASH ALLOWANCES

The Contractor shall include in the Contract sum all allowances stated in the Contract Documents. These allowances shall cover the net cost of the materials and equipment delivered and unloaded at the site, and all applicable taxes. The Contractor’s handling costs on the site, labor, installation costs, overhead, profit, and other expenses contemplated for the original allowance shall be included in the Contract sum and not in the allowance. The Contractor shall cause the Work covered by these allowances to be performed for such amounts and by such persons as the Owner or Architect may direct through the Owner’s Representative, but it will not be required to employ persons against whom it makes a reasonable objection. If the cost, when determined, is more than or less than the allowance, the Contract sum shall be adjusted accordingly by field order which will include additional handling costs on the site, labor, installation costs, overhead, profit, and other expenses resulting to the Contractor from any increase over the original allowance.

GC - 32.00  USE OF PREMISES

The Contractor shall confine its apparatus, the storage of materials, and the operations of its workers to limits indicated by law, ordinances, permits, and the Contract Documents, and shall not unreasonably encumber the premises with its materials. Contractor shall not place or store any materials, equipment, or other items or goods outside the construction area as designated in the Construction Documents, without prior written approval of the Owner and Owner’s Representative. The Contractor shall not load or permit any part of the structure to be loaded with a weight that will endanger its safety. The Contractor shall enforce all Owner instructions and other regulations regarding signs, advertisements, fires, and smoking and shall not allow the possession or consumption of alcohol or drugs on the premises by his or any subcontractor’s workers. The Contractor shall limit his construction activities, including material storage, to areas approved by the Owner’s Representative.

GC - 33.00  CUTTING, PATCHING, AND EXCAVATING

The Contractor shall do all cutting, fitting, or patching of his work that may be required to make its several parts come together properly and fit it to receive or be received by work of the subcontractors shown upon, or reasonably implied by, the drawings and specifications for the completed structure.
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Any cost caused by defective or improperly timed work shall be borne by the party responsible therefore. The Contractor shall not endanger any work by cutting, excavating, or otherwise altering the Work and shall not cut or alter the Work of any subcontractor except with the consent of the Architect.

The Contractor will ensure that each subcontractor leaves all chases, holes, or openings straight, true, and of proper size in its own work, or cut the same in existing work as may be necessary for the proper installation of its own or another subcontractor’s work consulting with the Owner’s Representative and the Contractor regarding proper location and size of same. In case of its failure to leave or cut same in the proper place, it shall cut them afterward at its own expense. No piers or other structural members shall be cut or modified in the field without the written consent of the Architect and Owner’s Representative. Any extensive cutting of non-structural elements shall also require the Owner’s Representative's and Architect's approval. After such work has been installed, it shall carefully fit around, close up, repair, patch, and point up same as directed to the entire satisfaction of the Architect. Each section of this specification shall include all cutting, patching, and excavating for that trade division unless specifically stated to the contrary.

GC - 34.00 CLEANING UP

The Contractor shall at all times keep the premises free from accumulations of waste material or rubbish caused by its employees or work, and shall remove all rubbish as often as is necessary or as directed by the Owner, Architect or Owner’s Representative, or as specified elsewhere in these documents. At the completion of the Work, it shall remove all its rubbish from and about the building, and all its tools, scaffolding, and surplus materials and shall wash all glazing and window frames inside and outside throughout the building, removing all stains, paint, etc., on same. Care shall be taken not to scratch the glazing in this clean up.

All doors and wall coverings shall be left thoroughly clean and finished; all walls and ledges shall be dusted; all plumbing fixtures shall be cleaned; all hardware shall be free of all labels, paint, stains, dust, dirt, and the like; all marks, stains, fingerprints, other oil, and dirt shall be removed from painted, decorated, or natural finish work and the building will be ready for occupancy except for being further equipped by the Owner. In case of dispute, the Owner may perform such cleaning up as may be required and charge the cost to the Contractor.

GC - 35.00 STATUTES, ORDINANCES, AND REGULATIONS

The Contract shall be governed by the laws of the State of Iowa.

The Contractor and all subcontractors shall comply with all applicable federal and state statutes, rules, regulations, and directives of any governmental body having jurisdiction over the Work to be performed. Should any of the provisions of the Contract Documents be in conflict therewith, then that portion which is in conflict shall be considered stricken and the applicable statute, ordinance, regulation, or ruling substituted therefore. All such cases of apparent conflict coming to the attention of any party shall immediately be called to the attention of the Owner. The Contractor shall strictly observe and comply with all federal and state laws pertaining to the employment and payment of labor.
The Contractor will be held to have used in his base proposal and to furnish under the Contract those items of equipment and/or materials which are specifically identified in the specifications by a manufacturer’s name, model, or catalog number. Owner, in its sole discretion, may approve substitution of equipment and/or materials of makes other than those specifically named in the Contract Documents so long as the equipment or material proposed for substitution in the opinion of the Owner is just as suitable as equipment and/or materials named in the specifications so far as performance, construction, efficiency, and utility are concerned.

All requests for substitutions must be submitted in writing at least seven (7) working days prior to the bid opening to the Owner for evaluation and final approval. Contractor’s request shall include a complete listing of the substitutions proposed, with drawings and other data required by Owner, supporting Contract price changes pertaining to each proposed substitution. Contractor shall also furnish drawings or other data required to indicate any modifications which would result from use of the proposed changes and shall furnish general arrangement drawings, full descriptive data, and any other information required to demonstrate that the proposed substitutions are equal to the product(s) specified. The Owner will determine if the proposed substitutions are acceptable or unacceptable and will notify all potential bidders of its decisions no later than five (5) calendar days before bid opening. In the absence of the Owner’s written acceptance, no substitution will be allowed for any items specified in the Contract Documents. Acceptance by the Owner of proposed substitutions shall not relieve Contractor of the responsibility for providing workmanship, materials and equipment meeting quality standards established for the Project. No substitution may be made subsequent to the award of the Contract, except upon Owner’s written approval.

Contractor may offer alternate systems to the ones named in the specifications by submitting with the proposal and on the form provided, identifying data on the system proposed, together with a statement of the amount of addition or deduction from the base bid if the bidder’s alternate is accepted. Prior approval by the Owner is not required on items submitted as alternate bids.

**GC - 37.00 OCCUPANCY**

The Contractor, upon the Owner’s written request, shall allow the Owner to occupy portions of the Work and to place and install, subject to reasonable restrictions, as much equipment and furnishings during the progress of the Work as is possible without interfering with the progress of the Work. Such occupancy and the placing or installing of equipment and furnishings shall not in any way evidence the completion of the Work or signify the Owner’s acceptance of the Work, or any part of it. Equipment includes such things as kitchen equipment, etc. Furnishings include such things as lockers, benches, desks, etc. Prior to occupancy, the Architect and Owner shall make a thorough inspection accompanied by the Contractor’s superintendent to note any defects in workmanship or materials which are the responsibility of the Contractor. The provisions of the Article shall not be in limitation of the Owner’s rights set forth in Article 18.00.
The Contractor shall take adequate precautions to protect existing utilities on and off the site and avoid damage thereto. The Contractor shall repair or replace or have repaired or replaced at his own expense any damage to streets, water, sewer, light, power, cable, or telephone lines, damaged by reason of his work.

The location and extent of underground utilities and cables and conduit as indicated on the drawings are not guaranteed. This information is shown only for such use as bidders and Contractors may choose to make of it. All Contractors shall check with all public utilities companies for locations and shall comply with their regulations regarding their utilities in performing the Work.

Active underground utilities shall be adequately protected from damage and if damaged shall be immediately repaired. Removal or relocation of same shall be done only as indicated on the drawings. If they are in use, they shall be maintained in continuous service. If not indicated on the drawings or not known to exist, the Contractor shall report discovery of such lines to the Architect and shall not proceed further until directed to do so.

Inactive or abandoned utilities, whether or not they are indicated on the drawings, shall be recorded as to location and depth and shall be removed for a distance of not less that three (3) feet from outside line of all concrete work unless otherwise required by regulations. Ends shall be capped or plugged. There will be no adjustment of Contract amount for work due to inactive or abandoned utilities indicated on the drawings.

GC - 39.00 PROJECT SIGN

If required by the specifications, the Contractor shall provide a Project sign in such form and size as may be approved by the Owner. No other advertising is permitted on the Project site.

GC - 40.00 BLASTING

No explosives of any nature except for those normally employed in powder actuated tools, .38 caliber or smaller, shall be employed or used on any site except with the express and specific prior written approval of the Architect and the Owner and any appropriate governmental authorities, in each instance. The Contractor shall notify the Architect of need for such approval three (3) days prior to the proposed use of such explosives.

GC - 41.00 HISTORICAL DATA

In addition to warranties, guarantees, operating instructions, etc., elsewhere specified, the Contractor, at the conclusion of the Work and before final payment is made, shall furnish a listing, giving principal’s names, addresses, and telephone numbers of all subcontractors and material suppliers who furnished labor or materials on the job with identification of the services rendered. There shall be provided one (1) copy to the Owner’s Representative, one (1) copy to the Architect and three (3) copies to the Owner. All copies will be delivered to the Owner’s Representative for review and distribution.
The Contractor shall submit a written plan prior to completion and acceptance, consistent with the Contract Documents and applicable codes, for the testing of all building systems. All testing shall be of the complete system, before covering, or of individually separable larger portions of the system and shall be performed in the presence of the appropriate consultant and representative of the Owner. A written report shall be filed in the office of Facility Management, Des Moines Independent Community School District, recording each test, and signed by such consultant.

**GC - 43.00  TEMPORARY OR TRIAL USAGE**

Temporary or trial usage by the Owner of any mechanical device, machinery, apparatus, equipment, or any work or material supplied under the Contract before final completion and written acceptance by the Architect shall not be construed as evidence of the Architect's or Owner's acceptance of same or the commencement of any warranty periods.

The Owner has the privilege of such temporary or trial usage, for such reasonable time as the Owner and the Architect deem proper. The Contractor shall make no claim for damage or injury to or breaking of any parts of such work which may be caused by weakness or inaccuracy of structural parts or by defective materials or workmanship.

If the Contractor so elects, it may, without cost to the Owner, make such trial usage. However, trials shall only be conducted with the Architect's prior approval and under the Architect's observation.

When heating, air conditioning, ventilating, exhaust, or other items of electrical or other equipment are installed, it shall be the responsibility of the Contractor installing such equipment to operate it for a satisfactory period of time as required by the Architect for proper testing of the equipment and instructing the Owner's operating personnel. All items of equipment, testing meters, testing instruments, and incidentals required for proper testing and for instructing the Owner's operating personnel, shall be provided by the Contractor responsible for providing and installing the equipment.

**GC - 44.00  ASSIGNMENT**

Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any moneys due or to become due to him hereunder, without the previous written consent of the Owner.

**GC - 45.00  SEPARATE CONTRACTS**

The Owner reserves the right to let other contracts in connection with this Work. The Contractor shall afford such other Contractors’ reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate its work with theirs.

If any part of the Contractor’s work depends for proper execution or results upon the Work of any other Contractor, the Contractor shall inspect and promptly report to the Owner through the Owner’s Representative any defects in such work that render it unsuitable for such proper execution and results. Its failure to inspect and report shall constitute an acceptance of the other Contractor’s work as fit and proper for the reception of his work, except as to defects which may develop in the other Contractor's work after the execution of its work.
To ensure the proper execution of his subsequent work, the Contractor shall measure work already in place and shall at once report to the Owner through the Architect any discrepancy between the executed work and the drawings.

**GC - 46.00 ** CONTRACTORS’ MUTUAL RESPONSIBILITY

The entire Project may be covered by more than one contract and in such case there will of necessity be a certain overlapping of contracts. Each Contractor shall, therefore, take due notice of the Work called for in contracts other than his own. Should the Contractor cause damage to any separate Contractor on the Work, the Contractor agrees, upon due notice, to settle with such other separate Contractor by agreement, if it will so settle. If such other separate Contractor sues the Owner on account of any damage alleged to have been so sustained, the Owner may notify the Contractor, who shall, at the Owner’s option, defend such proceedings at the Contractor’s expense or reimburse the Owner for the expenses incurred in defense, and, if any judgment against the Owner arises therefrom, the Contractor shall pay or satisfy it and pay all costs and expenses thereby incurred by the Owner.

**GC - 47.00 ** LIENS

It is hereby mutually understood by and between the parties hereto that no Contractor, subcontractor, materialman, vendee, laborer, mechanic, or other person, can or will contract for or in any other manner have or acquire any lien upon the building or works covered by this Contract, or the land upon which the same is situated.

**GC - 48.00 ** WORK IN EXISTING BUILDING

In addition to all other requirements of the Contract Documents, if the Work involves an addition to an existing building, the Contractor shall erect and maintain during the progress of the Work, suitable dust-proof partitions to protect such building and the occupants thereof. If necessary in the Owner’s, Owner’s Representative’s or Contractor’s judgment, or pursuant to manufacturer’s directives or recommendations in order to protect occupants from noxious fumes, odors, or hazardous substances, the Contractor may be required to provide additional ventilation and/or work different or extended hours to avoid disruption to other activities within the existing building.

If any portions of an existing building are to be remodeled or repaired, such portions shall be adequately partitioned off with dust-proof partitions and well ventilated. Contractor’s personnel shall not access areas still in use by the Owner without prior, written authorization. All remodeling work shall be scheduled and submitted to the Owner and Owner’s Representative for approval. The various Contractors shall schedule their work jointly, in order that each may accomplish his work within such existing building in an orderly fashion during regular school vacation periods, where possible, or in such a manner as to permit full use of the building and without impairment of any existing facilities.

During the course of construction the Contractor shall maintain free and unimpeded all required exits from the building. Barricades shall be so erected that traffic is separated and protected from the construction. Such exits shall not be closed at any time for any reason while the building is occupied nor at any time when the building is unoccupied except after written approval is given by the Owner and proper warning and directional signs are posted.
The Contractor shall indemnify and hold the Owner and the Architect and their agents and employees harmless from and against all claims, damages, losses, and expenses, including attorneys’ fees arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including the Work itself and including the loss of use resulting therefrom but only to the extent caused by any negligent or intentional act or omission or breach of contract of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. This specific indemnification by the Contractor is in addition to and not in lieu of other remedies which may be available to the Owner.

Contractor agrees to indemnify and hold harmless the District and their agents and employees from and against all claims, damages, losses and expenses, including attorneys’ fees, arising out of or resulting from a breach of cybersecurity or other cyber fraud incident affecting Contractor that results in the disclosure of the District’s financial or other confidential information to any unauthorized person or misuse of the District’s financial or other confidential information by any unauthorized person. This specific indemnification by Contractor is in addition to and not in lieu of other remedies which may be available to the District.

The obligations of the Contractor under this Article shall not extend to and will be reduced by the liability of the Architect or the Architect’s Consultants to the extent directly attributable to and proximately caused by (A) the negligent preparation or approval of drawings or specifications, or (B) errors or omissions in written directions or instructions given by the Architect or the Architect’s Consultants.

**GC - 50.00 LIQUIDATED DAMAGES FOR DELAY IN COMPLETION**

It is understood and agreed that completion of the entire Project within the time stated in the Contract Agreement is a matter of vital necessity to the Owner, that the Owner will suffer substantial damages if the entire Project is not completed within that time, and that it would not be possible to accurately determine the amount of such damages. In view of these facts, if imposed by the Owner, the Contractor agrees to pay the Owner liquidated damages in the sum set forth in the Construction Agreement for each calendar day, if any, which elapses between the dates stated in the Construction Agreement for either or both Substantial Completion and Final Completion, as extended by any extensions of time under the provisions of the General Conditions of the Contract. If the Contractor shall fail to pay such liquidated damages, if imposed, promptly upon demand therefore, the surety on his performance bond shall pay such damages. Also, the Owner may withhold all or any part of such liquidated damages from any payments due the Contractor. No changes in the Work shall extend the time for completion unless set forth on a properly approved field order/change order. Document titled “Schedules and Liquidated Damages” shall determine if and at what amount liquidated damages will be imposed on the Project.

**GC – 51.00 SUBSTANTIAL COMPLETION**

When the Contractor considers that the Work, or a designated portion thereof which is acceptable to the Owner, is substantially complete, the Contractor shall prepare for the Owner a list of items to be completed or corrected and submit it to the Owner’s Representative. The list shall include written
warranties and related documents required by the Contract and assembled by the Contractor. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the Architect and the Owner’s Representative, on the basis of an inspection, jointly determine that the Work or designated portion thereof is substantially complete, the Architect and Owner’s Representative will then prepare a Statement of Responsibilities of the Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and fix the time within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall commence on the date of occupancy of the Work or designated portion thereof by the Owner unless otherwise provided in the Statement of Responsibilities. The Statement of Responsibilities shall be submitted to the Owner and the Contractor for his written acceptance of the responsibilities assigned in such Statement.

GC—52 REQUEST FOR EARLY RELEASE OF RETAINED FUNDS

Upon achieving Substantial Completion, the Contractor may formally request the release of all or part of the retained funds being held on the Project. The Contractor’s request for Release of Retained Funds shall be accompanied by the required sworn statement that ten (10) calendar days prior to filing the Request for Release of Retained Funds the required sworn statement was given to all known subcontractors, sub-subcontractors and suppliers that the Contractor is requesting the early release of retained funds. If proper documentation is received from the Contractor, the Owner will release the requested funds at the next monthly Board meeting of within thirty (30) days, whichever is less, except it may retain the following:

a) An amount equal to 200% of the value of labor and materials yet to be provided on the Project, which will include the value of the itemized costs for closeout phase items of the Project as listed in Section 01705 of the documents and other items as determined by the Owner and its authorized Contract representative.

b) An amount equal to 200% of the value of any Chapter 573 claims currently on file at the time the Request for Release of Retainage Funds is approved.

If the Owner withholds an amount from the retainage payment to the Contractor, the Owner will provide a reason the request is being denied the Contractor within thirty (30) calendar days of the receipt of the request.

Approval of early release of retained funds will be made by Resolution of Owner’s Board of Directors. The Request will be presented to the Board of Directors for acceptance when:

1) All Work, under the request has been certified as finally and satisfactorily completed;

2) All Work, under the request has been inspected and approved by the Owner’s representative;

3) the Contractor has certified to the Owner that the materials, labor, and services involved in each Application for Payment have been paid in accordance with the Contract Documents; and
4) Documents as outlined in Section 01705 “Early Release of Retained Funds” including, but not limited to, the following documents have been completed and received by the Owner:

- Request for Release of Retained Funds - DMDSFM - -----
- Notice of Contractor’s Request for Early Release of Retained Funds
- Consent of Surety to Early Release of Retained Funds

GC - 53.00 ACCEPTANCE AND FINAL PAYMENT

Within a reasonable time after final completion of the Work and before Final Acceptance thereof, a final inspection shall be made by the Architect to determine whether the Work has been completed in accordance with the Contract Documents. A written Report of Inspection and detailed “punch list,” certified as to contents and date of inspection, shall be completed by the Architect and delivered or mailed to the Contractor.

All prior Requests for Payment shall be subject to correction in the final Request for Payment.

The balance remaining due the Contractor, if any, following Final Acceptance will be paid not earlier than thirty-one (31) days from the date of Final Acceptance of said work by the Owner, subject to the conditions and in accordance with the provision of Chapter 573 of the Code of Iowa.

Final Acceptance of the Work will be made by Resolution of Owner’s Board of Directors. The Work will be presented to the Board of Directors for Final Acceptance when:

1) All Work, including the punch list, has been certified as finally and satisfactorily completed;

2) All Work, including the punch list, has been inspected and approved by the Owner’s representative;

3) the Contractor has certified to the Owner that the materials, labor, and services involved in each Application for Payment have been paid in Accordance with the Contract Documents; and

4) Documents as outlined in Section 01700 “Contract Closeout”, including, but not limited to, the following documents have been received by the Owners:

- Application for and Certification of Payment - DMPSFM-600
- Itemization Sheet for Final Payment - DMPSFM-610
- Certificate of Completion - DMPSFM-620
- Contractor’s Affidavit of Payment of Debts & Claims - DMPSFM-630
- Contractor’s Affidavit of Release of Liens - DMPSFM-640
- Consent of Surety Company to Final Payment - DMPSFM-650
- Architect’s Certificate of Specifications - DMPSFM-660
Required Guarantees

If any unpaid claim for such labor, materials, supplies, or equipment is filed with the Owner before payment in full of all sums due the Contractor, the Owner shall withhold from the final payment sufficient funds, if available and in accordance with Iowa Code Chapter 573, as amended, to provide for the payment of such claim, until the same shall have been paid or withdrawn. Such payment or withdrawal shall be evidenced by filing with the Owner a receipt in full or an order authorizing withdrawal signed by the claimant or his duly authorized agent or assignee.

If a claim under Iowa Chapter 573 is filed against the Owner, the Contractor agrees to defend, indemnify, hold harmless and/or reimburse the Owner from, against and for any and all damages, settlements, payments or expenses, (including reasonable attorneys' fees) incurred by the Owner on account of any and all claims filed against the Project as a direct result of the Contractor.

If any claim for such labor, materials, supplies, or equipment remains unsatisfied after all payments are made by the Owner to the Contractor, the Contractor shall refund to the Owner all sums which the latter may for any reason be compelled to pay to satisfy such claim, including all costs and attorneys' fees incurred by the Owner as a result of the Contractor's default in such respect.

The making and acceptance of the final payment shall not constitute a waiver of any claims by the Owner, including, among other things, those arising from unpaid claims, from faulty work which appears before or after final payment, or from any failure to comply with any requirements of the Contract Documents.

GC – 54.00 WARRIANTIES ON PORTIONS OF THE WORK

The Contractor shall, in case of work performed or materials or equipment provided for which warranties are required by the Contract Documents, secure the required warranties and deliver copies thereof to the Architect and the Owner upon completion of the Work. All such warranties shall commence from the date set forth in the Certificate of Substantial Completion and will not in any way reduce the Contractor's responsibilities under his Contract. Whenever guarantees or warranties are required by the specifications for a longer period than one year, such longer period shall govern.

Contractor shall provide Owner with an acceptable maintenance bond at the time of Final Acceptance. Maintenance guarantee shall run for one (1) year from the time of acceptance to protect Owner from faulty workmanship and materials as outlined in the preceding paragraph.

GC - 55.00 CONTRACTOR'S PROJECT GUARANTEE AFTER COMPLETION

The Contractor expressly warrants and guarantees that the Project will be constructed in a good, firm, substantial workmanlike manner; free from structural and workmanship defects and defects in materials; and that the improvements will be fit for occupancy and built in strict compliance with contract documents.

Neither the Architect's approval of the final Request for Payment nor payment of any Request for Payment or of any sum previously withheld from the Contractor shall relieve the Contractor of responsibility for its warranty and guarantee hereunder or for faulty materials or workmanship, and,
unless otherwise agreed, it unconditionally agrees to remedy any defects due thereto, and pay for any
damages resulting therefrom, which shall appear within a period of one (1) year from the date set forth
in the Letter of Acceptance of his work. The Contractor shall repair or replace any defective
workmanship and materials in a manner acceptable to the Owner, without expense to the Owner, within
ten (10) days after written notification by the Owner of such defect. If said repairs or replacements or
mutually satisfactory arrangements have not been made within ten (10) days, the Owner shall make said
repairs or replacements and charge the cost to the Contractor.

The Owner, the Architect, and the Contractor together shall make at least one (1) complete inspection of
the Work after the Work has been accepted by the Architect and the Owner. Such inspection shall be
made approximately eleven (11) months after the acceptance of the Work. The Architect shall make a
written report of the inspection, certified as to contents and date of inspection, and forward the report
by mail to the Owner and the Contractor within seven (7) days after completion of the inspections. The
Contractor shall immediately initiate such remedial work as may be necessary to correct any deficiencies
or defective work shown by this report and shall promptly complete all such remedial work in a
satisfactory manner.

If the Contractor fails to promptly correct deficiencies and defects shown by the report within ten (10)
days after notice thereof, the Owner may do so. The Owner shall be entitled to collect from the
Contractor all costs and expenses incurred in correcting such deficiencies and defects, as well as all
damages resulting from such deficiencies and defects. The guarantee and warranties of the Contractor
provided for herein are in addition to and not in lieu of any other remedies available to the Owner.

**GC - 56.00  SOIL TEST REPORT**

The Owner has arranged for a separate consultant to conduct field and laboratory soil investigations on
the site and to prepare a report of the findings. Such reports, as appropriate, are included as an
attachment to the specification. Such data is offered solely for reference and is not to be considered a
part of the Contract Documents. The data contained in any such document prepared for the Owner by a
separate consultant is believed to be reliable; however, the Owner and Architect do not guarantee its
accuracy or completeness. All applicable subcontractors shall be fully familiar with the contents of such
reports, if prepared, and shall consider and evaluate them in the performance of their contracts.

**GC - 57.00  EXPEDITING MATERIALS**

The Contractor shall exercise due diligence in seeing that all equipment, materials, and supplies are
ordered and delivered well in advance of the time they are needed on the job; and it shall properly store
and protect same at his expense and in accordance with these General Conditions, either at the site or
elsewhere as approved by the Architect. It shall, when requested, submit to the Architect evidence that
such orders have been placed and/or received.

**GC - 58.00  MISCELLANEOUS KEYS, SWITCHES, ETC.**

Except as otherwise specifically required by the Technical Specifications at the completion of the Project,
all loose keys for hose bibs, adjustment keys and wrenches for door closers and panic hardware, keys for
electric switches, electrical panels, and all other equipment shall be identified and accounted for and
turned over to the Architect for transmittal to the Owner.
If required by the Contract Documents, the Contractor shall use the Internet based Project Management system for communications and tracking of the Project. The system shall be used to keep comprehensive account of Project activities, conditions and issues including, but not necessarily limited to, general correspondence, reports, drawings, drawing submittals and drawing schedules, submittals, shop drawings, payment requests, transmittals, change request, and authorization, meeting minutes, confirmation of oral instruction, notice of non-conforming work, press photographs, call-back requests, and other documentation as may be specified by the Owner. The Contractor shall have access to the program established at their main office as well as the Project site. There is no fee associated with the use of the Internet based Project Management System.
The following supplements modify, change, delete from or add to the General Conditions of the Contract for Construction. Where any Article of the General Conditions is modified or any Paragraph, Subparagraph, or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph, or Clause shall remain in effect.

END OF DOCUMENT 00800
PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Project description.
   2. Work by Owner.
   3. District Furnished Products.
   4. Contractor’s Use of Site and Premises.
   5. Surrounding Site Condition Survey.
   6. Work Sequence.
   7. District Occupancy.

1.2 PROJECT DESCRIPTION

A. Des Moines Public Schools (DMPS) – McCombs Middle School – Re-Roofting Project – 3300 E. 29th Street, Des Moines, Iowa 50317.

B. The project includes a partial Re-Roofting Project for approximately 78,000 sq. ft. of roof area as reflected in the construction documents.

C. Work performed under the Contract Documents for this project comprises the complete construction of the Project and includes: Lump Sum Contract will be awarded for the Total Construction of the work, including All Construction Work Relating to this Re-Roofting Project of the designated McCombs Middle School – Re-Roofting Project except for all Existing Roof Areas as noted on drawings indicated as “No Work”.

D. DMPS McCombs Middle School – Re-Rooft Project, consist of the following: which includes remove all designated wet insulation and associated Modified Bitumen Membrane. Mechanically screw-fastened or fully adhere new polyisocyanurate insulation to steel roof deck. Install new tapered roof insulation as shown on drawings matching the existing roof thickness and install 60 mil TPO membrane sheet air sealed over new insulation patch. After replacing all wet roof system areas then install under Base Bid new 2” thick loose laid insulation, new loose laid gypsum protection board and vented TPO membrane roof system. Install new wood blocking and sheathing as shown on details. Install associated metal roof edge, counter, parapet and misc. flashings and other misc. repairs as shown in specification and on drawings with all work appurtenant thereto. There is an Alternate Bid #1 option to replace all wet roof system area with new tapered polyisocyanurate insulation screw fastened to steel roof deck and then install a 60 Mil TPO Membrane roof system with new 2” thick screw fastened insulation, adhered gypsum protection board with low rise foam adhesive and a Fully Adhered 60 mil TPO membrane roof system. Provide and install new wood blocking and sheathing as shown on details in Preform all misc. repairs and as shown on drawings and required on specifications.

E. Each subcontractor is responsible for familiarizing himself with the Work in other divisions and under other contracts as it pertains to and affects his own.

F. Construction will commence upon execution of the contract. Contractor shall restrict his operation to areas designated by the Owner and stay within the Owner provided and Contractor erected chain link fence panel barricades to protect the public and property. Contractor shall coordinate with the Owner as construction proceeds.
G. The contractor is to coordinate with the owner so as not to intake dust and fumes into the existing HVAC system when performing dusty work or applying adhesives that contain noxious fumes. **Contractor is to securely install filter fabric over all HVAC openings and louvers prior to beginning any restoration work.** If building interior needs cleaning do to dusty building interior the Owner will have the building professionally cleaned and the cost to clean the building will be deducted from the final amount owed the contractor.

H. The owner has performed some random roof core samples and tested the roof adhesive and insulation and found it to not contain any asbestos containing materials. If the contractor suspects any existing materials contain asbestos, they shall immediately notify the owner’s representative and they will have the questioned materials tested and abated if found to contain asbestos materials.

1.3 **WORK BY OWNER**

A. Items noted "NIC" (Not in Contract), will be furnished and installed by others separately from the work included in these Bid Packages.

1.4 **DISTRICT FURNISHED PRODUCTS**

A. Products furnished by the District and installed by the Contractor. Refer to drawings for these items.

B. District's Responsibilities:

1. Arrange and pay for owner furnished product delivery to site. (Verify for each item)
2. On delivery, inspect products jointly with Contractor.
3. Submit claims for transportation damage and replace damaged, defective, or deficient items.
4. Maintain manufacturer's warranties, inspections and service.
5. Obtain receipt for materials delivered to Contractor.

C. Contractor's Responsibilities:

1. Receive and unload products at site; inspect for completeness or damage, jointly with District.
2. Handle, store, install and finish products.
3. Repair or replace items damaged after receipt.

1.5 **CONTRACTOR USE OF SITE AND PREMISES**

A. Limit use of site and premises to allow:

1. District use of the existing building during the construction period.
2. Work by other contractors and work by District.
3. Safe use of site and premises by public.
4. Contractor and subcontractor employees’ use of areas outside construction zone is restricted.
### 1.6 SURROUNDING SITE CONDITION SURVEY

A. Prior to commencement of work, the Contractor, the Owner and the Architect shall jointly survey the site and existing buildings, paving, plant life, and other items, noting and recording existing damage such as cracks, sags, loose blocks or bricks, unhealthy plant life, and other damage.

B. This record shall serve as a basis for determination of subsequent damage to these items due to settlement or movement due to demolition and construction operations.

C. Such damage, as noted, shall be suitably marked on the item, if possible, and the official record of existing damage shall be signed by the parties making the survey.

D. Cracks, sags, or other damage to the site and adjacent buildings, paving, plant life, and other items not noted in the original survey, but subsequently observed shall be reported immediately to the Owner in writing.

### 1.7 WORK SEQUENCE

A. Construct work in phases to accommodate District requirements during the construction period. Coordinate construction schedule and operations with the Owner. Sequencing is listed in Section 00210.

B. The Contractor shall provide a safe barrier / fence around On-grade Staging Areas and material storage as required by the Contractors to properly protect all building occupants. Contractor shall coordinate with the Owner for exact fence location. Contactor shall maintain and secure the fence and gates at the end of each day during the entire project. The Contractor shall take down the barrier / fence after the project is completed. Any damage cause by vandalism during this project will be the contractor’s responsibility relating to this project. When Contractors are working above exterior exits, they shall erect a walk-thru scaffolding with ¾” thick plywood top leading to a safe public way.

C. New construction work shall be kept clean and clear of debris and construction work shall not impede the Owner’s access and use of the School’s day to day operations.

D. Contractor shall install and maintain temporary safety barricades around all crane and lift operations when lifting equipment and materials onto the scaffolding and throughout the project duration. Also contractor shall install and maintain temporary safety barricades around all scaffolding and work areas around the existing facility walls to be restored that are not in the project work area. Temporary barricades protecting must comply with all OSHA requirements.

E. Contractor must provide safety barricades, safety belts and harnesses for worker working above the ground to prevent falling conditions per OSHA requirements for all workmen working from ladders, lifts, scaffolding, etc. at all times.

F. Contractor shall provide trash chute or dumpster and crane to remove all debris from the project. In no case shall materials be allowed to be removed from the roof or scaffolding by dropping materials off the side of the scaffolding or over the roof edge without being in an enclosed chute.
1.8 DISTRICT OCCUPANCY

A. The District will occupy the existing building during the construction period.

B. Time is of the essence.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

END OF SECTION 01010
PART 1 - GENERAL

1.1 SUMMARY
   A. Section Includes
      1. Procedures for preparation and submittal of Applications for Payment.
   B. Related Sections:
      3. Section 01300 - Submittals: Submittal procedures.
      4. Section 01700 - Contract Closeout: Final Payment.
      5. Document 00800 - Supplementary Conditions

1.2 SCHEDULE OF VALUES
   A. Submit to the Owner’s Representative a Schedule of Values allocated to the various portions of the Work broken down by building and trade, supported by data to substantiate its accuracy as the Owner’s Representative, Architect, and the Owner may require. This schedule, when approved, shall be used as a basis for the Contractor's application for payment.
   B. Sample of the Schedule of Values format follows this section. All line items shall be separated into labor and material components. A separate line item shall be included in the Schedule of Values for the Contractors Overhead and Profit.
   C. Schedule of Values must be submitted, reviewed and approved by the Owner’s Representative and Architect prior to the first Application for Payment.

1.3 FORMAT
   A. Sample of the Application for Payment form follows this Section and is titled "Application and Certification for Payment". Electronic emailed copies of payment applications will be used.

1.4 PREPARATION OF APPLICATIONS
   A. Applications shall be prepared in two copies.
   B. Contractor to meet with Owner’s Representative and Architect at regular job progress meeting to review proposed Application for Payment.
   C. Application as tentatively approved by Owner’s Representative and Architect shall be submitted.
   D. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed.
   E. Submit back-up documentation to support Application for Payment as may be requested by the Architect or Owner’s Representative.
   F. Architect will review Project Record Documents at each billing meeting. Status of Project Record Documents will be considered in evaluating proposed monthly billings.
   G. List each authorized Change Order as an extension on the Schedule of Values, listing Change
Order number and dollar amount as for an original item of Work.

H. Prepare Application for Final Payment as specified in Section 01700.

I. Prepare and submit with each Application for Payment the List of Potential Claims that follows this section per the requirements of paragraph G.C. – 18.01 of the General Conditions, Section 00700.

J. Prepare requests and accompanying sworn statement for early release of retained funds upon Substantial Completion as specified in Section 01705 “Early Release of Retained Funds”

1.5 SUBMITTAL PROCEDURES

A. All submittals associated with the Application for Payment shall be done in one copy.

B. Submit an updated construction schedule with each Application for Payment.

C. Payment Period: Submit at monthly intervals as coordinated by the Owner’s Representative.

D. Submit substantiating data as may be required.

E. Submit wavers on the form approved by the Owner’s Representative.

F. Submit list of potential claims.

1.6 SUBSTANTIATING DATA

A. When Owner’s Representative requires substantiating information, submit data justifying dollar amounts in question.

B. Provide one copy of data with cover letter for each copy of submittal. Show Application number, date, and line item by number and description.

C. When Application for Payment is requesting payment for stored materials the following information shall be submitted:
   1. Letter transferring ownership of material stored off site.
   2. Insurance certificate covering material stored off site.
   3. Invoice from supplier confirming cost of all stored material, whether on or off site.

1.7 PAYMENT PERIOD

A. If the Contractor has made a request for payment as stated above, the District will, with reasonable promptness, issue payments to the Contractor on the next standard monthly payment schedule, for such amount as the District, Architect, and Owner’s Representative determine to be properly due. If there are no problems with that month's progress billing, reimbursement for compensation shall be paid to the Contractor no later than thirty (30) days from the approved progress billing.

B. Note: there is only one DMPS School Board Meeting in July so all Contractor Pay Applications for June must be submitted to the Architect no later than June 10th to get paid for the June work in the month of July. Contractor may estimate project amount completion through June 30th. If June Pay Application is submitted after June 10th to the Architect, mostly likely contractor will not receive payment for June work until August 15th.
PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

END OF DOCUMENT 01027
LIST OF POTENTIAL CLAIMS

To: Des Moines Public Schools
From:

PROJECT NAME:                        Invoice Period:
Bid Number:                           From:          To:

Check one of the following:

Yes, we have the following listed potential claims for the contract period listed above. (List below or on additional sheets the potential claims for this contract period. Include description of potential claim and a potential estimated cost.)

No, we do not have any potential claims for the contract period listed above.

(Signature)                        (Date)

(Printed Name)

(Title)
Des Moines Public Schools:                  PROJECT:                        APPLICATION NO.:          Distribution to:
1917 Dean Avenue                            PROJECT NO.:                   PERIOD TO:                         X DMPS & Architect
Des Moines, IA 50316                        VIA ARCHITECT:                  CONTRACT DATE:

FROM CONTRACTOR:                            VIA ARCHITECT:                  CONTRACT DATE:

CONTRACTOR'S APPLICATION FOR PAYMENT
Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet, AIA Document G703, is attached.

1. ORIGINAL CONTRACT SUM $ -
2. Net change by Change Orders $ -
3. CONTRACT SUM TO DATE (Line 1 + 2) $ -
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) $ -

5. RETAINAGE:
   a. 10% of Completed Work $0.00
      (Columns D + E on G703)
   b. 1% of Stored Material $0.00
      (Column F on G703)
   Total Retainage (Line 5a + 5b or
      Total in Column I of G703) $0.00

6. TOTAL EARNED LESS RETAINAGE (Line 4 less Line 5 Total) $ -

7. LESS PREVIOUS CERTIFICATES FOR PAY (Line 6 from prior Certificate) $ - $0.00

8. CURRENT PAYMENT DUE

9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6) $ -

CHANGE ORDER SUMMARY

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<th>DEDUCTIONS</th>
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<td>Total approved this Month $ - $ -</td>
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<td>NET CHANGES by Change Order $ - $ -</td>
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ARCHITECT'S CERTIFICATE FOR PAYMENT
In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED $ -

(Attach explanation if amount certified differs from the amount applied for. Initial all figures on this Application and on the Continuation Sheet that are changed to conform to the amount certified.)

ARCHITECT:
By:                           Date:_________

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.
AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification is attached. In tabulations below, amounts are stated to the nearest dollar. Use Column I on Contracts where variable retainage for line items may apply.

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AIA DOCUMENT G703 (Instructions on reverse side)

APPLICATION NUMBER: 
APPLICATION DATE: 
PERIOD TO: 
ARCHITECT'S PROJECT NO: 

PROJECT TOTAL $ - $ - $ - $ - $ - $ - $ - $ -
PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes
   1. Submittals.
   3. Change procedures.
   4. Execution of change orders.
   5. Correlation of Contractor submittals.

B. Related Sections
   2. Section 01300 - Submittals.

1.15 DEFINITIONS

The following definitions shall be used in establishing prices for change orders:

A. “Price” is the direct cost of material, labor, equipment, insurance, bond, and subcontract costs, plus profit and overhead.

B. “Cost” is the direct expense for material, labor, equipment, insurance, bond, and subcontract costs.

C. “Direct expense” is the Contractor’s actual cost of any item that is required for the completion of his Contract obligation (i.e., tool rental, material, equipment, etc.).

D. “Overhead” is a business expense created by the project, but not necessarily a direct part of that portion of the work involved (i.e., small tools, project management, (including job site superintendent, administrative support, etc.).

E. “Profit” is the compensation accruing to the Contractor for the assumption of risk in a business enterprise.

1.2 SUBMITTALS

A. Submit name of the individual authorized to receive change documents and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.

B. Field Order Request Forms: Forms approved by the Owner’s Representative and Owner.

C. Approved Forms are attached to this Section.

D. FIELD ORDER REQUESTS MUST BE SUBMITTED IN WRITING WITHIN TEN (10) DAYS FROM THE DATE THE CONTRACTOR HAS KNOWLEDGE OF THE PROPOSED CHANGE.

1.3 DOCUMENTATION OF CHANGE IN CONTRACT SUM AND CONTRACT TIME

A. Furnish a proposal for a Field Order Request containing a price breakdown, itemized as required by the Owner’s Representative. The breakdown shall be in sufficient detail to permit an analysis of all direct costs, such as material, labor, equipment, insurance, bond,
and subcontract costs. Any amount claimed for subcontracts shall be supported by a similar price breakdown.

B. Maintain detailed records of work done on a time and material basis. Provide a complete description of the proposed change together with complete information required for evaluation and to substantiate costs of all changes in the Work.

C. Document each quotation for a change in cost or time with sufficient data to allow evaluation of the quotation.

D. Provide additional data to support computations for each request:
   1. Quantity of products, labor and equipment.
   2. Taxes, insurance and bonds.
   3. Justification for any change in Contract Time. (Applies to critical path items only)
   4. Credit for deletions from Contract, similarly documented.

E. Support each claim for additional costs, and for work done on a time and material basis, with additional information:
   1. Origin and date of claim.
   2. Dates and times work was performed, and by whom.
   3. Time records and wage rates paid.
   4. Invoices and receipts for products, equipment, and subcontracts, similarly documented.

1.4 PROFIT & OVERHEAD MARK-UP FOR FIELD ORDERS AND CHANGE ORDERS

A. The profit and overhead mark-up on costs for all change orders shall NOT EXCEED the following:
   1. Fifteen (15) percent maximum mark-up for overhead and profit for Work directly performed by employees of the Contractor, Subcontractor or Sub-Subcontractor.
   2. Five (5) percent maximum Contractor’s mark-up for overhead and profit for Work performed or passed through by a Subcontractor and passed through to the Owner by the Contractor.
   3. Five (5) percent maximum Subcontractor’s mark-up for overhead and profit for Work performed or passed through by a Sub-Subcontractor and passed through to the Owner by the Subcontractor and Contractor.
   4. Regardless of the above, the maximum allowable total mark-up for all tiers of contractors shall be twenty (20) percent passed through to the Owner by the Prime Contractor under any circumstances.

1.5 CHANGE PROCEDURES – FIELD ORDERS & CHANGE ORDERS

A. The Architect will advise of minor changes in the Work not involving an adjustment to Contract Sum or Contract Time by issuing supplemental instructions.

B. The Owner’s Representative may issue a Field Order Request which includes a detailed description of a proposed change with supplementary or revised Drawings and Specifications, a change in Contract Time for executing the change, and the period of time
during which the requested price will be considered valid. Contractor shall prepare and submit an estimate within 10 days.

C. The Contractor may propose a change by submitting a request for change to the Owner’s Representative describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation.

D. For any potential claims, the Contractor must fill out a Potential Claim Form with each monthly Pay Application. See paragraph 18.01 of the General Conditions and Section 01027 – Application for Payment

1.5 EXECUTION OF FIELD ORDERS

A. Upon the Owner’s approval of a Field Order Request (FOR), it will act as the authorization for the Contractor to proceed with the change.

B. Field Order Requests are executed for any change up to 15% of contract amount and are approved by the District’s Chief Operating Officer.

C. If Total of all FORs exceed 15% of the total contract value, the school board will be notified and any changes beyond this point are presented to the school board for approval.

1.6 CORRELATION OF CONTRACTOR SUBMITTALS

A. Contractor will promptly revise Schedule of Values and Application for Payment forms to record each authorized Field Order Request as a separate line item and adjust the Contract Sum.

B. Promptly revise progress schedules to reflect any changes in Contract Time, revise sub-schedules to adjust time for other items of work affected by the change, and resubmit.

C. Promptly enter changes in Project Record Documents.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

END OF SECTION 01028
PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Submission procedures.
B. Documentation of changes to Contract Sum and Contract Time.

1.2 RELATED SECTIONS

A. Document 00310 - Proposal: Schedule of Bid Alternates.
B. Document 00510 - Agreement Form: Incorporating monetary value of accepted Alternates.
C. Document 00100 - Instructions To Bidders: Requirements for Alternates.
D. Section 01310 - Progress Schedules: Work schedule affected by Alternates.
E. Section 01600 - Material and Equipment: Product options and substitutions.

1.3 REQUIREMENTS

A. Submit Alternates with full description of the proposed Alternate and the effect on adjacent or related components.
B. Alternates quoted on Proposal Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
C. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.4 SELECTION AND AWARD OF ALTERNATIVES

A. Indicate variation of Bid Price for Alternates described below and list in Proposal Form or any supplement to it which requests a 'difference' in Bid Price by adding to or deducting from the base bid price.
B. Bid may be evaluated on base bid price, Consideration may be given to Alternates and Bid Price adjustments.
C. The Owner will either award the Base Bid or Alternate Bid #1 if the owner elects to award a contract. They are two completely different systems with two completely different prices.

1.5 SCHEDULE OF ALTERNATES

A. **Alternate Bid No 1**: The undersigned proposes to provide and construct the Work required, in accordance with said Contract Documents. State the amount for *All the Materials and Labor to install a New FULLY ADHERED TPO Roof System for required Roof Areas for the McCombs Middle School – Re-Roof Project* as shown on Drawings & Specs:

PART 2 – PRODUCTS

Not used

PART 3 – EXECUTION

Not used

END OF SECTION 01030
1.01 SECTION INCLUDES

A. Measurement and payment criteria applicable to the Work performed under a unit price payment method.

1.02 MEASUREMENT

A. Measurement methods will be done with the Contractor, Owner and the Architect prior to completing work that is not indicated on the Base Bid or Alternate Bids. The work shown on the drawings is the work to be done under the base bid or accepted alternate bids. The unit pricing is for the adding or deleting amount of wet Modified Bitumen roof system including, roof insulation and fiberboard and installing new tapered polyisocyanurate roof insulation and 60 mil TPO Air Barrier over the area the existing roof system was removed to level of existing roof surface shown on the drawings.

B. The measurement will be calculated per:

1. Per square feet to add or delete the existing roof area to be removed that is not shown on the drawings to be removed.

1.03 PAYMENT

A. Payment Includes: Full compensation for all required labor, products, materials, tools, equipment, plant transportation services and incidentals: erection, application or installation of an item of the work, overhead and profit.

B. Final payment: Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the Architect multiplied by the unit/sum price for the Work, which is incorporated in or made necessary by the Work.

1.04 DETERMINATION OF UNIT PRICE WORK

A. In the event the Owner desires to add or delete repairs as defined by the drawings the contractor shall provide on the bid form the required unit prices for the following items. Prior to any of the Unit Price work being performed the Contractor, Owner and Architect shall meet on site to determine the exact scope of the unit price work to be added from the contract. Following the agreed upon change in scope the Architect shall draft a Change Order adjusting the contract amount. The Contractor shall not proceed with the Unit Price Change in Scope until he has a signed change order from the Owner and the Architect.

1.05 SCHEDULE OF UNIT PRICES

A. State the amount per square foot for removing and disposing of any wet 4” +/- thick tapered polyisocyanurate insulation, wet 3/4” perlite board, and associated Modified Bitumen Roof Membrane System above wet insulation that is not identified in Base Bid or Alternate Bids to be remove and replaced with mechanically attached with two or more new matching layers of tapered paper faced polyisocyanurate insulation and 60 mil TPO
roof membrane sealed air tight to existing Modified Bitumen Roof Membrane. The new roof replacement insulation shall match the existing roof insulation thickness and slope and be secured the existing roof deck for 90 mph wind warranty. Note, this Unit Price will be used to add or subtract wet roof system areas from the base or alternate bid of wet roof system area not shown on the drawings.

2.01 PRODUCTS

A. Not used.

3.01 EXECUTION

A. Not used.

END OF SECTION 01031
1.1 SUMMARY
A. Section Includes
   1. Coordination
   2. Pre-construction Meeting
   3. Project Meetings
   4. Pre-installation Conferences
   5. Electrical and Mechanical Coordination
   6. Coordination with Work by District
   7. Special Meetings
   8. Coordination of Contract Closeout

1.2 COORDINATION
A. Coordinate scheduling, submittals, and Work of the various Sections of specifications to assure efficient and orderly sequence of Work, with provisions for accommodating items to be installed later and for accommodating items to be installed by the District and other Contractors.

B. Resolve differences or disputes concerning coordination, interference, or extent of work of the various sections of the specifications. Contractor's decisions if consistent with the requirements of the Contract Documents shall be final.

C. Coordinate completion and cleanup of Work of separate Sections in preparation for Substantial Completion.

D. Coordinate requests for substitutions to assure compatibility of space, of operating elements, and effect on work of other sections.

E. Coordinate sequence of work to accommodate District occupancy as specified in Section 01010.

F. Coordinate work so that work within telecom rooms is the first work done when a new trade comes on-site.

1.3 PRE-CONSTRUCTION MEETING
A. The Owner’s Representative will schedule a conference after Notice of Contract Award and prior to the start of Work.

B. Attendance Required: Owner, Architect, Owner’s Representative, Contractor, and others as appropriate.

C. Agenda:
   1. Submission of executed bonds and insurance certificates.
3. Submission of Schedule of Values, and progress schedule.
4. Designation of personnel representing the parties in Contract, the Owner’s Representative, and the Architect.
5. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders and Contract Closeout procedures.

1.4 PROJECT MEETINGS

A. The Owner’s Representative will schedule and administer meetings throughout progress of the Work at weekly intervals or as designated.

B. The Owner’s Representative will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings, receive minutes from the Architect, and distribute copies within two days to Contractor, Architect, Owner, participants and those affected by decisions made. Architect will record minutes in an approved format within 2 days and deliver to Owner’s Representative. In the event Architect does not provide minutes within 48 hours, the Owner’s Representative may prepare minutes.

C. Attendance Required: Project Manager, job superintendent, major Subcontractors, suppliers and others as appropriate to agenda topics for each meeting.

D. Agenda:
   1. Review minutes of previous meetings.
   2. Review of Work progress.
   3. Field observations, problems and decisions.
   4. Identification of problems that impede planned progress.
   5. Review of submittals schedule and status of submittals.
   6. Maintenance of progress schedule.
   7. Corrective measures to regain projected schedules.
   8. Planned progress during each succeeding work period.
   9. Coordination of projected progress.
  10. Maintenance of quality standards and work standards.
  11. Effect of proposed changes on progress schedule and coordination.
  12. Other business relating to Work.

1.5 PRE-INSTALLATION CONFERENCES

A. The Contractor will convene pre-installation conferences when required by individual Section of the Specifications. Include affected parties including the owner’s representative and the Architect/Engineer.

1.6 ELECTRICAL AND MECHANICAL COORDINATION

A. Coordinate use of project space and sequence of installation of mechanical and electrical work that is indicated diagrammatically on Drawings. Follow routings shown for pipes, ducts, and conduits as closely as practicable, with due allowance for available physical
space; make runs parallel with lines of building. Utilize space efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

B. Use large scale drawings, if their preparation is required as part of work of Division 15 - Mechanical, and Division 16 - Electrical, of these specifications, together with shop drawings and layout drawings of other affected sections of these specifications to check, coordinate and integrate the work of various sections to prevent interferences.

C. Perform and complete checking and coordination before commencing construction in the affected areas.

D. In finished areas, except as otherwise shown, conceal pipes, ducts, and wiring in the construction. Coordinate locations of fixtures and outlets with finish elements.

1.7 COORDINATION WITH WORK BY DISTRICT

A. Coordinate service connections for District furnished and District installed equipment. Verify that service connections are correct sizes and in required locations.

B. Coordinate support and anchorage for equipment furnished and installed by the District. Provide blocking and backing as shown or directed to facilitate installation of equipment by others.

1.8 SPECIAL MEETINGS

A. The Owner’s Representative may call special meetings at any time during the course of the project. Special project meetings, if deemed necessary, shall include representatives of the Contractor and subcontractors as required by the Owner’s Representative.

1.9 COORDINATION OF CONTRACT CLOSEOUT

A. Coordinate completion and cleanup of work of separate sections in preparation for Substantial Completion.

B. After District occupancy of premises, coordinate access to site by the various construction trades for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of District's activities.

C. Assemble and coordinate closeout submittals.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

END OF SECTION 01040
PART 1 - GENERAL

1.1 SECTION INCLUDES
   A. Requirements and limitations for cutting and patching of work.

1.2 RELATED SECTIONS
   A. Section 01010 - Summary of Work: Work by District or by separate contractors.
   B. Section 01120 - Alteration Project Procedures: Cutting and patching for alteration work.
   C. Section 01300 - Submittals.
   D. Section 01630 - Product Options and Substitutions.
   E. Individual Product Specification Sections:
      1. Cutting and patching incidental to work of the section.
      2. Advance notification to other sections of openings required in work of those sections.
      3. Limitations on cutting structural members.

1.3 SUBMITTALS
   A. Submit written request in advance of cutting or alteration which affects:
      1. Structural integrity of any element of project.
      2. Integrity of weather-exposed or moisture-resistant element.
      3. Efficiency, maintenance, or safety of any operational element.
      5. Work by District or by separate contractor.
   B. Include in request:
      1. Identification of project.
      2. Location and description of affected work.
      3. Necessity for cutting or alteration.
      4. Description of proposed work, and products to be used.
      5. Alternatives to cutting and patching.
      6. Effect on work of District or separate contractor.
      7. Written permission of affected separate contractor.
      8. Date and time work will be executed.

1.4 QUALITY ASSURANCE
   A. Patching shall achieve security, strength, weather protection and continuity of fire ratings, as applicable.
   B. Patching shall successfully duplicate undisturbed adjacent finishes, colors, textures, and profiles. Where there is a dispute as to whether duplication is successful or has been
achieved to a reasonable degree, the Architect's judgment shall be final.

PART 2 - PRODUCTS
Not used.

PART 3 - EXECUTION

3.1 EXAMINATION
A. Inspect existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching.
B. After uncovering existing work, inspect conditions affecting performance of work.
C. Beginning of cutting or patching means acceptance of existing conditions.

3.2 PREPARATION
A. Provide temporary supports to ensure structural integrity of the work. Provide devices and methods to protect other portions of project from damage.
B. Provide protection from elements for areas which may be exposed by uncovering work.
C. Maintain excavations free of water.

3.3 CUTTING AND PATCHING
A. Execute cutting, fitting, and patching including excavation and fill to complete work.
B. Fit products together, to integrate with other work.
C. Uncover work to install ill-timed work.
D. Remove and replace defective or non-conforming work.
E. Remove samples of installed work for testing when requested.
F. Provide openings in the work for penetration of mechanical, electrical and other work.

3.4 PERFORMANCE
A. Execute work by methods to avoid damage to other work, and which will provide appropriate surfaces to receive patching and finishing.
B. Employ original installer to perform cutting and patching for weather exposed and moisture resistant elements and sight-exposed surfaces installed as work of this Contract.
C. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
D. Restore work with new products in accordance with requirements of Contract Documents.
E. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
F. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material to full thickness of the penetrated element.
G. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit. Painted surfaces shall not present a spotty, touched-up appearance.

END OF SECTION 01045
PART 1 - GENERAL

1.1 SECTION INCLUDES
   A. Quality control.
   B. Surveying services.
   C. Project record documents.

1.2 RELATED SECTIONS
   A. General Conditions: Benchmarks, Monuments, Statues and Measurements. GC-13
   B. Section 01700 - Contract Closeout: Project record documents.

1.3 QUALITY CONTROL
   A. Employ a professional Engineer of the discipline required for specific service on project, licensed in the State of Iowa.
   B. Submit evidence of Engineer's errors and omissions insurance coverage in the form of an Insurance Certificate.

1.4 SUBMITTALS
   A. Submit name, address, and telephone number of Engineer before starting survey work.
   B. On request, submit documentation verifying accuracy of survey work.
   C. Submit a copy of registered site drawing and certificate signed by the Engineer, that the elevations and locations of the work are in conformance with Contract Documents.

1.5 PROJECT RECORD DOCUMENTS
   A. Maintain complete, accurate log of control and survey work as it progresses. Indicate dimensions, locations, angles, and elevations of construction and site work.
   B. Submit Record Documents under provisions of Section 01700.
   C. Project Record documents are to be updated on a regular basis. The status of the Project Record Documents will be considered when evaluating Applications for Payment. See section 1027 paragraph 1.4 E.

1.6 EXAMINATION
   A. Verify locations of survey control points prior to starting work.
   B. Promptly notify Architect of any discrepancies discovered.

1.7 SURVEY REFERENCE POINTS
   A. Contractor to locate and protect survey control and reference points.
   B. Control datum for survey is that indicated on Drawings.
   C. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
   D. Promptly report to Program Manager the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
   E. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.
1.8 SURVEY REQUIREMENTS

A. Provide field engineering services. Utilize recognized engineering survey practices.

B. Establish a minimum of two permanent bench marks on site, referenced to established control points. Record locations, with horizontal and vertical data, on Project Record Documents.

C. Establish lines and levels, locate and lay out by instrumentation and similar appropriate means:
   1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
   2. Grid or axis for structures.
   3. Building foundation, column locations, and ground floor elevations.

D. Periodically verify layouts by same means.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

END OF SECTION 01050
PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes
   1. Quality Assurance.
   2. Statutory and Jurisdictional Regulations.

B. Related Sections
   1. Document 00700 - General Conditions of the Contract for Construction

1.2 QUALITY ASSURANCE

A. For products of workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

1.3 STATUTORY AND JURISDICTIONAL REGULATIONS

A. All work shall conform to the following requirements:

   All building projects for Des Moines Public Schools (DMPS) shall be designed and Contract Documents prepared in conformity with the following Codes and Regulations:

   1. International Building Code (Most current version used by City of Des Moines)
   2. International Existing Buildings Code (Most current version used by City of Des Moines)
   3. Des Moines Municipal Code
   4. Uniform Plumbing Code (Most current version used by City of Des Moines)
   5. National Electric Code (Most current version used by City of Des Moines)
   6. International Mechanical Code (Most current version used by City of Des Moines)
   7. International Fire Code (Most current version used by City of Des Moines)
   8. Metropolitan Design Standards for Engineering
   10. ADA Accessibility Guideline for Buildings and Facilities


1.4 GENERAL STANDARDS FOR WORK AND MATERIALS

A. Trade Standards:

1. Referenced standards shall have full force and effect as though printed herein. Upon request, Architect will furnish information as to where copies may be obtained.

2. Material or trade associations, societies, or other bodies regularly publishing standards most widely used under these documents are listed herein together with reference symbols.

3. Individual standards referenced in technical specifications (Divisions 1 through Division 16) shall also apply to the work of this contract.

4. No construction shall commence until building plans have been submitted to and approved by the State Fire marshal’s Office and the State Building Code Bureau and/or other approving agencies as applicable.

1.5 APPLICATION

A. If there is a conflict between any referenced standard and the Contract Documents, notify the Program Manager, and await instructions before proceeding with affected work.

B. The contractual relationships, duties, and responsibilities of the parties to the Contract shall not be altered by mention or inference in any reference document.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

END OF SECTION 01090
PART 1 - GENERAL

1.1 SECTION INCLUDES
   A. Products and installation for patching and extending existing work.
   B. Products and installation for installing new components in existing construction.
   C. Transition and adjustments.
   D. Repair of damaged surfaces, finishes, and cleaning.

1.2 RELATED SECTIONS
   A. Section 01040 - Coordination: Work sequence: District occupancy.
   B. Section 01045 - Cutting and Patching.
   C. Section 01500 - Construction Facilities and Temporary Controls: Temporary enclosures, protection of installed work and existing facilities, and cleaning during construction.

PART 2 - PRODUCTS

2.1 PRODUCTS FOR PATCHING AND EXTENDING WORK
   A. New Materials: As specified in product sections or match existing products and work for patching and extending work.
   B. Type and Quality of Existing Products: Determine by inspection and testing products where necessary, referring to existing work as a standard.

PART 3 - EXECUTION

3.1 EXAMINATION
   A. Verify that demolition is complete, and areas are ready for installation of new work.
   B. Beginning of restoration work means acceptance of existing conditions.

3.2 PREPARATION
   A. Cut, move, or remove items as necessary for access to alterations and renovation work. Replace and restore at completion.
   B. Remove unsuitable material not marked for salvage, such as rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished work.
   C. Remove items to be salvaged and relocate to an area on the main level of the building as designated by the Owner’s Representative. Coordinate Owner's storage with Owner’s Representative. Weather protect until acceptance by Owner.
   D. Remove debris and abandoned items from area and from concealed spaces.
   E. Prepare surface and remove surface finishes to provide for proper installation of new work and finishes.
   F. Close openings in exterior surfaces to protect existing work and salvage items from weather and extremes of temperature and humidity. Insulate ductwork and piping to prevent
condensation in exposed areas.

G. Protect existing fire alarm sensors and wiring in ceilings and walls from damage.

1. Alert Owner’s Representative prior to work in buildings with existing active fire alarm sensors to avoid response to false alarm and advise Owner’s Representative each day at end of work to reinstate response to alarms.

3.3 INSTALLATION

A. Coordinate work of alterations and renovations to expedite completion sequentially and to accommodate District occupancy.

B. Remove, cut, and patch work in a manner to minimize damage and to provide a means of restoring products and finishes to specified condition.

C. Refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent finishes.

D. Advise Architect of existing plumbing, heating, ventilation, air conditioning, and electrical systems, which are found to be deficient during course of the work.

E. Install products as specified in individual sections.

3.4 TRANSITIONS

A. Where new work abuts or aligns with existing, perform a smooth and even transition. Patch work to match existing adjacent work in texture and appearance.

B. When finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division.

3.5 ADJUSTMENTS

A. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.

B. Where a change of plane of 1/4 inch or more occurs, provide for a smooth transition.

C. Trim existing doors as necessary to clear new floor finish. Refinish trim as required.

D. Fit work at penetrations of surfaces as specified in Section 01045.

3.6 FINISHES

A. Finish surfaces as specified in individual product sections.

B. Finish patchwork to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

END OF SECTION 01120
PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes
   1. Submittal procedures.

B. Related Sections
   1. Section 01310 - Progress Schedules
   2. Section 01400 - Quality Control
   3. Section 01630 - Product Options and Substitutions
   5. Document 00700 – General Conditions of the Contract

1.2 SUBMITTAL PROCEDURES

A. Submit schedule of submittals within 3 working days of receiving Notice of Contract Award. Submittal schedule to include proposed submittal number, specification section, title and anticipated date of submission.

B. All submittals to be submitted for approval within 30 days of Notice of Contract Award.

C. Transmit submittals to Owner’s Representative using Owner’s Representative approved format. Electronic PDF submittals are to be used when possible.

D. Number the submittals using the specification number from the specifications. Resubmittals shall have original number with an alphabetic suffix.

E. Identify Project, Contractor, Subcontractor or supplier; name and telephone number of individual to contact for additional information; pertinent Drawing sheet and detail number(s), specification section number, as appropriate, and date of submission.

F. Apply Contractor’s stamp, signed or initialed, certifying that review, verification of products required, field dimensions, adjacent construction work, and coordination of information, is in accordance with the requirements of the work and Contract Documents.

G. Submit product data sheets, which clearly designate which of the items on the sheet is being provided. Cross all other items out to clarify the submittal.

H. Submit color charts in proper quantities of original color materials; photocopied reproductions will not be accepted.

I. Fully coordinate material prior to submittal. Determine and verify field dimensions and conditions, catalog numbers, and similar data. Coordinate with public agencies involved and secure necessary approvals; signify that approvals have been secured by stamp or other means. Coordinate with the various types of work involved; make submittals in groups containing all associated items.

J. Submit product submittals required by individual sections of the specifications. Submittals not required by the specifications, but made at the option of the Contractor, will be returned without review unless accompanied by written, valid justification.
K. Schedule submittals to expedite the Project and deliver to Owner’s Representative. Coordinate submission of related items. Allow a minimum of 15 calendar days for processing.

L. Make complete product submittals. Include shop drawings, product data, samples, manufacturer's instructions and manufacturer's certificates as required in individual specification sections. Partial submittals will be rejected as not complying with Contract Documents. Manufacturer's certificates based on tests or inspections at time of manufacture may be submitted separately.

M. Identify variations from Contract Documents and product or system limitations, which may be detrimental to successful performance of the completed work. State whether submitted product is the specified product or an accepted substitution. Shop drawings and product data indicating substitutions which have not been previously accepted will be returned without review.

N. Provide space for Contractor, Owner’s Representative, and Architect/Engineer review stamps.

O. Submit in PDF format.

P. The Architect will review the submittals; mark the submittals with required revisions; stamp the submittals and indicate "No Exceptions Taken," "Make Corrections Noted," "Revise and Resubmit," "Rejected" or "Submit Specified Item" and return the submittal.

Q. Review the returned submittals and take appropriate action as indicated. If submittals are marked "Revise and Resubmit," "Rejected" or "Submit Specified Item," make revisions necessary, identify revisions with a 'cloud' and resubmit in same manner and number as for the original submittal.

R. The Architect will review the resubmittal and take action, as appropriate, in the same manner as for the original submittal.

S. Review the returned resubmittal and take appropriate action as indicated. Continue to revise and resubmit until Architect returns resubmittal marked "No Exception Taken" or "Make Corrections Noted." Said marks signify final action.

T. Following final action by the Architect, provide copies of submittals for concerned parties including District, Job Superintendent and appropriate subcontractors. Instruct parties to promptly report any inability to comply with provisions.

U. Use only those submittals, which bear stamps showing final review of the Contractor, the Architect and appropriate Architect’s consultant, as appropriate.

V. If deviations, discrepancies or conflicts between the shop drawings/submittals and contract documents are discovered either prior to or after the shop drawings/submittals are processed by the Architect, the contract documents shall control over the shop drawings/submittals.

1.3 PRODUCT DATA/MATERIAL LIST

A. Submit the number of copies, which the Contractor requires, plus six (6) copies, which will be retained of any submittal which cannot be made by PDF.
B. Submit manufacturer's most recently published catalog sheets, brochures, drawings, schedules, performance charts, illustrations and other standard descriptive data.

1. Modify submittal in a neat and orderly fashion to delete information, which is not applicable to Project.

2. Supplement standard information to provide additional information applicable to Project.

3. Make note of dimension and clearances required.

4. Make note of performance characteristics and capacitates.

1.4 SAMPLES

A. Submit the size of samples specified in individual specification sections. Submit the number of samples, which the contractor requires, plus two (2) of which will be retained. Contractor to retain Owner copy of sample at project site.

B. Submit samples to illustrate functional and aesthetic characteristics of the Product, with integral parts and attachment devices. Coordinate sample submittal for interfacing work.

C. Submit samples of finishes from the full range of manufacturer's standards of selected custom colors, textures and patterns for Architect's selection.

D. Where samples have natural variation in texture, color and dimension, submit samples showing extreme range plus the middle variation.

E. Erect Field Samples and Mock-Ups at the Project site at location acceptable to Owner's Representative and Architect. Construct each sample or mock-up complete, including work of all trades required in finished work.

1.5 SHOP DRAWINGS

A. Submit in the form of one reproducible transparency and five opaque reproductions if submittal cannot be made by PDF or CAD. Opaque reproductions will be retained by the Owner’s Representative and Architect.

B. State or indicate data necessary to describe the product or system. Present in a clear and thorough manner.

C. Identify field dimensions; show relation to adjacent or critical features, work or products.

D. Title each drawing with PROJECT NAME and number.

E. After review, reproduce and distribute in accordance with article on procedures above and for Record Documents described in Section 01700, Contract Closeout.

1.6 MANUFACTURER’S INSTRUCTIONS AND CERTIFICATES

A. When specified in individual specification sections, submit manufacturer's printed instruction for delivery, storage, assembly, installation, start-up, adjusting, finishing in quantities specified for Product Date.

B. Identify conflicts between manufacturer's instructions and Contract Documents.

C. Submit manufacturer's certifications based on recent or previous test results with other submittals specified. Submittal certifications based on tests or inspections at time of manufacture with product delivery.
D. When specified in individual specification sections, submit manufacturer's certificate for review in quantities specified for Product Data.

E. Indicated material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

F. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect.

1.7 PATTERNS AND COLORS

A. Unless the exact pattern and color of a product is indicated in the Contract Documents whenever a choice of pattern or color is available for a product, submit accurate color charts and pattern charts in the required number of original color or patterns for review and selection.

1.9 SUBMITTAL TIMELINE

A. The following submittals are due within 24 hours of Bid Time:
   1. Background Information Sheet
   2. List of Subcontractors and Suppliers

B. The following submittals are due 10 working days after Notice of Contract Award:
   1. Preliminary Construction Schedule
   2. Certificate of Insurance
   3. Bond
   4. Schedule of Submittals
   5. Copy of Contractor’s Safety Program
   6. Copy of Contractor’s Jobsite Staging Plan

C. The following submittals are due 10 working days prior to first Application for Payment:
   1. Schedule of Values
   2. Construction Progress Schedule
   3. Security Program (section 01500 para. 1.21)

D. The following submittals are due 30 calendar days after Notice of Contract Award:
   1. Balance of all required Project submittals

E. The submittal log will be maintained by the Contractor.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

END OF SECTION 01300
PART 1 - GENERAL

1.1 SUMMARY
A. Section Includes
   1. Format.
   2. Content.
   3. Revisions to Schedules.
B. Related Sections
   1. Section 01040 - Coordination and Meetings: Project Meetings.

1.2 FORMAT
A. Prepare Schedules as a horizontal bar chart or CPM with separate bar for each major portion of Work or operation, identifying first workday of each week.
B. Use commercially available software for producing schedule. Provide electronic document to Owner’s Representative if requested.
C. Sequence of listing: The chronological order of the start of each item of work.
D. Scale and Spacing: To provide space for notations and revisions.

1.3 CONTENT
A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
B. Identify each item by specification Section number.
C. Identify work by separate stages and logically grouped activities.
D. Provide sub-schedules to define critical portions of the entire Schedule.
E. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
F. Show coordination with District work and other contractors.
G. Show the network schedule logic on the schedule form of a CPM (or table if a bar chart is used).
H. Indicate Critical Path of project activities on the project schedule.

1.4 REVISIONS TO SCHEDULES
A. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
B. Identify activities modified since previous submittal, major changes in scope and other identifiable changes.
C. Provide narrative report to define problem areas, anticipated delays and impact on Schedule. Report corrective action taken, or proposed, and its effect.
1.5 SUBMITTALS

A. Submit Preliminary Construction Schedule within 10 working days after date of Notice of Award.

B. Construction Progress Schedule to be submitted and accepted prior to first Application for Payment.

C. After the Owner’s Representative has accepted the Construction Progress Schedule, it shall become the basis for determining scheduled completion of the project.

D. Submit updated Construction Progress Schedules with each Application for Payment.

E. Submit the schedule by electronic distribution.

1.6 DISTRIBUTION

A. Distribute copies of Project Construction Schedule to project site file, Subcontractors, suppliers, and other concerned parties.

B. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in Schedules.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

END OF SECTION 01310
PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Quality assurance and control of installation.
B. References.
C. Field samples.
D. Mock-up.
E. Inspection and testing laboratory services.
F. Manufacturers' field services and reports.

1.2 RELATED SECTIONS

A. Section 01090 - Reference Standards.
B. Section 01300 - Submittals: Submission of Manufacturers' Instructions and Certificates.
C. Section 01410 - Testing Laboratory Services
D. Section 01600 - Material and Equipment: Requirements for material and product quality.

1.3 QUALITY ASSURANCE/CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship to produce Work of specified quality.
B. Comply fully with manufacturers' instructions, including each step in sequence.
C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Owner's Representative before proceeding.
D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes or specified requirements indicate higher standards or more precise workmanship.
E. Perform work by persons qualified to produce workmanship of specified quality.
F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.4 REFERENCES

A. Conform to reference standards in effect on date of Contract Documents unless otherwise specified in product Sections.
B. Obtain copies of standards when required by Contract Documents.
C. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.5 FIELD SAMPLES

A. Install field samples at the site as required by individual specification sections for review.
B. Acceptable samples represent a quality level for the Work.
C. Where field sample is specified in individual sections to be removed, clear area after field sample has been accepted by Architect.
1.6 MOCK-UP
   A. Mock-ups shall be prepared in a timely manner to allow review and acceptance by the Owner's Representative, Owner and Architect.
   B. Assemble and erect specified items, with specified attachment and anchorage devices, flashings, seals and finishes.
   C. Where mock-up is specified in individual Sections to be removed, clear area after mock-up has been accepted by Architect.

1.7 INSPECTION AND TESTING LABORATORY SERVICES
   A. Owner will appoint, employ and pay for services of an independent firm to perform inspection and testing.
   B. The independent firm will perform inspections, tests, and other services specified in individual specification sections and as required by the Architect.
   C. Reports will be submitted by the independent firm to the Architect and Owner's Representative in writing indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
   D. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.
      1. Notify Architect, Inspector and Owner’s Representative 48 hours prior to expected time for operations requiring services.
      2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.

1.8 MANUFACTURERS' FIELD SERVICES AND REPORTS
   A. Submit qualifications of observer to Owner's Representative 30 days in advance of required observations. Observer subject to approval of Owner's Representative and Architect.
   B. When specified in individual specification sections, require material or product suppliers or manufacturers to provide: qualified staff personnel to observe site conditions, conditions of surfaces and installation; quality of workmanship; start-up of equipment; test, adjust, and balance of equipment; and other as applicable, and to initiate instructions when necessary.
   C. Individuals to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
   D. Submit report in triplicate within 30 days of observation to Owner’s Representative for review.

PART 2 - PRODUCTS
Not used

PART 3 - EXECUTION
Not used

END OF SECTION 01400
PART 1 - GENERAL

1.1 SECTION INCLUDES

A. District provided testing laboratory services.
B. Contractor provided testing and inspection services.

1.2 RELATED SECTIONS

A. Section 01700 - Contract Closeout: Record documents.
B. Individual Specification Sections: Inspections and tests required, and standards for testing.
C. Divisions 15 and 16 - Mechanical and Electrical: Testing, adjusting and balancing of mechanical and electrical systems.

1.3 SELECTION AND PAYMENT

A. The District will employ and pay for the services of testing to conduct required tests and inspections for the project.
   1. Soils: The District will employ and pay for the services of a Soils Engineer to observe excavating, grading, and filling operations and to provide testing of soil materials as specified in individual sections of this specification. The Soils Engineer will have management, laboratory and field supervisory personnel with minimum 5 years’ experience in testing and inspection of soils materials and will have adequate facilities, equipment, and technical references to permit performance of testing and inspections within applicable regulations and standards.
   2. Other Construction: The District will employ and pay for the services of a testing laboratory to conduct tests, inspections, and special inspections as required and as specified in individual sections of this specification.
      a. For construction requiring testing and inspection other than special inspection. The testing laboratory will have management, laboratory and field supervisory personnel with minimum 5 years’ experience in testing and inspection of work and materials of construction and will have adequate facilities, equipment, and technical references to permit performance of testing and inspections within applicable regulations and standards.

B. Re-testing: Per paragraph G.C. 20, when initial tests indicate non-compliance with the Contract Documents, subsequent re-testing occasioned by the non-compliance shall be performed by the same testing agency and the costs thereof will be deducted by the District from the Contract Sum by Change or Field Order.

C. Re-testing Covered Work: Re-examination of previously tested and inspected work may be ordered by the Architect and by the Owner. The Contractor shall uncover such work if re-testing is ordered. If work is found in accordance with Contract Documents, the District will pay costs of uncovering, removing, re-testing and replacing. If work is found not in accordance with Contract Documents, the District will deduct the cost of re-testing from the Contract Sum by Change Order and the Contractor will bear the costs of uncovering, removing and replacing work.

D. Testing and inspecting performed for Contractor's convenience, such as testing and inspection to establish equivalence of substitutions, equivalence of repairs to damaged
materials, and testing and inspecting to expedite the operations, shall be the Contractor’s responsibility.

1. The Contractor shall employ a licensed professional engineer of the discipline required to develop a testing program that will establish equivalency.

2. The Contractor shall submit the testing program to the Architect for review.

3. The Contractor shall arrange testing in accordance with the accepted testing program to be performed by the District’s testing laboratory.

4. The costs of testing done by the District's testing laboratory for the Contractor will be deducted from the Contract Sum by Change Order.

5. The Contractor may not arrange for testing upon portions of the work already completed except with the written consent of the Architect.

E. Employment of testing laboratory shall in no way relieve Contractor of obligation to perform work in accordance with requirements of Contract Documents.

F. The Architect shall have the right to make tests at any time on materials or work done whether those materials are specified or substituted items.

1.4 AGENCY RESPONSIBILITIES

A. Provide qualified personnel at site. Cooperate with Program Manager, Architect, and Contractor in performance of services.

B. Perform specified sampling and testing of materials in accordance with specified standards.

C. Ascertain compliance of materials and mixes with requirements of Contract Documents.

D. Promptly notify Program Manager, Architect, and Contractor of observed irregularities and non-conformance of work and products.

E. Perform additional tests required by Architect.

F. Attend Preconstruction Meeting. Attend Progress Meetings as requested.

G. Provide quantity estimates for all work associated with unforeseen conditions.

1.5 AGENCY REPORTS

A. Test/Inspection Reports:

1. Include every test and inspection made regardless of whether such tests and inspections indicate that the material and procedures are satisfactory or unsatisfactory.

2. Provide documentation describing scope of additional work associated with unforeseen conditions.

3. Include records of special sampling operations as required.

4. Indicate specified design strength of materials such as masonry, concrete and steel.

5. State whether or not materials and procedures comply with requirements of the Construction Documents.
6. Submit copies of reports to Program Manager, District, Architect, Structural Engineer, Civil Engineer, Soils Engineer and/or Contractor as applicable within 14 days of tests. Submit copies of reports of non-complying materials and procedures immediately.

1.6 LIMITS ON AGENCY AUTHORITY
A. Agency or laboratory may not release, revoke, alter or enlarge on requirements of Contract Documents.
B. Agency or laboratory may not approve or accept any portion of the work.
C. Agency or laboratory may not assume any duties of Contractor.
D. Agency or laboratory has no authority to stop work.

1.7 CONTRACTOR RESPONSIBILITIES
A. Package and deliver to laboratory at designated location adequate samples of materials proposed to be used, which require testing. Samples shall be selected by laboratory personnel. Allow proper time for selecting samples, and making tests or considerations.
B. Cooperate with laboratory personnel, and provide access to work and to manufacturer's facilities.
C. Provide incidental labor and facilities to provide access to work to be tested, to obtain and handle samples as selected by laboratory personnel at the site or at source of products to be tested, to facilitate tests and inspections, and for storage and curing of test samples.
D. Notify Program Manager and Architect, minimum 24 hours prior to expected time for operations requiring inspection and testing services. Do not allow work to be covered prior to inspection and testing.

1.8 SCHEDULE OF INSPECTIONS AND TESTS
A. Testing Certificates Provided by Contractor as required:
   1. Mill test reports for reinforcing steel.
   2. Mill test reports for cement.
   3. Weighmasters tickets for each load of transit mixed concrete.
   4. Weighmasters affidavit.
   5. Certifications of welders.
   6. Certifications of materials.
B. Initial Testing Provided by Owner as required:
   1. Site Clearing: Test compaction of excavation backfill.
   2. Earthwork:
      a. Sample and test fill and base materials for compliance with specified requirements.
      b. Inspect placement of engineered fill.
      c. Inspect bottoms of footings and foundation trenches.
      d. Test compaction of each layer of engineered fill.
3. Trenching:
   a. Inspect placement of trench backfill.
   b. Test compaction of trench backfill.

4. Asphalt Concrete Paving:
   a. Sample and test quality of paving and base if directed by Program Manager and Architect.
   b. Test compaction of paving and base if directed by Program Manager and Architect.

5. Portland Cement Concrete Paving:
   a. Review mix designs.
   b. Sample and test compressive strength of concrete.
   c. Sample and test slump of concrete.

6. Concrete Reinforcing:
   a. Inspect placement and installation of reinforcing steel.
   b. Inspect field welding of reinforcing steel.

7. Cast-In-Place Concrete:
   a. Sample and test cement.
   b. Sample and test aggregate.
   c. Review mix designs and confirm mix design proportions with weighmaster.
   d. Perform initial batch plant inspection.
   e. Inspect concrete placement.
   f. Sample and test slump of concrete.
   g. Test air content of concrete.
   h. Sample and test concrete for compressive strength.
   i. Test concrete for shrinkage.

8. Structural Steel:
   a. Inspect shop and field welding.
   b. Test full penetration welds.

9. Metal Fabrications:
   a. Inspect shop and field welding of load bearing fabrications.
   b. Test full penetration welds in load bearing fabrications.

10. Fire caulking:
    a. Inspection by city certified inspection agency.
    b. Test in accordance with accepted practice.
C. Initial Testing Performed by Owner's Testing Laboratory at Owner's Cost: The cost of the following initial tests, if required, will be deducted by the Owner from the Contract Sum by Change Order.

1. Testing to establish equivalence of material not properly identified.
2. Testing to establish equivalence of substitutions.
3. Testing required in order to expedite Contractor's operations.
4. Testing relating to repair of work which fails to meet specifications.
5. Testing and inspection required to correct damage to material in shipping and erection.

PART 2 - PRODUCTS
Not Used

PART 3 - EXECUTION
Not Used

END OF SECTION 01410
PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes
   1. Temporary Utilities: Electricity, lighting, heat, ventilation, telephone service, water service and sanitary facilities.
   2. Temporary Controls: Barriers, fencing, water, noise and vibration control, dust and mud control, traffic control, interior and exterior enclosures, protection of installed work, security and fire protection.
   3. Construction Facilities: Access roads, parking, progress cleaning, project identification, field offices and storage sheds, and construction aids.

B. Related Sections
   1. Section 01700 - Contract Closeout: Final Cleaning.

1.2 REFERENCES

A. ASTM E84 - Surface Burning Characteristics of Building Materials.

1.3 SUBMITTALS

A. Submit under the provisions of Section 01300.

1.4 TEMPORARY ELECTRICITY

A. Contractor shall provide all additional materials required for temporary power (e.g. spider boxes, temporary panels and feeder cables) and to provide labor to relocate the panels as required for the project. Contractor shall provide the labor to tie in the temporary panels to the main switchboard and to provide periodic service and maintenance to the temporary panels.

B. Temporary electrical power will be available at the project site from existing outlets and panels. Contractor will replace damaged receptacles damaged by construction activities at no cost to the District.

C. Owner will pay cost of energy used. Contractor shall exercise measures to conserve energy.

D. Should the existing electrical power not be sufficient, Contractor will arrange with the utility company to provide the additional service required and pay the costs associated with providing the additional service or to provide generators. The Contractor will pay cost of this energy used.

   Permanent convenience receptacles may be used during construction. Any devices damaged during construction shall be replaced at no cost to the Owner.

1.5 TEMPORARY LIGHTING (See Section 1.4)

1.6 TEMPORARY HEAT

A. The contractor shall supply any temporary heating systems and fuel required for the addition area to allow the continuous progression of the exterior and interior work on the
Contractor to install and maintain construction phase filters to prevent dust from entering the systems.

**1.7 TEMPORARY VENTILATION**

A. Each Trade Contractor shall be responsible for providing adequate forced ventilation of enclosed areas for proper installation and curing of materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors and gases.

**1.8 TEMPORARY TELEPHONE SERVICE**

A. The Contractor will be responsible for their phone / communications services.

B. Trade Contractor’s Project Manager and on-site Project Supervisor shall carry mobile telephones with them during all work hours of the project and be available by phone during off hours for emergencies. Mobile phone numbers to be made available to the Owner prior to start of construction.

**1.9 TEMPORARY WATER SERVICE**

A. The contractor can use the existing water services for ordinary uses. Contractor is responsible for getting water from the closest existing water source.

B. Owner will pay cost of water used for ordinary uses. Exercise measures to conserve water.

C. Contractor to provide water by tank truck or by hydrant meter for watering sod. Contractor to pay for water used.

**1.10 SANITARY FACILITIES**

A. The contractor shall provide temporary chemical toilets for the use of their workmen.

B. Existing and permanent sanitary facilities shall not be used.

**1.11 BARRIERS**

A. Contractor’s, as required, shall provide temporary barriers as detailed below:

1. Provide temporary barriers to prevent unauthorized entry to construction / building areas and to protect existing facilities and adjacent properties from damage from construction operations.

2. Provide barricades as required by governing authorities for public rights of way and for public access.

3. Provide barriers around trees and plants designated to remain. Provide temporary fencing around drip line of trees designated to remain. Protect against vehicular traffic, stored materials, dumping, chemically injurious materials and puddling or continuous running water. Replace damaged plant life. Maintain existing tree and plant barriers and at the conclusion of construction operations remove temporary tree and plant barriers as directed by the Owner.

4. Provide barricades around trenches. Barricade trenches less than 6 inches deep with warning tape. Cover trenches 6 inches deep and greater subject to pedestrian traffic with plywood covers or barricade with chain link fence as specified below. Cover trenches subject to vehicular traffic with suitable steel cover or barricade with chain link fence as specified below.

B. Relocate barriers as required by progress of work.
C. Maintain temporary barriers in a structurally sound condition with a neat, orderly appearance. Observe temporary barriers daily for safety compliance.

D. Protect non-owned vehicular traffic, stored materials, site and structures from damage.

E. Walkways and Barricades: If Contractor's portion of work interferes with pedestrians on the streets, provide pedestrian walkway protection and wood barricades conforming to City standards and requirements.

1.12 TEMPORARY FENCING

A. Temporary fencing is required as necessary to secure contractor work areas, storage areas and to protect the public. Temporary fencing and gates are to be installed and removed by the contractor. All fencing shall be 6’ high chain link with a top rail and new fabric. It shall be installed sound, maintained during its use and removed when work is complete.

1.13 CONTROL OF WATER

A. Each trade Contractor shall be responsible for water control as detailed below.

1. Rainwater shall be prevented from entering the facilities while work is underway. Rainwater, surface or subsurface water, or other fluid, shall not be permitted to accumulate in excavations or under or about the structures. Should such conditions develop or be encountered, the areas affected shall be de-watered with temporary pumps, piping, ditches, dams or other methods at the expense of the Trade Contractor.

2. Grade site to drain. Maintain excavations free of water. Provide, operate and maintain pumping equipment.

3. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

1.14 NOISE AND VIBRATION CONTROL

A. Contractor shall insure noise and vibrations generated through the completion of the Work do not affect educational activities. The contractor and their subcontractors shall modify work schedules, at no cost to the owner, if necessary to prevent disruptions to educational activities.

B. Contractor shall comply with applicable regulatory requirements for the operation of powered equipment as detailed below.

C. Equipment and impact tools shall have intake and exhaust mufflers.

D. Cooperate with the Owner if the use of noisy and vibratory equipment becomes objectionable.

E. Speakers / radios will not be permitted.

1.15 DUST AND MUD CONTROL

A. Contractor shall be responsible for controlling dust and mud during construction.

1. Execute Work by methods to minimize raising dust from construction operations.

2. Conform with applicable Federal, State and Local regulatory requirements and ordinances concerning dust control.

3. Contractor shall be responsible for additional cleaning required in in portions of the building outside of the work area that are impacted by dust and debris generated from completing work activities.
B. Provide positive means to prevent airborne dust from dispersing into atmosphere.
C. Remove mud originating from construction site from city streets and sidewalks.

1.16 TRAFFIC CONTROL
A. Contractor: Furnish, erect and maintain sufficient warning and directional signs, barricades and warning lights and sufficient flag people to give adequate warning of construction to vehicular traffic at all times.
B. Coordinate lane closures with appropriate government agencies.
C. Maintain a minimum number of travel lanes for traffic specified by appropriate government agencies.

1.17 EXTERIOR ENCLOSURES
A. Contractor shall be responsible for exterior enclosures as detailed below.
   1. Provide temporary insulated weather-tight closures of openings in exterior surfaces to provide acceptable working conditions and protection for materials, to allow for temporary heating and maintenance of ambient temperatures identified in individual specification sections and to prevent entry of unauthorized persons. Provide doors with self-closing hardware and locks.
   2. Provide temporary roofing as required.

1.18 INTERIOR ENCLOSURES
1. Provide temporary dust and traffic control enclosures to prevent dust and debris from entering unaltered areas and to protect the public.
2. Certain interior enclosures shall be installed at the start of the project.

1.19 PROTECTION OF INSTALLED WORK
A. Contractor shall be responsible for protection of installed work as detailed below.
   1. Protect installed work and provide protection from damage.
   2. Provide temporary protection for installed products. Control activity in immediate work area to minimize damage.
   3. Provide protective coverings at walls, projections, jambs, sills and soffits of openings.
   4. Protect finished floors, stairs and other surfaces from traffic, dirt, wear, damage and movement of heavy objects by protecting with durable sheet materials.
   5. Prohibit traffic from landscaped areas.

1.20 PROTECTION OF EXISTING FACILITIES
A. Contractor shall be responsible for protection of existing facilities as detailed below.
   1. Provide temporary protection for existing facilities as specified for installed work.
   2. Replace or repair pipes, conduits and conductors broken or severed as a result of construction activities by the end of the workday in which they were broken or severed.
   3. Become familiar with existing conditions of all systems to remain. Provide temporary
connections as required to maintain systems. Protect systems during construction. Provide temporary tie-in pipes, conduits and conductors as required to maintain systems completely operational during construction.

4. The trade contractor shall be responsible for the protection of tops, trunks, and root systems of existing trees and shrubs on the project site. Install planking with 2 x 4’s to 8’ minimum height to protect existing tree trunks on the project site that may be subject to construction damage. Installation of protective structure shall be made before any work is started and not removed until directed by the Owner. Alternate method is to fence around the drip lines of the trees.

Do not permit heavy equipment or stockpiles within the branch spread. No ropes, wires, cables, or other devices shall at any time be affixed to a tree or shrub so as to damage the bark, break branches, or destroy its natural shape.

The Trade Contractor shall be liable in cases of accidental damage to trees and shrubs that are to remain on the site.

The Trade Contractor shall notify the Owner immediately in cases of accidental damage so that the proper repairs can be made. Cost of such repairs will be assessed to the Trade Contractor. The Trade Contractor shall not attempt to make such repairs himself.

Evaluation of trees or shrubs damaged beyond repair shall be made on the basis of replacement cost, if replaceable, with material of equal size. In cases where it would not be possible to replace a tree with one of equal size, trees shall be evaluated on the basis on the "Shade Tree Evaluation" formula of the International Shade Tree Conference, current edition.

5. Maintain existing plumbing, mechanical, electrical, security, intercom and fire alarm systems operational at all times.

1.21 SECURITY

A. Contractor shall be responsible for the security of its own equipment and materials on the job site.

B. Provide sufficient security program and facilities to protect work, existing facilities and Owner operations within construction area from unauthorized entry, vandalism and theft.

C. Secure, maintain and protect the work, stored materials, equipment and temporary facilities until time of acceptance, or such earlier time as Owner may choose to assume such responsibility.

D. Contain and secure construction equipment and materials to satisfaction of the Owner.

E. Submit security program to Owner for review and coordination.

1.22 TEMPORARY FIRE PROTECTION

A. Provide and maintain fire extinguishers, fire hoses and other equipment necessary for fire protection.

B. Designate use and use such equipment for fire protection only.

1.23 LAWN AREAS

1. Contractor’s vehicles may not be driven into lawn areas without prior approval of the Owner. In those cases where it is necessary to drive such a vehicle or vehicles, the
Contractor shall provide planking material upon which to drive. The Contractor shall be held responsible for any damages incurred.

2. Lawn areas which are disturbed by construction shall be repaired to the satisfaction of the Owner and paid for by the Contractor.

1.24 PARKING
A. Contractor: The contractor may utilize school parking lots during non school hours. All other parking shall be off site.

1.25 PROGRESS CLEANING
A. Contractor shall provide all measures to secure debris and provide dumpsters for removal from the site.
B. Contractor shall maintain all work areas free of waste materials, debris and rubbish. Maintain site in a clean and orderly condition by removing waste materials weekly or more frequently as required. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces and other closed or remote spaces, prior to enclosing the space. Broom and vacuum clean interior areas prior to start of surface finishing and continue cleaning to eliminate dust.
C. Contractor shall supply labor for a general job site cleanup each Friday. The buildings shall be brought to a broom clean condition and all debris shall be deposited in the dumpsters. Break cartons and containers down for better use of dumpsters.

1.26 STORAGE
A. Trade contractors shall store all their materials onsite in a manner not to interfere with the work of any other trade contractor. Trade contractors shall move their stored materials as required for the work of all to proceed.

1.27 CONSTRUCTION AIDS
A. Furnish, operate and maintain a complete plant for fabricating, handling, conveying, installing, and erecting materials and equipment required under the Contract. Include elevators, hoists, derricks and conveyances for transportation of workers and transporting and placing materials and equipment necessary for performance of the work.
B. Maintain plant and equipment in safe and efficient operating condition. Repair damage due to defective plant and equipment and use thereof at no increase in Contract Sum.
C. Furnish, erect, and maintain for duration of work, scaffolds, runways, guardrails, platforms and similar temporary construction necessary for the performance of work. Such facilities shall be of type and arrangement required, structurally sound and well secured.

1.28 REMOVAL OF UTILITIES, FACILITIES AND CONTROLS
A. Remove temporary above grade or buried utilities, materials, equipment and facilities prior to inspection at completion.
B. Clean and repair damage caused by installation or use of temporary facilities.
C. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

1.29 TEMPORARY CONTROLS
A. Temporary Construction, Equipment and Protection
1. Protection: Contractor must protect all workers and equipment from power lines and maintain safe distances and protective devices as required by OSHA.

2. Temporary construction and equipment: Temporary construction and equipment shall conform to regulations, ordinances, laws and other requirements of authorities having jurisdiction, including insurance companies, with regards to safety precautions, operation and fire hazard.

B. Pollution Control

1. Provide methods, means and facilities to prevent contamination of soil, water and atmosphere from discharge of noxious, toxic substances and pollutants produced by construction operations.

2. Waste solvents, oils and other materials which may be harmful to people, plant life, or the environment, shall be removed from the site in containers and disposed of in accordance with applicable laws and regulations.

3. Erect, maintain and remove silt fencing and other erosion control measures as required.

C. Safety

1. Contractor shall submit Company Safety Plan 10 days after Notice of Award under the Provisions of Section 01300.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

END OF SECTION 01500
PART 1 - GENERAL

1.1 SUMMARY
A. Section Includes
   1. Products.
   2. Transportation and handling.
   3. Storage and protection.
B. Related Sections
   1. Section 01400 - Quality Control: Product quality monitoring.
   2. Section 01630 - Substitutions.

1.2 PRODUCTS
A. Products: Means new materials, machinery, components, equipment, fixtures and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.
B. Do not reuse materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
C. Provide interchangeable components of the same manufacturer, for similar components.

1.3 TRANSPORTATION AND HANDLING
A. Transport and handle products in accordance with manufacturer's instructions.
B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.4 STORAGE AND PROTECTION
A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate controlled enclosures.
B. For exterior storage of fabricated products, place on sloped supports, above ground.
C. Provide off-site storage and protection when site does not permit on-site storage or protection.
D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
E. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement or damage.
G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.
PART 2 - PRODUCTS
Not Used

PART 3 - EXECUTION
Not Used

END OF SECTION 01600
PART 1 GENERAL

1.1 SECTION INCLUDES
A. Contractor's options in selection of products.
B. Requests for substitution of products.

1.2 RELATED SECTIONS
B. Document 00800 - Supplementary Conditions
C. Section 01040 - Coordination: Applicability of specified reference standards; coordination of construction.
D. Section 01300 - Submittals: Proposed products list; product data submittals.
E. Section 01700 - Contract Closeout: Record documents operation and maintenance data.

1.3 OPTIONS (Based on scope of project and products specified for use, review listed options below and coordinate with General Conditions 3.11.4.)
A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards.
B. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not specifically named.
C. Products Specified by Naming Several Manufacturers: Products of named manufacturers meeting specifications; no substitutions of products by other manufacturers allowed.
D. Products Specified by Naming Only One Manufacturer: No option due to necessity to match existing products or systems; no substitutions allowed.

1.4 LIMITATIONS ON SUBSTITUTIONS
A. Requests for substitutions of products will be considered only during the bid period per G.C. - 35. Subsequent requests will be considered only in case of product unavailability or other conditions beyond control of Contractor.
B. Substitutions will not be considered when indicated on shop drawings or product data submittals without separate formal request, when requested directly by subcontractor or supplier, or when acceptance will require substantial revision of Contract Documents.
C. Substitute products shall not be ordered or installed without written acceptance.
D. Only one request for substitution for each product will be considered. When substitution is not accepted, provide specified product.
E. Architect and Owner will determine acceptability of substitutions.
F. Substitutions shall not extend the contract completion date.

1.5 REQUESTS FOR SUBSTITUTIONS
A. Submit separate request for each substitution. Document each request with complete data substantiating compliance of proposed substitution with requirements of Contract Documents.
B. Identify product by Specifications section and Article numbers. Provide manufacturer's name and address, trade name of product, and model or catalog number. List fabricators and suppliers, as appropriate.

C. Attach product data as specified in Section 01300.

D. List similar projects using product, dates of installation and names of Architect/Engineer and Owner.

E. Give itemized comparison of proposed substitution with specified product, listing variations and reference to Specifications section and Article numbers.

F. Give quality and performance comparison between proposed substitution and the specified product.

G. Give cost data comparing proposed substitution with specified product and amount of net change to Contract Sum.

H. List availability of maintenance services and replacement materials.

I. State effect of substitution on construction schedule and changes required in other work or products.

J. State if use of proposed substitutions is subject to payment of license fee or royalty.

K. Submit sample of manufacturer's standard form of guarantee or warranty for proposed substitution.

1.6 CONTRACTOR REPRESENTATION

A. Request for substitution constitutes a representation that Contractor:
   1. Has investigated proposed product and has determined that it is equal to or superior in all respects to specified product or that the cost reduction offered is ample justification for accepting the offered substitution.
   2. Will provide same warranty for substitution as for specified product.
   3. Will coordinate installation of accepted substitute, making such changes as may be required for work to be complete in all respects.
   4. Will pay additional costs generated by an accepted substitution, including the cost of the Architect's additional services associated with reviewing and incorporating the substitution.

B. Contractor certifies that:
   1. Cost data presented is complete and includes all related costs under this Contract.
   2. Substitution is in full compliance with the Contract Documents and applicable regulatory requirements.

C. Contractor waives claims for additional costs related to substitution which may later become apparent.

1.7 SUBMITTAL PROCEDURES

A. Submit three copies of request for substitution.

B. Requests for substitutions will be reviewed and Contractor notified in writing of Owner’s decision to accept or reject requested substitution no later than five (5) calendar days before bid.
C. For accepted products, submit shop drawings, product data and samples under provisions of Section 01300.

PART 2 PRODUCTS
Not used.

PART 3 EXECUTION
Not used.
PRE-BID REQUEST SUBSTITUTION FORM

To: Angelo Architectural Associates, LLC
   12314 Ridgeview Drive
   Urbandale, IA 50323

PROJECT: PROJECT NAME

Email: Mark Thiessen – mthiessena1@mchsi.com

We hereby submit for your consideration the following product as substitute for specified item for the above project:

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
<th>Paragraph/Line</th>
<th>Specified Item</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Proposed Substitution:

Attach complete product description, drawings, photographs, performance and test data, warranty, information and other information necessary for evaluation. Identify specific model numbers, finishes, options, etc.

A. Will changes be required to building design or drawing dimensions in order to properly install proposed substitution? Yes__ No__ . If yes, explain.

B. Will the undersigned pay for changes to the building design, including engineering and drawings costs, caused by requested substitution? Yes__ No__ .

C. Differences between proposed substitution and specified item. __________________________

D. What affect does substitution have on other trades? __________________________

E. Does manufacturer's warranty of the proposed substitution differ from that specified?
   Yes__ No__ .
   If yes, explain __________________________

January 26, 2004
PART 1 - GENERAL

1.1 SECTION INCLUDES
   A. Starting systems.
   B. Demonstration and instructions.

1.2 RELATED SECTIONS
   A. Section 01400 - Quality Control: Manufacturers field reports.
   B. Section 01700 - Contract Closeout.

1.3 STARTING SYSTEMS
   A. Coordinate schedule for start-up of various equipment and systems.
   B. Notify Owner’s Representative seven days prior to start-up of each item.
   C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence or other conditions which may cause damage.
   D. Verify that tests, meter readings and specified electrical characteristics agree with those required by the equipment or system manufacturer.
   E. Verify wiring and support components for equipment are complete and tested.
   F. Execute start-up under supervision of responsible manufacturer's technical representative in accordance with manufacturers' instructions.
   G. When specified in individual specifications sections, require manufacturer to provide authorized representative to be present at site to inspect, check and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
   H. Submit a written report in accordance with Section 01400 that equipment or system has been properly installed and is functioning correctly.

1.4 DEMONSTRATION AND INSTRUCTIONS
   A. Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of Substantial Completion.
   B. Demonstrate Project equipment and instruct in a classroom environment located at the site and instructed by a qualified representative who is knowledgeable about the Project.
   C. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owners' personnel in detail, to explain all aspects of operation and maintenance.
   D. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance and shutdown of each item of equipment at scheduled times, at designated location.
   E. All demonstrations and training sessions of equipment/products/systems by qualified personnel shall be video recorded by the Contractor. Two copies of the video recording shall be turned over to the Owner’s Representative.
   F. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.
G. The amount of time required for instruction on each item of equipment and system is that specified in individual sections.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

END OF SECTION 01650
PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Closeout procedures.
B. Final cleaning.
C. Adjusting.
D. Project Record Documents.
E. Operation and maintenance data.
F. Instruction of District personnel.
G. Warranties and bonds.
H. Certification of Asbestos-Free Construction.
I. Spare parts and maintenance materials.
J. Restoration of damaged work.
K. Remedial work.
L. Keys

1.2 RELATED SECTIONS

A. Section 01040 - Project Meetings
B. Section 01500 - Construction Facilities and Temporary Controls: Progress cleaning
C. Section 01650 - Commissioning of Systems
D. Document 00700 – General Conditions

1.3 CLOSEOUT PROCEDURES

A. Submit written certification that Contract Documents have been reviewed, work has been inspected, and work is complete in accordance with Contract Documents and ready for Architect’s inspection.
B. Provide submittals to Architect required by governing or other authorities.
C. At the conclusion of the work and before final payment is made, furnish to the Owner a list with the names, contact persons, addresses and telephone numbers, of all the subcontractors and material suppliers who furnished labor and materials on the project. The list shall include identification of the services rendered and of the materials provided by each subcontractor.
D. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due. Deliver Project Record Documents, Warranties and Bonds, Certification of Asbestos-Free Construction, Spare Parts and Maintenance Materials, final Operation and Maintenance Data at one time with final Application for Payment, and full releases from all subcontractors and suppliers.

1.4 FINAL CLEANING

A. Contractor shall perform the following cleaning:

1. Execute cleaning prior to final inspection.
2. Comply with applicable regulatory requirements during cleaning and disposal operations.

3. Use cleaning materials which will not create hazards to health or property or cause damage to products or work.

4. Use cleaning materials and methods recommended by the manufacturers of the products to be cleaned.

5. Schedule operations to prevent dust and other contaminants resulting from cleaning operations from adhering to wet or newly finished surfaces.

6. Remove grease, stains, fingerprints, labels, spilled and spattered materials and other foreign materials from interior and exterior surfaces exposed to view including glazing.

7. Remove waste and surplus materials and rubbish from the site.

8. Leave areas which have been entered during the course of the work in a neat condition, free from debris, weeds and material not called for in the Construction Documents.

9. Wash and clean interior and exterior glass and window frames.

B. Contractor shall perform final cleaning of the equipment installation. This cleanup will include:

1. Wash and shine and polish glossy surfaces to a clear shine.

2. Vacuum and wipe insides of casework.

3. Vacuum and mop floor

4. Clean equipment and fixtures to a sanitary condition.

5. Clean new and existing surfaces, equipment and fixtures within project area.

1.5 ADJUSTING

A. Adjust operating products and equipment to ensure smooth and unhindered operation.

1.6 PROJECT RECORD DOCUMENTS

A. Maintain on site, one set of the following record documents; record actual revisions to the work:


2. Specifications.

3. Addenda.

4. Change Orders and other modifications to the Contract.

5. Reviewed shop drawings, product data and samples.

6. Construction schedule.

B. Store Record Documents separate from documents used for construction. Label each document “Project Record” in neat, large printed letters. Do not use Project Record Documents for construction.

C. Maintain Project Record Documents in a clean dry, legible condition and in good order.
D. Record information concurrent with construction progress. Do not conceal any work until required information is recorded.

E. Record information initially on set of opaque Drawings and in a copy of Project Manual provided by the District. Transfer information from opaque Drawings to reproducible Drawings provided by the District.

F. Make Project Record Documents available to Owner’s Representative, and Architect at all times.

G. Architect will review Project Record Documents at each billing meeting. Status of Project Record Documents will be considered in evaluating proposed monthly billings.

H. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
   1. Manufacturer’s name, the product model and number.
   2. Product substitutions or alternates utilized.
   3. Changes made by addenda and modifications.

I. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
   1. Changes made by addenda and modifications.
   3. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements such as column lines and walls.
   4. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the work.
   5. Measured locations of items, not necessarily concealed, which have been changed from locations shown on Contract Documents.
   6. Deviations from sizes, locations, and other features of installations shown in the Contract Documents.
   7. Details not on original Contract Drawings.

J. Construction Schedule: Submit a Final Construction Progress Schedule based on the latest, updated progress revised to indicate actual dates and durations of the various construction activities.

K. Submit documents to Owner’s Representative with final Application for Payment. Provide in format as acceptable to Architect.

1.7 OPERATION AND MAINTENANCE DATA

A. Operations and maintenance manuals shall be submitted in an electronic PDF format on a disc.

B. Prepare covers with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS," title of project and subject matter of if multiple discs are required.

C. Internally subdivide the contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.

D. Contents: Prepare a Table of Contents for each product or system description identified.
E. Part 1: Directory, listing names, addresses and telephone numbers of Architect, Engineer, Contractor, Subcontractors and major equipment suppliers.

F. Part 2: Operation and maintenance instructions arranged by specification section. For each category identify names, addresses and telephone numbers of Subcontractors and suppliers. Identify the following:
   1. Manufacturer's trade or brand name, catalog or model number and, where applicable, serial number,
   2. Significant design criteria.
   3. List of equipment.
   4. Parts list for each component.
   5. Operating instructions.
   6. Maintenance instructions for equipment and systems.
   7. Maintenance instructions for finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.

G. Part 3: Project documents and certificates, including the following:
   1. Approved copies of shop drawings and product data.
   2. Air and water balance reports.
   3. Certificates.
   4. Photocopies of warranties and bonds.

H. Submit one copy of completed volumes in final form 15 days prior to final inspection. This copy will be returned after final inspection, with Architect comments. Revise content of documents as required prior to final submittal.

I. Submit final volumes revised, with final Application for Payment.

J. Provide data where specified in individual sections.

1.8 INSTRUCTION OF DISTRICT'S PERSONNEL

   A. Where specified in individual specification sections, furnish qualified personnel for on-the-job instruction of the Owner's operation and maintenance personnel in accordance with section 01650.

   B. Furnish instruction including special start-ups and running time prior to occupancy of subject areas. Furnish at no additional cost to Owner.

1.9 WARRANTIES AND BONDS

   A. Warrant the entire work against defects in materials and workmanship for 12 months from date of acceptance. In addition, warrant or bond work as required in the individual specification sections.

   B. Warranties between Contractor and manufacturers and between Contractor and suppliers shall not affect warranties between the Contractor and the District.

   C. Submit warranties typed on the Contractor's letterhead if for the entire work and on the subcontractor's letterhead if for the work of a specification section. Use the form in Section 01710.
D. Provide original and two (2), notarized copies. Execute and assemble documents from subcontractors, suppliers and manufacturers. Verify compliance with Contract Documents. Provide table of contents and assemble in binder with durable plastic cover. Identify on or readable through the front cover with the PROJECT NAME and address, the Contractor's name and address and the title 'WARRANTIES AND BONDS.'

E. Submit all material with final Application for Payment. For equipment put into use with Owner's permission during construction, submit within ten days after first operation. For items of work delayed beyond Date of Substantial Completion, provide updated submittals within ten days after acceptance, listing date of acceptance as start of warranty period.

1.10 CERTIFICATION OF ASBESTOS-FREE CONSTRUCTION
A. Certify that no materials containing asbestos were incorporated into the construction of work of the Contract.
B. Submit certification typed on Contractor's letterhead. Identify the project by name, address, District Job Number. See Section 01710 for form.

1.11 SPARE PARTS AND MAINTENANCE MATERIALS
A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification sections.
B. Deliver to project site prior to final payment and place in location as directed by Owner’s Representative/Owner; obtain receipt.

1.12 RESTORATION OF DAMAGED WORK
A. Restore or replace, as specified or directed by the Architect, materials or finishes damaged from movement of equipment or other operations at no additional expense to the District.
B. Restore to match original work. Finishes shall match appearance of original adjacent work.

1.13 REMEDIAL WORK
A. Perform remedial work necessary due to faulty workmanship or materials at no additional expense to the District.
B. Coordinate remedial work with District. Perform at such time and in such manner to cause minimal interruption and inconvenience to the District's operation.

1. 14 SERVICE AND MAINTENANCE CONTRACTS [for elevators, etc.]
A. Compile, review and submit specified service and maintenance contracts.
B. Provide in PDF format titled 'SERVICE AND MAINTENANCE CONTRACTS.'
C. Submit with warranties and bonds.

PART 2 - PRODUCTS
Not Used

PART 3 - EXECUTION
Not Used

END OF SECTION 01700
PART 1 - GENERAL

1.1 SECTION INCLUDES
A. Procedures  
B. Values of Closeout Requirements  
C. Forms

1.2 RELATED SECTIONS
A. Document 00700 – General Conditions of the Contract  
B. Section 01700 - Contract Closeout  
C. Section 01710 – Contract Closeout Forms

1.3 PROCEDURES
A. In compliance with Chapter 38 Section 13 of the Iowa Code the Owner allows for the Contractor to request the early release of retained funds. 
B. Prior to Owner’s release of any retained funds, the Contractor shall submit the following forms: 
   1. Request for Release of Retained Funds (Section 01705 – Page 2)  
   2. Notice of Contractor’s Request for Early Release of Retained Funds (Section 01705 – Page 3) (This form is to be completed by all subcontractors, sub-subcontractors and suppliers on the Project).  
   3. Consent of Surety to Early Release of Retained Funds (Section 01705 – Page 4)

1.4 VALUES OF CLOSEOUT REQUIREMENTS
A. The Owner has established monetary values of closeout requirements for this Project. The Owner will retain funds equal to 200% of the value of any of the following items that are not complete at the time of the request for release of retained funds. This is in addition to funds retained for incomplete construction and punch list items. 
   1. Project Record Documents (Section 01700 – Section 1.6) Value $ 2,000.00  
   2. Operation and Maintenance Data (Section 01700 – Section 1.7) Value $ 2,000.00

PART 2 - PRODUCTS
Not Used

PART 3 - EXECUTION
Not Used
REQUEST FOR RELEASE OF RETAINED FUNDS

OWNER

TO:  Des Moines Independent
      Community School District
      2100 Fleur Drive
      Des Moines, IA 50321

PROJECT: ____________________________

FROM: ___________________________________________ (Contractor)

This is to certify that I, ___________________________________________ am an authorized official of working in the capacity of ________________ and have been properly authorized by said firm or corporation to sign the following statements pertaining to the subject Contract:

On ____________________, the project described above was designated substantially complete as provided for by Chapter 38 of the Iowa Code. As of ____________________, the total amount retained by the Owner on this Contract is $__________________.

Pursuant to Iowa Code Chapter 38, Contractor is now making this formal request for the release of all / part (circle one) of the retained funds currently being withheld by the Owner on this Contract.

I know of my own personal knowledge, and do hereby certify, that at least ten (10) calendar days prior to filing this Request for Release of Retained Funds with the Owner, the required notice was given by the Contractor to all known subcontractors, sub-sub-contractors and suppliers on the Project that the Contractor was requesting the early release of retained funds. A signed copy of each said notice is attached hereto.

Notwithstanding this Request for Release for the Retained Funds, the Owner will continue to retain, as applicable:

a. an amount equal to 200% of the value of labor or materials yet to be provided on the Project which will include the value of the itemized costs for closeout phase items of the Project as listed in Section 01705 of the documents, as determined by the Owner through its authorized contract representative.

b. an amount equal to 200% of the value of any Chapter 573 claims currently on file at the time of this Request or as otherwise authorized by Iowa Code Chapter 573 Upon review by the Owner of this Request, any Chapter 573 claims on file, and the status of any work or materials still remaining to be provided on the Project, the Owner shall release all applicable retained funds at its next regularly scheduled board meeting or within thirty (30) days, whichever is less. The Contractor shall release the paid retained funds to the subcontractors and suppliers in the same manner as retained funds are released to the Contractor by the Owner. Each subcontractor shall pass through to each lower tier subcontractor or supplier all retained fund payments from the Contractor in the same manner.

If the Owner does not release all funds requested by the Contractor, Owner shall provide an itemization and/or reason(s) for the non-release to the Contractor within thirty (30) days of the Contractor’s request.

__________________________________________  __________________________  __________________________
CONTRACTOR  BY  DATE

STATE OF IOWA, ___________________ COUNTY, ss:

Subscribed and sworn to before me by the said ____________________ on this __________ day of ________, 202__.

__________________________________________
Notary Public in and for the State of Iowa
NOTICE OF CONTRACTOR’S REQUEST FOR EARLY RELEASE OF RETAINED FUNDS

PART A - NOTICE:

You are hereby notified that __ (Contractor) ______ will be requesting an early release of funds on a public improvement designated as _____ (Name of Project) _____ for which you have or may have provided labor or materials. The request will be made pursuant to Iowa Code section 38.13. The request may be filed with the Des Moines Independent Community School District after ten calendar days from the date of this notice. The purpose of the request is to have the Des Moines Independent Community School District release and pay funds for all work that has been performed and charged to Des Moines Independent Community School District as of the date of this notice. This notice is provided in accordance with Iowa Code section 38.13.

This Notice was sent by ____ (Contractor) _____ on _____________, 202 __.

This Notice was received by ______________________________ on _____________, 202 __.

____________________________
(Signature of Receiver)

PART B – SWORN STATEMENT:

The total aggregate value of our agreement, purchase order or Work on this Project to date is $__________________, of which we acknowledge receipt of total payments to date of $__________________.

The below stated entity, as a Subcontractor, Sub-Subcontractor and/or Supplier attests and certifies the amounts entered above are correct as of the date of this Affidavit, and: 1) that it has received Notice from the Prime Contractor that it intends to apply for partial (or full) Release of Retained Funds and/or Final Payment for the Project, 2) that it is current in payments received to date on this project, 3) that, as of this date, is not aware of any potential claims against the Project or the Owner, and 4) that it will submit all required final closeout substantiation and documents as required by the project documents for its area of the work within sixty calendar days.

__________________________  _______________________
(Entity)                    (Date)
CONSENT OF SURETY FOR RELEASE OF RETAINED FUNDS

TO OWNER: Des Moines Independent Community School District
PROJECT NO.: McCOMBS MIDDLE SCHOOL – RE-ROOF PROJECT

PROJECT: _____________________________________________________________

CONTRACTOR: ______________________________________________________

In accordance with the provisions of the Contract between the Owner and the Contractor for the above project, the ________________________________, SURETY, on bond number ___________________ dated ______________________ hereby approves of the release of retained funds of the Contractor as authorized by law, and agrees that the release of retained funds to the Contractor shall not relieve the Surety of any of its obligations to Des Moines Independent Community School District, 2100 Fleur Drive, Des Moines, Iowa, 50321, OWNER, as set forth in said Surety’s bond.

IN WITNESS WHEREOF, the Surety has hereunto set its hand on this date:

________________________________________________________________________
Surety

________________________________________________________________________
Signature of authorized representative

ATTEST:

________________________________________
(Seal):

________________________________________
Printed name and title

END OF SECTION 01705
CONTRACTOR’S CERTIFICATE OF SUBSTANTIAL COMPLETION

OWNER

TO: Des Moines Independent
    Community School District
    2100 Fleur Drive
    Des Moines, IA 50321

ARCHITECT

TO: Angelo Architectural Associates, LLC
    12314 Ridgeview Drive
    Urbandale, IA 50323

PROJECT: _______________________________________________________________________

FROM: ____________________________________________________________ (Contractor)

This is to certify that I, __________________________________________________________ am an authorized
official of __________________________________ working in the capacity of _______________________________ and have
been properly authorized by said firm or corporation to sign the following statements pertaining to the
subject contact:

I know of my own personal knowledge, and do hereby certify, that the work of the contract described above
has been performed in accordance with, and in conformity to, the contract drawings and specifications. A
list of all incomplete work is attached.

The Contractor hereby releases the Owner and its agents from all claims of and liability to the Contractor for
anything done or furnished for or relating to the work, as specified in the Project Manual, except demands
against the Owner for the remainder of progress payments retained to date, and unresolved written claims
prior to this date.

The contract work is now substantially complete, ready for its intended use, and ready for your inspection.

A list of items to be completed or corrected is attached hereto. The failure to include any items on such list
does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract
Documents.

The Contractor will complete or correct the work on the list of items attached hereto within _______________ days from the above date of Completion.

__________________________________________________________________________

Contractor By Date

__________________________________________________________________________

Architect By Date

The Owner accepts the work or designated portion thereof as substantially complete and will assume full
possession thereof at _______________ (time) on _______________ (date), which is also the date of
commencement of applicable warranties required by the contract documents, except as stated below:

__________________________________________________________________________

Des Moines Independent Community Scho District By Date

This Document shall not become Valid until signed by the Contractor, Architect, and Owner
CERTIFICATE OF FINAL ACCEPTANCE

PROJECT: 

PROJECT NO: 

CONTRACT DATED: 

FROM: OWNER: Des Moines Independent Community School District
2100 Fleur Drive
Des Moines, IA 50321

TO CONTRACTOR: Community School District

The Work performed under this contract has been reviewed and found, to the Owner’s Representative’s and Architect’s best knowledge, information and belief, to be complete, based on the Owner’s Representative’s and Architect’s on-site observations, inspections, and data gathered. The date of completion of the Project or portion thereof designated above is hereby established as

_________________________________________  By  ________________________________  ______________________
Contractor

_________________________________________  By  ________________________________  ______________________
Architect

The Owner accepts the work or designated portion thereof as complete and will assume full acceptance thereof at _________________ (time) on _________________ (date).

DMPS Facility Management

_________________________________________  By  ________________________________  ______________________
Des Moines Independent Community School District

This Document shall not become Valid until signed by the Contractor, Architect, and Owner.
FINAL WAIVER AND RELEASE OF CLAIMS

TO ALL WHOM IT MAY CONCERN:

WHEREAS, the undersigned has been employed by Des Moines Independent Community School District to furnish labor and materials for (A) ____________________________ for the ____________________________ School in the City of Des Moines, County of Polk, State of Iowa, of which the Des Moines Independent Community School District is the Owner.

NOW THEREFORE, this ______ day of ______________, 20___, for and in consideration of the sum of (B) ____________________________ dollars paid simultaneously herewith, the receipt whereof is hereby acknowledged by the undersigned, the undersigned does hereby waive and release any claims*, liens, rights to, or claim of lien with respect to and on said above-described premises, and the improvements thereon, and on the monies or other consideration due or to become due from the Owner, on account of labor, services, materials, fixtures, apparatus or machinery heretofore or which may hereafter be furnished by the undersigned to or for the above-described premises by virtue of said contract.

(C)

______________________________
(Name of sole ownership, corporation, or partnership)

______________________________
(Signature of Authorized Representative)

______________________________
(Title)

INSTRUCTIONS FOR FINAL WAIVER:

(A) Fill in nature and extent of work, strike the word labor or the word materials if not in your contract.

(B) Amount shown should be the amount actually received and equal to total amount of contract as adjusted.

(C) If waiver is for a corporation name should be used, and title of officer signing waiver should be set forth; if waiver is for a partnership, the partnership name should be used, partner should sign and designate himself as partner.

* The word claims as used herein shall include 573 Claims, Stop Orders, Stop Notices, or Freeze Orders on monies or other consideration of the Owner which are due or to become due on the Contract referenced above.
CONSENT OF SURETY TO FINAL PAYMENT

TO OWNER: Des Moines Independent Community School District
2100 Fleur Drive
Des Moines, IA 50321

PROJECT NO:

PROJECT:

________________________________________
Surety

________________________________________
Signature of authorized representative

ATTEST:

(Seal):

________________________________________
Printed name and title

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above, the ________________________________,
SURETY, on bond of ________________________________,
CONTRACTOR.

hereby approves of the final payment of the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety of any of its obligations to Des Moines Independent Community School District, 2100 Fleur Drive, Des Moines, Iowa, 50321, OWNER, as set forth in said Surety’s bond.

IN WITNESS WHEREOF, the Surety has hereunto set its hand on this date:

________________________________________
Surety

________________________________________
Signature of authorized representative

(Seal):

________________________________________
Printed name and title
CONTRACTOR’S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS AND RELEASE OF CLAIMS

TO OWNER: Des Moines Independent Community School District
2100 Fleur Drive
Des Moines, IA 50321

PROJECT NO:

PROJECT:

CONTRACT DATED:

STATE OF: Iowa
COUNTY OF: Polk

The undersigned hereby certifies, except as listed below, payment has been made in full and all obligations have otherwise been satisfied for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the contract referenced above for which the Owner or Owner’s property might in any way be held responsible or encumbered.

EXCEPTIONS:

The undersigned hereby further certifies that to the best of the undersigned’s knowledge, information and belief, except as listed below, the Release of Claims attached hereto include the Contractor, all subcontractors, all suppliers of materials and equipment, and all performers of Work, labor or services who have or may have 573 claims, or encumbrances or the right to assert claims or encumbrances against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS:
SUPPORTING DOCUMENTS ATTACHED

HERETO:
1. Consent of Surety to Final Payment. DMPSFM-640

BY: ________________________________
   Signature of authorized representative

Indicate attachment: yes  no

The following supporting documents are attached:
1. Contractor’s Waiver and Release of Claims
2. Separate Waiver and Releases of Claims from Subcontractors and material and equipment suppliers accompanied by a list thereof.

______________________________
Subscribed and sworn before me on this date

______________________________
Notary Public

______________________________
My Commission Expires
ARCHITECT’S CERTIFICATE OF SPECIFICATIONS

TO OWNER: Director, Facility Management
Des Moines Independent Community
School District
2100 Fleur Drive
Des Moines, IA 50321

PROJECT NO:

CONTRACT FOR:

The undersigned hereby certifies as follows:

1. The above referenced Project is finally completed; and

2. No asbestos or asbestos-containing material was specified as a building material in any Construction Documents for the Project; and

3. To the best of my knowledge, no asbestos or asbestos-containing material was used as a building material in the Project.

________________________________________
Architect

________________________________________
Date

________________________________________
Subscribed and sworn before me on this date

________________________________________
Notary Public

________________________________________
My Commission Expires
HAZARDOUS MATERIALS STATEMENT

THE FORM BELOW IS FURNISHED FOR THE CONVENIENCE OF EQUIPMENT OR MATERIALS MANUFACTURERS, DISTRIBUTORS, SUPPLIERS AND THE CONTRACTOR AND MAY BE REPRODUCED AS NECESSARY TO COMPLY WITH SUBMITTAL DOCUMENTATION AS DEFINED IN "SUPPLEMENTARY CONDITIONS".

I, ________________________________, ________________________________,
   (Name) (Title)
of ________________________________, do hereby declare that in completing the work of the Bid # ________________________________ for project ________________________________,
   at ________________________________, school, no manufactured materials assembly/device or item of construction will contain, or in itself is composed of, any materials listed (by Federal or State EPA or Federal or State health agencies) as a hazardous material.

________________________________________________________________________
Name

________________________________________________________________________
Title

________________________________________________________________________
Date

________________________________________________________________________
Subscribed and sworn before me on this date

________________________________________________________________________
Notary Public

________________________________________________________________________
My Commission Expires

THIS STATEMENT MUST BE NOTARIZED
PART 1   GENERAL

1.01   SECTION INCLUDES

   A. Protection of existing building and structures.

   B. Coordination of Owner installed temporary site construction fencing.

   C. Dust control and fume control from getting into building.

   D. Contractor to install all temporary barricades to keep Public safe from hazards cranes and lift hazards.

   E. Removal and code compliance disposal of all existing roof membrane, flashings, insulation, any misc. items removed from the roof.

1.02   RATED SECTIONS

   A. Division 1: Administrative Requirements.

   D. Section 07500 – Fully Adhered TPO Membrane Roof System.

1.03   REGULATIONS

   A. Comply with all City of Des Moines Traffic Department for hauling and disposing of existing roof system at all times throughout the entire project.

   B. Comply with all City of Des Moines Special Inspection requirements for inspection of all structural components. Refer to Section 00220 & 01400. Owner will pay for all inspections, contractor to coordinate with Testing & Inspection Company.

PART 2   PRODUCTS

2.01   MATERIALS

   A. Provide and install construction fence: Coordinate with Owner the proper location of the 6’-0” high chain link fence with gates around construction site staging area.

   B. Temporary fences and barricades per OSHA and City of Des Moines Requirements.

   C. Temporary steel scaffolding and 3/4” plywood sheathing enclosure to protect existing exit near all contractor staging areas. Extend protection a minimum of 8’-0” or as required to protect occupants when exiting the building.
PART 3  EXECUTION

3.01  SECTION INCLUDES

A. Install temporary barricades to protect Public from open hazards of the operations. Coordinate owner installed construction fence location.

B. Contractor will be required to clean soil or debris off City of Des Moines streets if material is determined to be from this project as required to satisfy the Traffic Department requirements.

C. Contractor Staging Area: The contractor may have the East Lawn Area and Part of the East paving area adjacent to school for staging for the placement of a dumpster or removing or stocking the existing roofing materials, or set up a crane to remove or stock materials to or from the existing roofs. Contractor may also have part of the McCombs School Parking Lot (not Aviation Parking Lot) as indicated on the site plan. The contractor shall erect and maintain security fencing around designated areas to maintain the site in a safe manner. The Contractor shall set the crane so that it does not damage existing parking lot and create any hazards for the facility school occupants. The contractor shall set temporary barricades around the crane and lifting area to protect all staff, students and construction workers per the OSHA requirements.

D. Contractor shall dismantle the construction fence at end of the project. Contractor shall restore existing damaged lawn area and rework existing grade for placement of new sodding of lawn where the lawn has died due to this restoration project. Contractor shall replace any damaged paving to match existing paving slope and thickness.

E. The Owner shall be responsible to obtain the building permit. The Contractor shall be responsible to obtain all other permits and licenses for the project.

F. Project Coordination: The contractor shall coordinate with the School Staff and Building Manager to coordinate project sequencing of work locations on the project to provide the safest and the least disruption to school and business operations.

G. See Section 00210 Schedules & Liquidated Damages for Project Schedule.

END OF SECTION 02100
PART 1   GENERAL

1.01  SECTION INCLUDES

    A. New black dirt topsoil for backfilling restoring existing lawn and landscape areas the have
depression in the lawn due to lifts that have been driven over the lawn.

    B. Consolidation and compaction of new topsoil.

1.02  RELATED SECTIONS

    A. Section 02900: Sodding: Prep black dirt topsoil for sodding.

1.03  REFERENCES


    B. ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil Aggregate
Mixtures, Using 5.5 lb Rammer and 12 inch Drop per Standard Proctor.

    C. ANSI/ASTM D1556 - Test Method for Density of Soil in Place by the Sand-Cone Method.

PART 2   PRODUCTS

2.01  FILL MATERIALS

    A. Topsoil: Black Dirt topsoil free of rocks, roots and clay.

PART 3   EXECUTION

3.01  EXAMINATION

    A. Verify that all off-site topsoil is acceptable to the Owner and Architect.

    B. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are
as required, and ready to receive Work.

    C. Report in writing to Architect prevailing conditions that will adversely affect satisfactory execution
of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been
corrected.

    D. By beginning Work, Contractor accepts existing conditions and assumes responsibility for
correcting unsuitable conditions encountered at no additional cost to the Owner.

3.02  PREPARATION

    A. Generally, rework and compact existing sub-grade to density requirements for adequate bearing for
new topsoil.
B. Compacttopsoil to 75 percent of its maximum dry density in accordance with ANSI/ASTM D698.

3.03 COMPACTION & BACKFILLING

A. Employ a placement method that does not disturb existing lawn to remain.

B. Slope soil away from building minimum 2 inches in 10 feet or blend into existing surrounding grades.

C. Make grade changes gradual. Blend slope into level areas.

D. Backfill areas to contours and elevations with unfrozen materials.

E. Remove surplus backfill materials from site.

3.04 TOLERANCES

A. Topsoil: Plus or minus one inch from matching existing surrounding grades.

3.05 GRADING

A. Site Finish Grading: Finish grade site area disturb by restoration contractor outside of building pad and paving areas to contours and elevations with unfrozen materials with Type ‘A’ soil to 75% of its maximum dry density to within 1/2”+/− of finished grade elevations to blend with the existing surrounding grades prior to the project.

3.06 EXCESS EARTH:

A. Excess earth to be removed from the site.

END OF SECTION 02200
PART 1   GENERAL

1.01   SECTION INCLUDES

   A.   Top Soil Preparation where new sod is required to be installed at all non-paved or landscaped areas of site as shown on drawings.

   B.   Sod the entire disturbed or rutted lawn areas to blend with undamaged lawn area. **No mesh is allowed on back of any new sod. If sod is installed with mesh the sod will need to be undone and mesh removed and sod replaced without mesh.**

   C.   Maintenance of sod until sod is established but a minimum of 60 days past installation.

   D.   Protection of new and existing landscaping, building and paving from damage.

1.02   RELATED SECTIONS

   A.   Section 02100 – Excavation: Excavate and remove any unsatisfactory sub-grade soil to within 6” of finished grade or existing lawn surface for new 6” top soil where new sod installation is required.

   B.   Section 02200 – Earth Work: Install a minimum of 6” thick new imported or existing stockpiled black dirt topsoil. Compaction of existing sub-grade and compaction of new sub-grade fill materials as required in Section 02200.

1.03   REFERENCES

   A.   FS O-F-241 - Fertilizers, Mixed, Commercial.


1.04   DEFINITIONS


   B.   Plants: Living trees, plants, and ground cover specified in this Section and described in ANSI Z60.

1.05   MAINTENANCE DATA

   A.   Submit under provisions of Section 01700.

   B.   Maintenance Data: Include maintenance instructions, cutting and trimming method; types, application frequency, and recommended coverage of fertilizer.

1.06   REGULATORY REQUIREMENTS

   A.   Comply with regulatory agencies for fertilizer and herbicide composition.
B. Provide certificate of compliance from authority having jurisdiction indicating approval of plants and fertilizer mixture.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Deliver sod immediately prior to placement. Keep sod moist.

B. Deliver sod in rolls. Protect exposed roots from dehydration.

C. Do not deliver sod that can be laid by end of the same day the sod is cut and delivered.

1.09 ENVIRONMENTAL REQUIREMENTS

A. Do not install sod when ambient temperatures may drop below 35 degrees F or above 90 degrees F.

1.10 COORDINATION

A. Coordinate work under provisions of Section 01300.

1.11 MAINTENANCE SERVICE

A. Maintain sod until established or Substantial Completion but for at least a minimum of 60 days after installed.

PART 2 PRODUCTS

2.01 SOD

A. Sod: ASPA field grown grade; cultivated grass sod; type Kentucky Blue Grass with fibrous root system, free of stones, burned or bare spots; containing no more than 5 weeds per 1,000 S.F.

B. Harvest Sod: Machine cut sod in accordance with ASPA guidelines.

C. No plastic mesh allowed on back any new sod.

2.02 SOIL MATERIALS

A. Topsoil: Fertile, agricultural soil, typical for locality, capable of sustaining vigorous plant growth, taken from drained site; free of subsoil, clay or impurities, plants, weeds and roots; minimum pH value of 5.4 and maximum 7.0.

2.03 SOIL AMENDMENT MATERIALS

A. Fertilizer: As recommended by growers.

B. Water: Clean, fresh and free of substances or matter, which could inhibit vigorous growth of plants.
PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that prepared subsoil is ready to receive work of this section.

3.02 PREPARATION OF SUBSOIL

A. Prepare subsoil to eliminate uneven areas. Maintain profiles and contours.

B. Remove foreign materials, weeds and undesirable plants and their roots. Remove contaminated subsoil.

C. Scarify subsoil to a depth of 4 inches where sod is to be placed in damaged areas. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted subsoil.

D. Install 6 inches minimum thickness of black dirt topsoil where all new sod shall be installed at all disturbed existing lawn areas caused by this project or as indicated on Drawings.

3.03 FINAL TOPSOIL PREPARATION

A. Rake topsoil smooth and remove all rocks larger than 1/2” in diameter and any roots or branches.

B. Level topsoil for smooth uniform grade.

C. Cut new grade at existing lawn area down 2” so that new sod will blend with the existing lawn when installed.

D. Top soil adjoining all new and existing paving should be rake 1” to 1 1/2” lower than the top of all paving so that when sod is installed it is not higher than the paving.

3.04 LAYING SOD

A. Moisten prepared black dirt surface immediately prior to laying sod.

B. Lay sod immediately after delivered to prevent deterioration.

C. Lay sod tight with no open joints visible and no overlapping. Stagger end joints 12” minimum. Do not stretch or overlap sod pieces.

D. Lay smooth, align with adjoining grass areas.

E. Stake all sod as required holding sod in place on all slopes steeper than 1:4 slope.

3.05 MAINTENANCE
A. Water sod twice a daily for the first two weeks and once a day thereafter minimum until the sod is established on it own and is knitted down to the soil a minimum of 60 days. Owner shall pay for all water provided for the project.

B. Neatly trim sod or mow sod as necessary until 60 days past new sod installation.

C. Immediately remove clippings after trimming.

D. Water to prevent sod from drying out and dying.

E. Control growth of weeds. Apply herbicides in accordance with manufacturer’s instructions. Remedy damage resulting from improper use of herbicides.

END OF SECTION 02900
SECTION 05300 - STEEL DECKING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. New metal roof deck infill where existing abandon capped mechanical equipment and related roof curbs are indicated to be removed and disposed of legally.

B. Galvanized steel roof deck perimeter ‘Z’ angle and intermediate framing per roof detail if new metal decking does not match existing metal deck profile.

1.2 RELATED SECTIONS

A. Section 07500 – Vented TPO Membrane Roof System: Coordinate location where existing mechanical capped equipment curbs are removed and infill with new steel roof deck.

B. Section 07550 – Fully Adhered TPO Membrane Roof System: Coordinate location where existing mechanical capped equipment curbs are removed and infill with new steel roof deck.

1.3 SUBMITTALS

A. Product Data: For each type of deck, accessory, and product indicated.

B. Shop Drawings: Show layout and types of deck panels, anchorage details, reinforcing channels, pans, cut deck openings, special jointing, accessories, and attachments to other construction.

C. Product Certificates: For each type of steel deck, signed by product manufacturer.

D. Welding certificates. No welding to occur on these projects.

E. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, indicating that each of the following complies with requirements:

   1. Power-actuated mechanical fasteners shall be used to fasten all new steel deck to existing steel roof deck

   2. Carbon Steel self-tapping metal deck screws.

F. Research/Evaluation Reports: For steel deck.

1.4 QUALITY ASSURANCE

A. Welding: Qualify procedures and personnel according to AWS D1.3, "Structural Welding Code - Sheet Steel." NOT APPLICABLE FOR THIS PROJECT.
B. Fire-Test-Response Characteristics: Where indicated, provide steel deck units identical to those tested for fire resistance per ASTM E119 by a testing and inspecting agency acceptable to authorities having jurisdiction.

   1. Fire-Resistance Ratings: Indicated by design designations of applicable testing and inspecting agency.
   2. Steel deck units shall be identified with appropriate markings of applicable testing and inspecting agency.

C. AISI Specifications: Comply with calculated structural characteristics of steel deck according to AISI's "North American Specification for the Design of Cold-Formed Steel Structural Members."

1.5 DELIVERY, STORAGE, AND HANDLING

   A. Protect steel deck from corrosion, deformation, and other damage during delivery, storage, and handling.

   B. Stack steel deck on platforms or pallets and slope to provide drainage. Protect with a waterproof covering and ventilate to avoid condensation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

   A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

   B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

      1. Steel Deck:
         a. ASC Profiles, Inc.
         c. Consolidated Systems, Inc.
         d. DACS, Inc.
         e. D-Mac Industries Inc.
         f. Epic Metals Corporation.
         g. Marlyn Steel Decks, Inc.
         h. New Millennium Building Systems, LLC.
         i. Nucor Corp.; Vulcraft Division.
         j. Roof Deck, Inc.
         k. United Steel Deck, Inc.
         l. Valley Joist; Division of EBSCO Industries, Inc.
         m. Verco Manufacturing Co.
         n. Wheeling Corrugating Company; Div. of Wheeling-Pittsburgh Steel Corporation.
2.2 ROOF DECK

A. Steel Roof Deck: Fabricate panels, without top-flange stiffening grooves, to comply with "SDI Specifications and Commentary for Steel Roof Deck," in SDI Publication No. 30, and with the following:

1. Prime-Painted Steel Sheet: ASTM A 1008/A 1008M, Structural Steel (SS), Grade 33 minimum, shop primed with manufacturer's standard baked-on, rust-inhibitive primer.

2. Deck Profile: Type ‘A’ to match existing deck profile and overlap existing roof deck 6” each way, or provide Type ‘B’ deck with ‘Z’ perimeter angle.

3. Profile Depth: 1 ½” thick.

4. Design Uncoated-Steel Thickness: 20 Gauge

5. Span Condition: One Span

6. Side Laps: Overlapped or interlocking seam at Contractor's option.

2.3 ACCESSORIES

A. General: Provide manufacturer's standard accessory materials for deck that comply with requirements indicated.

B. Mechanical Fasteners: Corrosion-resistant, low-velocity, power-actuated or pneumatically driven carbon-steel fasteners; or self-drilling, self-threading screws.

C. Side-Lap Fasteners: Corrosion-resistant, hexagonal washer head; self-drilling, carbon-steel screws, No. 10 minimum diameter.

D. Flexible Closure Strips: Vulcanized, closed-cell, synthetic rubber.

E. Miscellaneous Sheet Metal Deck Accessories: Steel sheet, minimum yield strength of 33,000 psi, not less than 0.0359-inch design uncoated thickness, of same material and finish as deck; of profile indicated or required for application.

F. Repair Paint: Manufacturer's standard rust-inhibitive primer of same color as primer.

G. Perimeter Steel ‘Z’ Channel supports: 16 gauge ‘Z’ Channel on 4 sides of existing steel deck opening. Refer to details on drawings.

H. Intermediate Steel Channel supports: 12 gauge ‘C’ Channel in center of new deck infill for all openings larger than 4’-0” in any direction.

2.4 STRUCTURAL-STEEL MATERIALS

A. Channels, Angles: ASTM A 36.
PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine supporting frame and field conditions for compliance with requirements for installation tolerances and other conditions affecting performance.

3.2 INSTALLATION, GENERAL

A. Install deck panels and accessories according to applicable specifications and commentary in SDI Publication No. 30, manufacturer's written instructions, and requirements in this Section.

B. Install temporary shoring before placing deck panels, if required to meet deflection limitations.

C. Locate deck bundles to prevent overloading of supporting members.

D. Place deck panels on supporting frame and adjust to final position with ends accurately aligned and bearing on supporting frame before being permanently fastened. Do not stretch or contract side-lap interlocks.

E. Place deck panels flat and square and fasten to supporting frame without warp or deflection.

F. Cut and neatly fit deck panels and accessories around openings and other work projecting through or adjacent to deck.

G. Provide additional reinforcement and closure pieces at openings as required for strength, continuity of deck, and support of other work.

H. Mechanical fasteners may be used in lieu of welding to fasten deck. Locate mechanical fasteners and install according to deck manufacturer's written instructions.

3.3 ROOF-DECK INSTALLATION

A. Fasten roof-deck panels to new cold-formed metal Z channel supporting members with self drilling screws or mechanical fasteners, and as follows:

   1. Fastener Size: No. 12 diameter or larger.
   2. Fastener Spacing: Fasten edge and interior ribs of deck units with a minimum of three fasteners per deck unit at each support. Space as required to meet minimum diaphragm shear values indicated on drawings.

B. Side-Lap and Perimeter Edge Fastening: Fasten side laps and perimeter edges of panels between supports, at intervals not exceeding the lesser of 1/2 of the span or 36 inches, and as follows:

   1. Mechanically fasten with self-drilling, No. 10 diameter or larger, carbon-steel screws.
   2. Mechanically clinch or button punch.
C. End Bearing: Install deck ends over supporting frame with a minimum end bearing of 2 inches, with end joints as follows:

1. End Joints: Lapped 2 inches minimum.
2. Side laps: One flute or minimum of 2 inches.

3.4 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.

B. Field welds will be subject to inspection.

C. Testing agency will report inspection results promptly and in writing to Contractor and Architect.

D. Remove and replace work that does not comply with specified requirements.

E. Additional inspecting, at Contractor's expense, will be performed to determine compliance of corrected work with specified requirements.

3.5 REPAIRS AND PROTECTION

A. Provide final protection and maintain conditions to ensure that steel deck is without damage or deterioration at time of Substantial Completion.

END OF SECTION 05300
PART 1 GENERAL

1.01 SECTION INCLUDES

A. Non-Treated wood curb dimension lumber blocking as shown on drawings to raise existing mechanical curbs.

B. Non-Treated wood curb dimension lumber blocking to raise existing roof edge perimeter blocking as shown on drawings to raise existing roof edge curbs to match top of new gypsum cover board level.

C. MDO plywood sheathing two layers of ½” thick (Total 1” thick) at roof edge to raise existing roof edge perimeter blocking as shown on drawings to raise existing roof edge curbs to match top of new gypsum cover board level.

D. MDO Plywood sheathing 1/2" thick screw fasten to sides and top of all existing wood framed roof expansion joints for a smooth new substrate to adhere 60 Mil Gray TPO roof membrane to cover all roof expansion joints as shown on drawings.

E. MDO Plywood sheathing 3/4" thick screw fasten to vertical surface of roof transition wall at existing Office Addition for a smooth new substrate to adhere 60 Mil Gray TPO roof membrane to cover all roof expansion joints as shown on drawings.

F. All required non cohesive screw fasteners to secure and new roof wood blocking and sheathing for 90 mph wind warranty. All anchors to resist 180 lbs. of pull force per anchor in any direction. Follow all roof manufacturers requirements for roof termination fastening.

1.02 RELATED SECTIONS

A. Section 07500 – Vented TPO Membrane Roof: Provide wood blocking and sheathing for roof edge conditions, roof expansion joints and vertical wall transition sheathing for securing new roof membrane. Refer to roof plan drawings

B. Section 07550 – Fully Adhered TPO Membrane Roof: Provide wood blocking and sheathing for roof edge conditions, roof expansion joints and vertical wall transition sheathing for securing new roof membrane. Refer to roof plan drawings.

C. Section 07600 Sheet Metal Flashing & Trim: Installing new wood blocking and sheathing for proper substrate to fasten all new metal roof edge flashing.

1.03 REFERENCES

A. ALSC - American Lumber Standards Committee: Softwood Lumber Standards.


C. NFPA: National Forest Products Association

D. SPIB: Southern Pine Inspection Bureau.

E. WWPA: Western Wood Products Association.
1.04 QUALITY ASSURANCE

A. Perform Work in accordance with the following agencies:


B. All wood materials with nominal thickness of 3” of less shall be dried in a kiln. Moisture content of all lumber shall not exceed 16% for non-treated lumber. No pressure treated lumber allowed for this project.

PART 2 PRODUCTS

2.01 MATERIALS

A. Lumber Grading Rules: SPIB

B. Framing Lumber: Douglas fir-larch or southern pine, grade #2 or better. Maximum 16 % moisture content.

C. Miscellaneous Framing & Blocking: Stress Group D, 16 percent maximum moisture content, kiln dried after treatment. No new treated lumber is allowed to be used on this project.

D. Wood Sheathing as shown in details: Medium Density Overlay (MDO) Plywood, Exterior Grade plywood with MDO overlay both sides of sheathing; no pressure preservative treated. M.D.O. Plywood sheathing ½” to ¾” Thick, Structural 1, APA Exterior Grade. No new treated plywood is allowed to be used on this project.

E. Treated wood 2x blocking for HVAC wood sleeper rails, kiln dried.

2.02 ACCESSORIES

A. Fasteners and Anchors: Corrosion resistant steel nails and screws shall be used for all lumber and plywood fasteners meeting FM4470 requirements

1. Wood to Light Gauge Steel Fasteners: Corrosion-resistant, self drilling and self tapping screws with flat head screws or countersunk below top of wood surface.
   a. Construction Fasteners - Dekfast
   b. ITW Buildex – Roof Grip

2. Wood to Structural Steel Fasteners: Corrosion-resistant powder of gas actuated fasteners
   a. Hilti X-U Fastener for to steel or concrete

3. Wood to Concrete or Masonry Anchors: Corrosion resistant screw or ballistic fasteners.
   a. ITW Buildex – Tapcon Flat Head Phillips or square head painted screw fasteners.
   b. Hilti X-CF Fasteners for untreated lumber with no moisture exposure.
   c. Hilti X-CP Fasteners for pressure treated lumber with no moisture exposure.
   d. Hilti X-CR-L Fasteners for all wood types in heavy industrial areas.
4. Fasteners to be install in wood blocking and sheathing for required vented roof air seal shall be the required screw fasteners and quantities required by the vented roof manufacturer.

5. Construction Adhesive to adhere new ¾” plywood sheathing to existing insulated metal panels.
   a. Locktite PL 400

PART 3 EXECUTION

3.01 EXAMINATION

A. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.

B. Report in writing to Architect prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected.

C. By beginning Work, indicates the Roofing Contractor accepts existing conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the Owner.

3.02 FRAMING

A. Set members level and plumb, in correct position as shown on drawings.

B. Place horizontal members flat, crown side up if members are vertical and cup side down if members are placed flat.

C. Refer to drawings for wood blocking locations.

D. Install wood curb blocking overlapping corners and staggering joints.

3.03 INSTALLATION OF WOOD COMPONENTS

A. Countersunk screw fasteners into new 2x6 non-treated wood curb framing and 2 layers of ½” thick x 5 ½” wide M.D.O. sheathing to existing wood curb framing according to roof manufactures recommendation but no further spacing the every 16” or one anchor per one square foot of nailer or wood blocking, which every is more restrictive as shown on details.

B. Securely screw-fasten 2x6 non-treated wood curb blocking vertically on top existing mechanical curbs to raise curbs higher above the roof. Install 16 gauge galvanized cleats or ½” thick M.D.O. sheathing cleats as shown on details.

C. All new wood nailer anchors space according to manufactures recommendation but no further spacing than every 16” or one anchor per one square foot of nailer or wood blocking, which every is more restrictive.

D. Fasten all plywood sheathing to with minimum on fastener every 12” o.c. maximum and at 8” o.c. at edge of all plywood sheathing with 1/4” diameter tapcon screw fasteners if fastening it masonry and wood screws if fastening into wood blocking unless otherwise noted in specifications and drawings.

END OF SECTION 06100
PART 1 GENERAL

1.01 SECTION INCLUDES

A. Project Name: Des Moines Public Schools, McCombs Middle School - Re-Roofing Project.

B. Furnish and install complete Section 07500 - Vented TPO (thermoplastic polyolefin) Membrane Roof System) under BASE BID in Lieu of Fully Adhered Roof under Alternate Bid #1 to include:

1. Roofing manufacturer's requirements for the specified warranty.
2. The existing roof is constructed of fully adhered modified bitumen membrane of 3/4” perlite, over tapered 2 1/2” to 5” +/- thick polyisocyanurate insulation over 1 1/2” thick steel decking to remain unless existing roof system is designated as “Wet” on the Roof Plan.
3. Roof Type ‘A’ Demolition / Existing Roof Repair on Roofs with Metal Decking Structures:
   a. Sweep and vacuum and blow off all loose modified bitumen roof granules from roof surface Type A Roof. Refer to Roof Plan for existing Roof System – Type ‘A’. All Roofs A-S except for Roof Q (Existing Gymnasium Roof which has exposed acoustic metal decking).
   b. Remove entire existing “Wet” designated roof areas on Roofs A-S as the existing “Wet” roof areas are to saturated to wait to have roof insulation dry-out.
   c. Install (5) 1/8” diameter holes per 100 sq. ft. through existing modified bitumen roof membrane and fiberboard, insulation to existing deck in roof area designated as “DAMP” roof system. Refer to Roof Plan for “DAMP” roof system areas to be removed.
   d. Remove or repair all modified roof blisters that are bubbled up or the roof membrane has lost its adherence to the existing insulation. Contractor shall verify prior to bidding. Install new 60 mil TPO Membrane patch and air seal to fiberboard if dry. Contractor to analyze the roof for blisters that will need to be repaired during the On-Site Mandatory Pre-Bid Walk Thru Meeting.
   e. Remove capped existing abandon mechanical curbs to existing steel decking and install new structural metal decking in existing abandon mechanical equipment curb opening locations and fill with new polyisocyanurate insulation and
   f. Removal and disposal of existing expansion joint flashings and miscellaneous wall counter flashing as shown on drawings.
4. Roof Type ‘B’ Demolition / Existing Roof Repair on Roofs with Acoustic steel roof deck.
   a. Existing Gymnasium Roof with Acoustic Steel Roof Deck (Roof ‘Q’): Since the Infrared Scan of this roof showed no wet or damp insulation this roof will not require any removal of existing roof system. HOWEVER NO SCREW FASTENERS OF ANY KIND THRU THEGYMNASIUROOF DECK FURTHER THAN 12” FROM FACE OF EXTERIOR GYM WALL.
5. Remove capped existing abandon skylight and mechanical curbs: On Roofs C, E, P & S remove capped abandon skylight and mechanical curbs on existing steel decking and install new structural metal decking in existing abandon skylight and mechanical equipment curb opening locations and fill with new polyisocyanurate insulation and
60 mil TPO Membrane to match height of top of existing modified bitumen membrane roof surface, approximately 4” thick and seal air tight to existing modified bitumen roof surface.

6. Remove entire existing “Wet” designated roof areas as shown on Roof Plan A1.1: Remove existing roof system as the existing “Wet” roof areas to existing steel roof deck as the existing roof system is to saturated to wait to have roof insulation dry-out. Fill removed roof area with (2) new layers of 2” +/- thick polyisocyanurate tapered insulation and 60 mil TPO Membrane to match height of top of existing modified bitumen membrane roof surface, approximately 4” thick and seal air tight. Adhere insulation and new TPO Membrane with recommended adhesive to roof manufacturer’s requirements and provide an air-tight seal to existing Modified Bitumen Roof Deck with air seal rope of tape and aluminum termination bar as detailed on drawings.

7. Roof Type ‘A’ System which is a Vented Roof System over Steel Roof Decking:
   a. Permeated existing modified bitumen roof membrane and insulation with (5) 1/8” diameters holes per 100 s.f. in all roof areas indicated with the word “Damp” on roof plan.
   b. Additional Roof Insulation: Install new loose laid black paper faced 2” thick 4’-0” x 8’-0” polyisocyanurate board insulation fit tight together over entire existing modified bitumen membrane near level roof sloped approximately 1/8” per foot with supplemental crickets to remain.
   c. Gypsum Protection Board: Install new loose laid 1/2” thick gypsum protection board (Dens Deck of Equal) over new loose laid insulation boards with joints fit tight.
   d. TPO Roof Membrane: Install new loose laid roof system using the WindSmart wind-vented components and 60 mil TPO membrane roof system over new loose laid gypsum protection board per WindSmart requirements and details. Provide all associated and required 60 mil TPO membrane flashings and pipe boot flashings. Install all required air seal rope or tape and aluminum termination bar at perimeter of all roof edges and vertical roof interruptions to provide an air seal to the existing modified bitumen roof system.
   e. Use the same procedure for Roof ‘Q’ Existing Gymnasium Roof only DO NOT INSTALL ANY SCREW FASTENERS OF ANY KIND IN THE FIELD OF THE GYM ROOF. AT ALL MECHANICAL GYM ROOF CURB PENETRATIONS THE AIR SEAL MUST BE INSTALLED IN THE VERTICAL SURFACE OF THE MECHANICAL CURB. ANYTHING ELSE IS UNACCEPTABLE.

8. Installation of all manufacturer’s supplied 6” wide x 65 mil thick TPO seam tape membrane flashing over edge of all prefinished metal fascia / gravel stop roof edge flashing. **Furnish and install lap sealant over both edges of seam tape membrane flashing required even if NOT required by manufacturer for 15 year warranty.**

9. Install walkway pads around at top and bottom of two roof ladders and at two doors leading out onto roofs. See Roof Plan.

10. Wood Roof Edge Blocking: Provide all wood M.D.O sheathing and 2x Douglas Fir wood blocking to fasten new prefinished metal fascia / gravel stop flashing and raise existing wood curbs as shown in drawings. Refer to Section 06100 Rough Carpentry.

11. Raise Existing Low Mechanical Curbs: Install 2x6 wood blocking on edge on top of existing mechanical curb as required as to raise the existing mechanical curbs as shown on drawings. Refer to Section 06100 Rough Carpentry.
12. Installation of wood sheathing and blocking at counter flashing curbs, vertical roof transition walls and roof expansion joints as shown on drawings. Refer to Section 06100 Rough Carpentry.

13. Installation of WindSmart Air Seal Technology including equalization vents, enhanced air seal rope and heavy duty termination bars. Cut vents openings in new membrane, protection board and insulation down to the top of the existing modified membrane roof. **Do not cut into existing modified roof.**

14. Installation of Prefinished Metal Fascia / Gravel Stop Flashing with continuous galvanized steel clip and Prefinished Wall Counter Flashing and any misc. wall flashing as shown on drawings. Refer to Section 07600 Sheet Metal Flashing.

15. Removal and reinstalliation of existing mechanical / electrical powered roof vent units to raise roof curb.

16. Cleaning of all existing cast iron roof drain bodies and removal of existing roof drain clamp rings wire brush and prime and painting. (Drain ring and membrane may be left in place to prevent air infiltration).

17. Remove and dispose of designated abandon and capped skylight and mechanical related curbs. Refer to Roof Plan for quantity and locations. Replace decking and roofing with like materials for a continuous air barrier.

18. Provide and install Schedule 40 PVC vent piping to raise all indicated Plumbing Vents (P.V.) on Roof Plan to a minimum of 18” to maximum of 20” above new roof.

19. Provide and install all other roofing-related items specified or indicated on the drawings or otherwise necessary to provide a complete weatherproof roofing system at no additional cost to owner.

C. Disposal and removal of construction debris and waste is the responsibility of Roofing Contractor. Perform disposal in manner complying with all applicable federal, state, and local regulations.

D. The Architect completed an Infrared Roof Scan, June 18, 2021 of the Existing Roof area to be re-roofed and have identified some of the damp and wet areas of roof insulation that the scan appears to have identified. If any additional insulation is found that is wet or damp not identified n the drawings, notify the Owner and Architect immediately to determine if the wet insulation needs to be replaced. The other identified damp areas of existing roof shall be permeated with (5) 1/8” diameter holes cut every 100 square feet in these damp areas. Such permeation holes shall penetrate the existing modified bitumen roof membrane to existing steel roof deck. The Modified Bitumen roof is the air barrier for the wind-vented system for Roof Type A & B Areas.

E. The existing roof system was cored in seven (7) locations by roof consultant after the infrared roof scan was completed. (3) Roof cores were found that all roof materials were so wet they need the entire roof system removed to the existing metal deck and disposed of office site for Roofs A, B, C & H as shown on Roof Plan designated was “Wet”. (5) Roof cores were found to have mildly damp insulation for Roofs B, C, D, E, F, G & H as designated “Damp” as shown on Roof Plan. Permeated existing modified bitumen roof membrane and insulation with (5) 1/8” diameters holes per 100 s.f. in all roof areas indicated with the word “Damp” on roof plan.

F. Commencement of work by the Contractor shall constitute acknowledgement by the Roofing Contractor that this specification can be satisfactorily executed, under the project conditions and with all necessary prerequisites for warranty acceptance by WindSmart. No modification of the Contract Sum will be made for failure to adequately examine the Contract Documents or the existing project conditions.
G. The existing roofing insulation and modified bitumen granular roof membrane has been tested by an independent testing company, and the existing roof system to the best of the Owner’s knowledge does not have any materials that contain asbestos. No abatement procedures are required for this project. If during the removal of any existing roofing materials and/or installation of any new materials, the contractor suspects any materials may contain asbestos it shall be report to the owner for further testing immediately.

1.02 RELATED SECTIONS

A. Divisions 0 & 1: Administrative Requirements related roof installation.

B. Section 05310 – Steel Roof Deck: Install new steel roof deck where existing skylights, intake ductwork and power roof ventilators are removed.

C. Section 06100 – Rough Carpentry: Wood blocking and sheathing at curb extensions, roof edge or parapet wall sheathing.

D. Section 07400 – Vertical Steel Siding: Coordinate installation of new vertical steel siding around existing clerestory structures and parapet walls as shown on details.

E. Section 07600 – Flashing & Sheet Metal: Flashing and Counter flashing installation.

F. Section 07900 – Sealant: Installation of required Sealant not part of the roofing system sealant. Mainly the sealant between counter flashing and existing wall surfaces.

H. Refer to WindSmart Roof System Details at end of this specification section for the 15 year - 60 mil Details use 500B Series Details

1.03 REFERENCES

A. Referenced Standards: These standards form part of this specification only to the extent they are referenced as specification requirements.


G. ASTM D1621 –Compressive Properties of Rigid Cellular Plastics.


K. UL1256 – Fire Test of Roof Deck Construction.


1.04 QUALITY ASSURANCE

A. Submit shop drawings under Provisions of Section 01300.

B. Roof Membrane Manufacturer: Company manufacturing TPO roof membranes meeting this specification.

C. Applicator: Roofing Company approved to installation of wind-vented roof membrane systems by an approved WindSmart Applicator or approved equal for the specified roof system.

D. There shall be no deviation made from the Project Specification or the approved shop drawings without prior approval of the Architect and WindSmart or approved equal.

E. All work pertaining to the installation of the TPO Roof Vented Membranes and Membrane Flashings shall only be installed and completed by the Applicator Trained Personnel and authorized in those procedures complying with the WindSmart Applicator Certification or equal manufacturer.

1.05 SUBMITTALS

A. Submit shop drawing roof plan indicating roof size and seaming locations. Show all vent locations.

B. Submit shop drawings details, manufacturers standard termination at roof penetrations. Provide detailing showing special joint to termination conditions and conditions of interface with other materials.

C. Submit product data for sheet membrane, elastic flashing, joint cover sheet and joint and crack sealants, with temperature range for application of membrane and insulation.

D. Submit manufacturer’s current installation instructions.

E. Submit a copy of WindSmart 15 Year Watertight Warranty with 1 Year Roofing Contractors Watertight Warranty meeting all specified roof warranty requirements. All Roof Warranties shall be for a 90 mph Weed Speed at roof highest roof level.
1.06 DELIVERY, STORAGE, AND HANDLING

A. Store material in weather protected environment clear of ground and moisture. Protect foam insulation board from direct sunlight exposure.

B. All products shall be delivered to the job site in the original unopened containers or wrappings bearing all seals and approvals.

C. Handle all materials to prevent damage. Place all materials on pallets and fully protect from moisture.

D. Membrane rolls shall be stored lying down on pallets and fully protected from the weather with clean canvas tarpaulins. Unvented polyurethane tarpaulins are not accepted due to the accumulations of moisture beneath the tarpaulins in certain weather conditions that may contaminate seams.

E. As a general rule all adhesives shall be stored at temperatures between 40°F and 80°F. Read instructions on adhesive canister for specific storage instructions. Keep adhesive containers out of direct sun.

F. All flammable materials shall be stored in a cool, dry area away from sparks and open flames. Follow precautions outlined on containers or supplied by material manufacturer / supplier.

G. All materials damaged by Applicator are to be removed from the job site and replaced at no additional cost to the Owner.

H. Contractor shall provide all lift and crane operations to lift materials upon existing roofs. Contractor shall distribute materials around the roof so as not to stress or permanently damage the existing roof structures. Should roof structure become damaged by roof contractor, they shall be required to replace the existing damaged structure to satisfactory methods as approved by independent structural engineer, paid for by roofing contractor.

1.07 ENVIRONMENTAL & JOB SITE REQUIREMENTS

A. Do not apply membrane during inclement, adverse weather conditions or when air temperature is below 40°F. Only install after WindSmart has been notified as installation time and system integrity may be affected.

B. Only install as much of the new roofing as can be made weathertight each day, including all flashing and detail work, shall be installed. All seams shall be cleaned and adhered watertight before leaving the job site that day. When removing existing designated wet roof system to be removed and mechanical equipment, permanently seal all openings watertight by the end of each work day.

C. All work shall be scheduled and executed without exposing the interior building areas to the effects of inclement weather. The existing building and its contents shall be protected against all risks by contractor’s project insurance. If any interior materials or furnishing are damaged due to roofing contractor’s inability to keep water out of the building, the roofing contractor’s
insurance company shall reimburse the Owner to repair or replace all interior materials and furnishings with no insurance deductible. If the roofing contractor’s insurance company does not pay all of the Owner’s expenses to restore the building interior to the original condition, the Owner will impose a De-Duct Change Order for the difference in cost.

D. All new insulation, protection board, membrane and flashing materials being installed shall be dry. Should surface moisture occur, the Roofing Contractor shall provide the necessary equipment to dry the surface prior to application.

E. All new and temporary construction, including equipment and accessories, shall be secured in such a manner as to preclude wind blow-off and subsequent roof or equipment damage.

F. Uninterrupted water-stops shall be installed at the end of each day’s work. Waterstops shall not emit dangerous or unsafe fumes and shall not remain in contactor’s finished roof system as the installation progresses. Contaminated membrane shall be replaced at no cost to Owner.

G. Arrange work sequence to avoid use of newly constructed roofing as a walking surface or for equipment movement and storage. Where such access is absolutely required, the Roofing Contractor shall provide all necessary protection and barriers to segregate the work area and to prevent damage to adjacent areas. A substantial protection layer consisting of plywood over insulation board shall be provided for all new and existing roof areas that receive rooftop traffic during construction.

H. Prior to application, all dirt, debris and dust shall be removed from surfaces either by vacuuming, sweeping, blowing with compressed air and/or similar methods.

I. The Roofing Contractor shall follow all safety regulations as required by OSHA and any other applicable authority have jurisdiction to prevent any injuries to workers and building users.

J. The Owner has had a Testing Agency sampled and tested the existing modified bitumen roof and flashing, which tested negative for asbestos containing materials. Should Roofing Contractor suspect other materials are hazardous they shall notify the Owner immediately and the Owner will have those materials tested, and if positive for asbestos material will have these items abated from the project before work proceeds by roofing contractor.

K. All new waste material (i.e., scrap roof membrane, flashings, empty cans of adhesive, unused insulation and protection board) shall be removed from the site by Applicator and properly transported to a legal dumping area or recycling center authorized to receive such materials.

L. The Roofing Contractor shall take precautions when storing and/or applying new roofing materials and/or equipment does not overload the existing roof deck or building structure.

M. Flammable adhesives shall not be stored and not be used in the vicinity of open flames, sparks and excessive heat.
N. The Roofing Contractor shall verify that all roof drain lines are functioning correctly (not clogged or blocked) after completing work on the roof. Roof Contractor shall report any such blockage in writing to Architect and Owner. Should corrective action be required to unclog any existing roof drain the Owner shall employ a sewer-cleaning contractor to open the roof drains prior to installation of the new roof system.

O. Site cleanup, including exterior building staging areas that have been affected by construction, shall be completed to the Owner and Architect’s satisfaction.

P. All landscaped areas damaged by construction activities shall be repaired at no cost to the Owner. Refer to Sections 02200 & 02900.

Q. The roofing contractor shall conduct fastener pullout tests in accordance with Windsmart requirements in roof deck air seal terminations at perimeter of all new air seal termination locations prior to submitting shop drawings.

R. Precautions shall be taken when using adhesives at or near rooftop vents or air intakes to prevent adhesive odors from entering the building. Coordinate the operation of vents and air intakes in such a manner as to avoid the intake of adhesive odor while ventilating the building. Keeps lids on unused cans at all times.

S. Protective wear shall be worn when using solvents or adhesives or as required by the job conditions.

1.08 WARRANTY & GUARANTEES

A. 60 Mil TPO Roof Warranty: Provide Fifteen (15) Year Non-Prorated Manufacturer’s Watertight Warranty for all Material costs to cover failure to prevent penetration of water below wind-vented roof system at time of Substantial Completion as determined by the Architect. This warranty shall carrier Roof Manufacturer’s 90 Mile Per Hour Wind Rating @ 10 meters above the ground and 2” size hail. Provide a 3 Year Maximum Dry-Out Warranty for all wet and damp insulation areas. Owner shall perform random test in designated wet areas three (3) years after roof has been installed. If existing system is not dry Roofing Manufacturing Warrantying the system shall install a new-vented roof system after removing all existing wet insulation and fiberboard at no additional cost to Owner.

B. Provide One (1) Year Non-Prorated Roofing Applicator Watertight Workmanship Warranty for Labor and Material Cost guaranteeing that in the event any work relating to the roofing, flashing, or membrane is found to be within the Applicator warranty term, is leaking or in defect otherwise not in accordance with the Contract Documents, the Roof Applicator shall repair those Conditions at no additional cost to the Owner. Roofing Applicator Workmanship Warranty shall be directly to the Owner. This warranty does not cover acts of God. This warranty shall begin at time of Substantial Completion as determined by the Architect.

C. Owner shall report to WindSmart, Roofing Contractor and Architect upon any leaks or damage to WindSmart Roof System. If the Owner desires to modify or add any new roof membrane penetration the owner shall contact the WindSmart prior to such work so that the air seal system is not compromised. Owner shall report any leaks to list entities as soon as possible to minimize
damage, but no time limit shall void these warranties. If new equipment is installed on this roof and not done by an approved Wind Smart Applicator, this may void the roof warranty previously provided by Windsmart to the Owner.

PART 2 PRODUCTS

2.01 ACCEPTABLE TPO ROOF MEMBRANE MANUFACTURERS

A. Acceptable Manufacturer - Roofing System as provided by the following manufacturer’s
   1. Roofing systems manufactured by the companies listed below are acceptable provided they meet or exceed this specification with materials, installation methods and all required warranty requirements:
      1) Carlisle - Sure-Weld, 60 mil reinforced TPO
      2) Firestone Building Products Co. – UltraPly, 60 mil reinforced TPO
      3) GAF Everguard 60 mil reinforced TPO
      4) GenFlex EX TPO – 60 mil white roof membrane.
      5) Versico Inc., Versiweld .60 mil reinforced TPO

2. No other roof membrane manufacturers are approved or will be considered.

3. All Roof Manufacturer shall meet the following requirements.
   a. ISO 9002 certified.
   b. Able to provide polyisocyanurate insulation that is produced in own facilities.

B. Membrane: 60 mil thick reinforced TPO Color: GRAY unaged properties, conforming to the following criteria:

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>TEST</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Membrane Thickness</td>
<td>ANSI/ASTM D412</td>
<td>60 mil min. +/- 2 mils</td>
</tr>
<tr>
<td>Thickness over Skim</td>
<td>--</td>
<td>0.024” +/- 2 mils</td>
</tr>
<tr>
<td>Breaking Strength</td>
<td>ASTM D 4637</td>
<td>350 lbf</td>
</tr>
<tr>
<td>Tearing Strength</td>
<td>ANSI/ASTM D 751</td>
<td>86 lbf</td>
</tr>
<tr>
<td>Elongation at Reinf. Break</td>
<td>ANSI/ASTM D751</td>
<td>30% min.</td>
</tr>
<tr>
<td>Brittleness Point</td>
<td>ASTM D 2137</td>
<td>-50 degrees</td>
</tr>
<tr>
<td>Linear Dimension Change</td>
<td>ASTM D 1204</td>
<td>+/- 15%</td>
</tr>
<tr>
<td>Change (6 Hours @ 70 Degrees)</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Ozone Resistance</td>
<td>ASTM D 1149</td>
<td>Pass (no cracks)</td>
</tr>
<tr>
<td>Factory Seam Strength</td>
<td>ASTM D 751</td>
<td>265 lbf</td>
</tr>
<tr>
<td>Puncture Resistance</td>
<td>ASTM FTM 101 C – 2031</td>
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<tr>
<td>Solar Reflectance</td>
<td>ASTM C 1549</td>
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<tr>
<td>Solar Emittance</td>
<td>ASTM E 408</td>
<td>.92</td>
</tr>
<tr>
<td>Solar Reflective Index</td>
<td>ASTM 1980</td>
<td>95</td>
</tr>
</tbody>
</table>

2.02 TPO ROOF MEMBRANE MATERIALS:

A. Membrane: 60 mil thick non-reinforced TPO, Color: GRAY conforming to the following criteria:
B. Membrane: Flexible, heat weldable sheet composed of thermoplastic polyolefin polymer and ethylene propylene rubber; complying with ASTM D 6878, with polyester weft scrim inserted reinforcement and the following additional characteristics:
   1. Thickness: 0.060 inch plus/minus 2% percent, with coating thickness over reinforcement of 0.024 inch plus/minus 2 percent.
   2. Sheet Width: Provide the widest available sheets to minimize field seaming.
   4. Solar Reflectance: 0.79, minimum, when tested in accordance with ASTM C 1549.
   5. Color: Gray.

C. Membrane Termination Bar Fasteners: Type and size as required by roof membrane manufacturer for roofing system and warranty to be provided; use only fasteners furnished by roof membrane manufacturer. All termination bars shall be aluminum.

D. Curb and Parapet Membrane Flashing: Same material as roof membrane, with encapsulated edge, which eliminates need for seam sealing the flashing-to-roof splice.

E. Formable Flashing: Reinforced, flexible, heat weldable sheet, composed of thermoplastic polyolefin polymer.
   1. Color: GRAY

F. Membrane Seam Tape Flashing, Color Gray: 5-1/2” inch nominal wide TPO membrane laminated to cured rubber polymer seaming tape, overall thickness 0.065 inch nominal.

G. Bonding Adhesive: Neoprene and SBR rubber blend, formulated for compatibility with the membrane other substrate materials, including masonry, wood, and insulation facings.

H. Pourable Sealer: Two-part polyurethane, two-color for reliable mixing.

I. Reinforcing Seam Plates: Steel with barbs and galvalume coating; corrosion-resistance complying with FM 4470 for quick seam edge termination fastening.

J. Termination Bars: Aluminum bars with integral caulk ledge; 1.3 inches wide by 0.10 inch thick as approved by manufacturer.

K. Cut Edge Sealant: Synthetic rubber-based, for use where membrane reinforcement is exposed.

L. General Purpose Sealant: Polyurethane, white general purpose sealant for sealing membrane to dissimilar materials.

M. Lap Sealant: Manufacturer’ recommended lap sealant of both edges of all manufacturer’s seam tap.

N. Coated Metal Flashing and Edgings: Galvanized steel with roofing manufacturer's bonded TPO coating GRAY color. Use at all thru-wall and overflow scuppers and difficult areas to seal membrane to unique shaped area and at dissimilar materials.

O. Pre-Molded Flashing Accessories: Unreinforced TPO, Color GRAY membrane pre-molded inside and outside corners to suit a variety of flashing details, including pipe boots, inside corners, outside corners, etc.

P. Water Block Seal: Butyl rubber sealant for use between two surfaces, not exposed.
Q. Roof Walkway Pads: Non-reinforced TPO, GRAY walkway pads, 0.130 inch by 30 inches by 50 feet around one existing roof hatch opening and at top and bottom of all roof ladders

R. TPO, Gray Reinforce Flashing: 60 mil thick TPO Reinforced; tensile strength of 1200 psi; elasticity of 50 percent with full recovery without set: White color; manufactured by membrane manufacturer.

2.03 TPO ROOF MEMBRANE ACCESSORIES FURNISHED BY ROOF MANUFACTURER

A. Materials and accessories provided TPO roof manufacturer.
   1. Membrane Flashing and Adhesives.
   2. Sealant Pocket filler shall be non-shrink grout topped with Pourable Sealant.
   5. Screw Fasteners for compression boards and wood curbs – Firestone All-Purpose Fasteners – Contract to verify required screw length to penetrate steel deck 1” min. 1 ½” maximum with 13 treads per inch and .235” tread size or approved equal.
   6. Termination Bar & Fasteners: Firestone Heavy Duty Screw Fasteners, #15 Screws or approved equal and acceptable with roof membrane manufacturer.
   7. Washer Plates as need for Quick Seam RFP Fastener: 2” diameter galvalume W56RAC419 or approved equal.

B. Membrane Termination Fasteners: Type and size as required by roof membrane manufacturer for roofing system and warranty to be provided; Firestone (or approved equal) fasteners, plates, termination bar and fasteners as specified above and / or approved by WindSmart.

C. Curb and Parapet Membrane Flashing: Same material as membrane and adhered with seam adhesive and sealed with lap slicing adhesive as require on drawings.

E. Seam Tape Cover Strip: 6” inch nominal width at all gravel stop flashing with lap sealant on both edges of cover strip.

F. Bonding Adhesive to adhere membrane flashing to wood sheathing and blocking at roof edges: Standard Solvent Based Bonding Adhesive formulated for compatibility with the membrane other substrate materials, including masonry, wood, and insulation facings. Firestone Ultra-Ply Bonding Adhesive W56-358-7052 (or approved equal).

G. Pourable Sealer: Two-part polyurethane, two-color for reliable mixing Pourable Sealer for sealant pockets or one part, moisture curing elastomeric polyether sealant

H. Cut Edge Sealant / Lap Sealant: As approved by Roof Manufacturer.

I. Molded Flashing Accessories: Reinforced TPO membrane pre-molded to suit a variety of flashing details, including pipe boots, inside corners, outside corners, etc.

J. Water Block Seal: Butyl rubber sealant for use between two surfaces not exposed.

2.04 WIND VENT MANUFACTURER’S FURNISHED ACCESSORIES

A. WindSmart Roofing, 3716 Ingersoll Avenue, Des Moines, IA 50312, Phone 515-314-1683, Attn: Dave Harvey
1. Air Seal Technology.
   a. Equalization Vents
   b. Air Seal Rope
   c. Enhanced air seal tape
   d. Heavy Duty Aluminum Extruded Termination Bar.

B. Other approved Vented Roof Systems:
   1. Carisle V2T Roof Technology, 13000 S. Tyron St., Suite F-193, Charlotte N.C. 28278, Phone 704-900-1220

2.05 ROOF MEMBRANE VENTING SYSTEM

A. WindSmart shall provide Equalization Vents, which achieves constant roof membrane stabilization in place within the system by a means of the manipulation of relative air pressure on the two sides of the roof membrane. The design of all aspects of the system relating to air pressure management shall be by the manufacturer / warrantor of the system.

2.06 GYPSUM ROOF SHEATHING BALLAST / PROTECTION BOARD

A. Gypsum-Based Protection Board: Non-combustible, water resistant gypsum core with embedded glass mat facers, complying with ASTM C 1177/C 1177M, and with the following additional characteristics:
   1. Size: 48 inches by 48 inches or 96 inches, nominal.
   2. Thickness: 1/2"
   3. Acceptable Product:
      a. United States Gypsum Corporation: Securock, Gypsum-Fiber Roof Board
      b. Georgia-Pacific Dens Deck.

B. Attachment: Loose Laid Protection Board on all near level Flat Roof Areas covering all new Rigid Insulation Board.

2.07 ROOF INSULATION

A. Polyisocyanurate Board Insulation: Closed cell polyisocyanurate foam with black glass reinforced mat laminated to both faces, complying with ASTM C 1289 Type I Class 1, with the following additional characteristics:
   1. Thickness: 2" actual thickness.
   2. Size: 48 inches by 96 inches maximum size.
   3. Compressive Strength: 20 psi when tested in accordance with ASTM C 1289.

B. Insulation Fasteners: Loose Laid with joints fit tight together (no insulation fasteners required) over existing modified bitumen roof membrane.

C. Replacement Insulation Fasteners at Wet Insulation Replacement: Screw fastener new insulation to existing metal deck with new Firestone or equivalent—All Purpose Screw Fastener and 3” diameter washer plates galvalume W56RAC419 or approved equal

2.08 60 MIL TPO MEMBRANE WHERE EQUIPMENT IS REMOVED OR WET ROOF SYSTEM

A. Install 60 mil TPO membrane air barrier sheet lapped over existing modified bitumen roof edge
minimum of 12” and sealed air tight to existing modified bitumen roof membrane with air seal tape or rope and continuous aluminum termination bar and screw fastened into existing steel roof deck where existing designated HVAC equipment and curbs are removed and new polyisocyanurate roof insulation is installed. Match existing roof thickness. Also this same method is required where existing capped skylight curbs are removed.

2.09 ROOF DRAINS

A. Remove existing beehive roof drain cast iron grate and clapping ring and wire brush clamp ring and drain body clean without damaging roof seal. Prime and paint existing cast iron roof drain clapping ring and seal new roof membrane watertight to existing roof drain casting per manufactures detail.

B. Wire brush existing roof drain strainer at all existing roof drawings. Prime and paint and reinstall all existing roof drain strainer. If they are missing provide new cast iron or aluminum strainer. Currently they are all existing. No plastic strainers allowed.

2.10 EXISTING ROOF VENT WITH NEW PIPE EXTENSIONS.

A. Roof Vent Extensions: Extend existing designated roof vents with matching diameter Schedule 40 PVC piping to a minimum of 1’-6” to a maximum of 1’-8” above new roof surface. Refer to Roof plan for new raise roof vents.

PART 3 EXECUTION

3.01 INSPECTION

A. Do not apply new roof materials to damp, wet, frozen, dirty, dusty existing roof surfaces unacceptable to manufacturer, owner or Architect.

B. Verify that existing roof deck, perimeter nailers and wood curbs are structural sound and ready to receive new wind-vented roof system.

C. Verify deck surfaces are dry and free for snow or ice.

D. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.

E. Report in writing to Architect prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected.

F. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the Owner.

3.02 GENERAL INFORMATION

A. Install roofing, insulation, flashings, and accessories in accordance with WindSmart roofing manufacturer's published instructions and recommendations for the specified roofing system. Where manufacturer provides no instructions or recommendations, follow details on drawings or follow good roofing practices and industry standards. Comply with federal, state, and local regulations. If manufacturer’s material installation instructions conflict with architects drawings
and specifications, contractor shall bring these contradictions to the architect’s knowledge at lease 5 days prior to bidding so an addendum can be issued. If not brought to the architect’s knowledge a change in contract price may not be issued for these items.

B. Obtain all relevant Instructions and maintain copies at project site for duration of installation period.

C. Do not start work until Project in Development (PID) and Notice of Award (NOA) forms has been submitted to manufacturer as notification that this project requires a manufacturer's warranty.

D. Perform work using competent and properly equipped personnel.

E. Temporary closures, which ensure that moisture does not damage any completed section of the new roofing system, are the responsibility of the applicator. Completion of flashings, terminations, and temporary closures shall be completed as required to provide a watertight condition.

3.03 PREPPING & REPAIRING EXISTING ROOF TO BE RE-ROOFED

A. Remove and dispose of designated capped skylight and mechanical curbs. Refer to Roof Plan for quantity and locations. Infill existing holes in roof deck with new 1 1/2” Type ‘A’ 22 gauge steel deck. Then infill existing void area of insulation with (4” +/- total) with 2 layers of 2” thick polyisocyanurate insulation and adhere insulation board to existing steel deck level with existing modified bitumen roof and adhere new 60 mil TPO membrane sheet and seal air tight to existing modified bitumen roof surface with air seal tape or rope and continuous aluminum termination bar screw fastened in steel roof deck air tight to existing roof membrane as shown on roof plan and details.

B. Cut out and replace all wet roof insulation, including modified roof membrane, wet 3/4” fiber board, wet polyisocyanurate insulation, and infill with matching roof insulation thickness (4” +/- total) with 2 layers of 2” thick felt faced polyisocyanurate insulation and adhere to existing roof steel roof deck level with existing modified bitumen roof and adhere new 60 mil TPO membrane sheet and seal air tight to existing modified bitumen roof surface with air seal tape or rope and continuous aluminum termination bar screw fastened in steel roof deck seal air tight to existing roof membrane as shown on roof plan. If no area is designated on roof plan, than it has been determined that the existing roof system is dry or can be dried-out with the venting process.

C. Vacuum, blow or sweep all loose particles from top of existing modified bitumen roof system including all loose granular surface material.

D. Puncture existing modified bitumen roof membrane to top of metal roof deck with five (5) 1/8” diameter holes in every 100 square feet of designated “DAMP” insulation not indicated to be removed and spaced evenly every 100 square feet. Such permeation holes shall not penetrate the existing steel roof deck. The existing modified bitumen roof is the air barrier for the wind vented system.
3.04 INSTALLATION OF NEW INSULATION, GYPSUM SHEATHING & MEMBRANE – ROOF TYPE A WITH STEEL ROOF DECK.

A. Existing Air Barrier: The existing modified bitumen roof membrane will become the air barrier required below the new TPO Roof System. Confirm that the new 60 mil TPO membrane is installed where existing wet insulation and roofing was removed and where all skylight and mechanical equipment, and related curbs is properly air sealed per vented roof manufacturer requirements.

B. New Air Seals: Seal new roof membrane air tight at all existing roof edges and vertical wall surfaces with continuous aluminum termination bar with new enhanced air seal rope or tape to existing modified bitumen roof membrane and between new TPO roof membrane as detail on architect’s and roof manufacturer’s drawings.

C. Roof Insulation installation at all near level Flat Roof Areas: Install new loose laid paper faced 2” thick polyisocyanurate board insulation over entire existing modified bitumen roof membrane and new capped mechanical equipment curb areas. Place insulation board substrate in parallel rows. All joints shall be tight and at the roof perimeter and roof penetrations, insulation neatly cut and fitted to reduce openings to a minimum. Insulation shall be tapered or feathered at drains to provide proper drainage. Insulation shall be loose laid 2” thick x 4’ x 8’ board. No insulation screw anchors shall be required where ½” thick gypsum protection board shall be overlaid on new insulation on flat roof.

D. Gypsum Protection Board Installation at near level Flat Roof Area: Install new 1/2” thick loose laid gypsum protection board (Dens Deck or approved equal) over new loose laid insulation boards with joints fit tight at Flat Roof Areas. Stagger joints between insulation and gypsum protection board 1'-0” min. each direction.

E. Roof Edge Air Seal: Install air seal rope between existing modified bitumen roof and new TPO membrane. Install aluminum termination bar directly over the air seal tape locations and screw fasten securely into existing steel roof deck at Type A & B Steel Roof Deck as required to provide roof air seal at perimeter roof edges per architect’s and roof manufacturer’s requirements and as shown on drawings. Use long screw fastener requirement by vented roof manufacturer a minimum of 1” and maximum 1 ½” into existing steel roof deck. At Type B Roofs with Acoustic Steel Roof Deck, Gymnasium Roof ‘Q’ only install roof air seal in maximum 12” from exterior face of brick veneer in steel roof deck with aluminum termination bar directly over the air seal rope locations and screw fasten securely into existing steel roof deck per roof manufacturer’s requirements and as shown on drawings.

F. Vertical Wall Surface Air Seal: Install air seal rope between existing modified bitumen roof and new TPO roof membrane and then screw fasten new termination bar over air seal rope in alignment will rope location securely into the existing metal roof deck. At Gym Roof new membrane needs to be air sealed to vertical surface of mechanical curbs so as not to penetrate exposed steel gym roof deck.

G. Roof Membrane Installation: Membrane shall be unrolled and positioned without stretching as close to and parallel with roof edges as possible. Adjoining roofing membrane shall be unrolled perpendicular to the continuous joint of the thermal insulation and be positioned without
stretching, lapping the previous edges a minimum of 3 inches. Installation of roof membrane should start at high point of roof and proceed to lowest point of roof. End joints shall be staggered. The membrane shall then be allowed to relax for 1/2 hour before sealing. Then clean and dry laps shall be welded (melted) together as required by Roof membrane manufacturer’s requirements. The roof membrane shall be overlapped 3” on edges and 4” on ends minimum and sealed with seam tape. Apply uniform bead of lap sealant to all joint edges. All seams shall be tested for integrity. Install Roof Membrane per Roof Manufacturer’s strict requirements. If they deviate from Architect’s drawings or specification, notify Architect immediately.

H. Continue membranes up vertical surfaces minimum 8” and under top of parapet and counter flashing as shown at details. Seal all new TPO membrane to existing flashings with SBR adhesive as approved by roof manufacturer. Seal items penetrating membrane with counter flashing membrane material.

I. Minimize wrinkles and bubbles in new membrane. Cut out all wrinkles that can be folded over and squeezed together and touching the roof membrane together.

J. Equalization Vents: EV’s shall be installed at the rate of two per corner and one every fifty feet or less around the perimeter, equally spaced between corners. Location of EV’s shall be as indicated on roof drawings. In no case shall less than one EV for every 1,250 square feet be installed without prior WindSmart approval. EV’s shall be installed as roofing installation proceeds to avoid wind displacement during installation.

K. Temporary Seals: The roofing membrane shall be sealed to the monolithic existing roof system at the end of the each day or at the onset of inclement weather to prevent water and wind from flowing into the completed roof system. Temporary seals shall be removed upon resumption of work.

L. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed during same day.

3.06 FLASHING AND ACCESSORIES INSTALLATION

A. Install membrane flashings, including laps, splices, joints, bonding, adhesion, and attachment, as required by membrane manufacturer's recommendations and details. Coordinate with Section 07600 Sheet Metal & Flashing.

B. Metal Accessories: Install metal flashings and continuous flashing clips in locations indicated on the drawings, with horizontal leg of clip over roof membrane and nail at 4” o.c. with 1 ¼” galvanized roofing nails into new or existing wood blocking or ramset anchors into existing masonry units.
   1. Follow roofing manufacturer's instructions for proper flashing installation.
   2. Remove protective plastic surface film immediately before installation.
   3. Install water block sealant under the membrane anchorage leg.
   4. Flash with recommended 24 gauge flashing sheet unless otherwise indicated.
   5. If the roof edge includes fascia / gravel stop flashing and seam covers are installed, sealant shall be applied between the laps in the metal edging from the roof surface to the top of the gravel stops at all joints.
C. Flashing at Walls, Curbs, and Other Vertical and Sloped Surfaces: Install weathertight flashing at all walls, curbs, parapets, and other vertical and sloped surfaces that the roofing membrane abuts to; extend flashing a minimum of 8 inches high and at least 3” under the new vertical metal equipment curbs and counterflashings or as shown on drawings.
1. Use the longest practical flashing pieces.
2. Evaluate the substrate and overlay and adjust installation procedure in accordance with membrane manufacturer's recommendations.
3. Complete the splice between flashing and the main roof sheet with specified splice adhesive before adhering flashing to the vertical surface.
4. Provide termination directly to the vertical substrate as shown on roof drawings.
5. Do not cover any thru-wall flashing or weep holes with new wall flashing.

D. Roof Drains:
1. Remove, wire bush clean all rust of clamp ring and prime and paint and reinstall existing cast iron roof clamping rings and connected to existing roof drain body.

Install new water cut-off mastic on roof drain body and set new roof membrane in mastic and tighten existing clamping ring over new roof membrane. No Roof Drain inserts allowed.
2. Install cover board around drain to provide smooth transition from roof surface to drain. Slope not to exceed manufacturer's recommendations.
3. Position membrane, then cut a hole for roof drain to allow 1/2 to 3/4 inch of membrane to extend inside clamping ring past drain bolts.
4. Make round holes in membrane to align with clamping bolts; do not cut membrane back to bolt holes.
5. Maintain watertight seal of existing roof membrane to existing roof drain body. If seal is broken the remove existing loose membrane and seal new membrane air tight to existing roof drain body.
6. Install roof drain clamping ring and clamping bolts; tighten clamping bolts to achieve constant compression. Then re-install existing cast iron roof drain strainer.
7. Install new picture framed air seal around all roof drains, with new air seal rope and aluminum termination strip screw fastened new TPO membrane thru air seal into existing modified bitumen roof and steel roof decking.

E. Flashing at Penetrations: Flash all penetrations passing through the membrane; make flashing seals directly to the penetration.
1. Many pipe penetrations will utilize existing flashings. Pipes, Round Supports, Preparation: wire brush, sand or grind all rust and sealant of metal pipes or supports prior to installing roof membrane flashings or boots.
2. Pipes, Round Supports, and Similar Items: Flash with specified pre-molded pipe flashings wherever practical; otherwise use specified self-curing elastomeric flashing.
3. Pipe Clusters and Unusual Shaped Penetrations: Provide penetration pocket at least 2 inches deep of pourable sealant, with at least 1 inch clearance from penetration, sloped to shed water.
4. Install flashings. Seal membrane watertight as detailed on drawings.
5. Membrane Flashing: Membrane flashings at the roof perimeter and at all penetrations, including drains, pipes, conduits, curbs, walls, expansion joints, and vents shall be installed as shown on approved shop drawings. Flashing shall be fabricated from the
60 mil TPO Gray Reinforced roof membrane. Prefabricated inside and outside corners shall be used wherever possible. All flashings shall be sealed to both penetration and the monolithic deck as shown on approved shop drawings or architect’s drawings. Flashing shall be installed as roof membrane install progresses.

3.07 FIELD QUALITY CONTROL

A. Intermediate Roof Inspection by wind vented system manufacturer: Provide intermediate inspection by roof manufacturer at the beginning of the reroofing project to observe the total process of the roofing installation so that any corrective measures can be made prior to final inspection. Inspect roof project every two weeks maximum to insure system is being install properly.

B. Final Roof Inspection by Manufacturer: Provide final inspection of the roofing system by a Technical Representative employed by wind-vented roofing system manufacturer specifically to inspect installation for warranty purposes (i.e. not a sales person). Have Technical Representative recheck any modifications required by roofing installer to make sure modifications have been made correctly.

C. Perform all corrections necessary for issuance of warranty.

3.08 CLEANING

A. Clean all contaminants generated by roofing work from building and surrounding areas, including bitumen, adhesives, sealants, and coatings.

B. Repair or replace building components and finished surfaces damaged or defaced due to the work of this section; comply with recommendations of manufacturers of components and surfaces.

C. Roofing Contractor shall walk the entire roof prior to the Owner and Architect substantial completion punchlist review to remove all debris, mainly sharp objects such as nails, screws and sharp piece of metal flashing!!!!!!!

D. Contractor shall remove leftover materials, trash, debris, equipment from project site and surrounding areas. Sweep all roofs clean of roof debris, dirt, sharp objects, nails, screws and flashing trimmings. Architect will not release final payment until roof is sweep clean of all debris and unused materials!!!!!!!!!!!!!!!!!!!

3.09 PROTECTION

A. Where construction traffic must continue over finished roof membrane, provide durable protection and replace or repair damaged roofing to original condition.

3.10 MANUFACTURERS STANDARD DETAILS ATTACHED AT END OF THIS SPECIFICATION SECTION 07500

A. SERIES – 500B.1 Details 1-11 for 60 mil TPO Vented Membrane Roof Details. Comply with these details for air seal requirements. If they differ from the Architects Specification or Drawings please contact the Architect 7 days prior to bidding for clarification so that any questions can be issued in an addendum. If not brought to Architects attention in time to issue a clarification the Architect shall determine what procedure to follow and contractor shall install as directed by Architect as not additional cost to owner.

END OF SECTION 07500
Direct Termination (Thru Roof) with Insulation and Cover Board (500B.1 Parapet)

Application Purpose: To provide perimeter and penetration air seals into fastenable deck with added insulation using thermoplastic membrane. Typically used on fastenable decks.
Direct Termination (Thru Roof) with Insulation and Cover Board (500B.2 Thru Wall Scupper)

**Application Purpose:** To provide perimeter and penetration air seals into fastenable deck with added insulation using thermoplastic membrane. Typically used on fastenable decks.

**NOTE:**
MEMBRANE TO RUN UNDER SCUPPER AS SHOWN, THIS CONDITION OCCURS @ SCUPPER ONLY

REINFORCED THERMOPLASTIC WALL FLASHING

UNREINFORCED THERMOPLASTIC FLASHING

AIR SEAL TAPE

REINFORCED THERMOPLASTIC MEMBRANE
WEIGHTED COVER BOARD (SEE NOTES FOR SECUREMENT OPTIONS)

AIR SEAL TAPE

$\frac{1}{16}$ HEAT WELD, TYP.

UNREINFORCED THERMOPLASTIC FLASHING

EXISTING WOOD BLOCKING FASTENED PER ANSI SPIRI

THERMOPLASTIC CLAD METAL SCUPPER

NEW INSULATION
Direct Termination (Thru Roof) with Insulation and Cover Board (500B.3 Over Flow Scupper)

Application Purpose: To provide perimeter and penetration air seals into fastenable deck with added insulation using thermoplastic membrane. Typically used on fastenable decks.
Direct Termination (Thru Roof) with Insulation and Cover Board (500B.4 Gravel Stop)

Application Purpose: To provide perimeter and penetration air seals into fastenable deck with added insulation using thermoplastic membrane. Typically used on fastenable decks.
Direct Termination (Thru Roof) with Insulation and Cover Board (500B.5 Drip Edge)

Application Purpose: To provide perimeter and penetration air seals into fastenable deck with added insulation using thermoplastic membrane. Typically used on fastenable decks.
Direct Termination (Thru Roof) with Insulation and Cover Board (500B.6 Gutter Edge)

Application Purpose: To provide perimeter and penetration air seals into fastenable deck with added insulation using thermoplastic membrane.

Typically used on fastenable decks.
Direct Termination (Thru Roof) with Insulation and Cover Board (500B.7 Expansion Joint at Wall)

**Application Purpose:** To provide perimeter and penetration air seals into fastenable deck with added insulation using thermoplastic membrane. Typically used on fastenable decks.
Direct Termination (Thru Roof) with Insulation and Cover Board (500B.8 Expansion Joint at Deck)
Application Purpose: To provide perimeter and penetration air seals into fastenable deck with added insulation using thermoplastic membrane.
Typically used on fastenable decks.

- TERM BAR & #15 SCREW
- AIR SEAL TAPE (AIR SEAL TAPE BETWEEN EACH LAYER OF INSULATION & COVER BOARD)
- BONDING ADHESIVE
- 1½ HEAT WELD
- REINFORCED THERMOPLASTIC MEMBRANE
- WEIGHTED COVER BOARD (SEE NOTES FOR SECUREMENT OPTIONS)
- REINFORCED THERMOPLASTIC FLASHING
- 2 AIR SEAL ROPE
- NEW INSULATION
- 2" TYP.
- WOOD BLOCKING FASTENED PER ANSI SPR1
Direct Termination (Thru Roof) with Insulation and Cover Board (500B.9 Hot Stack)

Application Purpose: To provide perimeter and penetration air seals into fastenable deck with added insulation using thermoplastic membrane. Typically used on fastenable decks.
Direct Termination (Thru Roof) with Insulation and Cover Board (500B.10 Cold Stack or Pipe)

Application Purpose: To provide perimeter and penetration air seals into fastenable deck with added insulation using thermoplastic membrane.

Typically used on fastenable decks.
Direct Termination (Thru Roof) with Insulation and Cover Board (500B.11 Drain)

Application Purpose: To provide perimeter and penetration air seals into fastenable deck with added insulation using thermoplastic membrane. Typically used on fastenable decks.

NEW INSULATION
REINFORCED THERMOPLASTIC MEMBRANE
WEIGHTED COVER BOARD (SEE NOTES FOR SECUREMENT OPTIONS)
REINFORCED THERMOPLASTIC MEMBRANE TARGET PATCH
TERM BAR & #15 SCREW
1" HEAT WELD
AIR SEAL TAPE (AIR SEAL TAPE BETWEEN EACH LAYER OF INSULATION & COVER BOARD)
2" AIR SEAL ROPE
WATERBLOCK
BONDING ADHESIVE
PART 1  GENERAL

1.01  SECTION INCLUDES

A.  Project Name: Des Moines Public Schools, McCombs Middle School - Re-Roof Project.

B.  Furnish and install a complete Fully Adhered thermoplastic polyolefin (TPO) sheet membrane roofing system, under Alternate Bid #1 in Lieu of Vented Roof including:
   1.  Roofing manufacturer's requirements for the specified warranty.
   2.  Existing Roof Types: There are 2 different basic existing roof systems, which are as follows:
       a.  Existing Roof Type A Area (all Roofs Except Existing Gymnasium Roof): is constructed of fully adhered Modified Bitumen roof membrane adhered to mechanically attached 3/4” thick perlite board over rigid tapered (2 3/4" to 5” thick) polyisocyanurate insulation, 1 1/2” (Concealed Non-Acoustic) steel roof decking on structure steel framing.
       b.  Existing Roof Type B Area (Existing Gymnasium Roof): is constructed of fully adhered Modified Bitumen roof membrane adhered to mechanically attached 3/4” thick perlite board over rigid tapered (2 3/4” to 5” thick) polyisocyanurate insulation, 1 1/2” (Exposed Acoustic) steel roof decking in Gymnasium on structure steel framing. Note: Existing Gymnasium Roof has no wet roof system to be removed.

3.  Removing existing roof items and Prepping Existing Roofs A & B to receive new roofs.
   a.  Roof Type A: Remove and dispose of all wet roof perlite board and roof insulation and modified roof membrane above wet perlite and insulation in areas to be re-roofed to existing 1 ½” steel roof deck and dispose of legally on site. The contract will be adjusted up or down depending on the amount of wet insulation removed and replaced. Remove only as much roof membrane that can be reroofed and made watertight the same day. (The is no wet roof insulation on Roof B.)
   b.  Roof Types A & B: Sweep vacuum and remove all loose white roofing granule coating on top surface of existing modified bitumen roof surface and legally dispose of off-site prior to installing new roof system.
   c.  Roof Type A: Remove all capped existing abandon skylight and abandon mechanical curbs and designated abandon mechanical curb rails to existing steel decking and then infill with new layers of flat matching insulation thickness of polyisocyanurate insulation to match height of top of existing wood modified bitumen roof membrane and screw fasten in place.
   d.  Roof Type A: Removal and disposal of existing roof counter flashings, thru-wall scupper and miscellaneous fascia flashing as shown on drawings. Salvage all existing downspouts around entire building. Temporarily support all downspouts until new collector head is installed. Maintain all roof perimeter fascia / gravel stop flashings as shown on drawings.

4.  New Roof System for Roofs Type A:
   a.  Complete replacing any wet insulation area and complete roof demolition and prepping prior to beginning new roof installation for the area of the roof that can be covered each day and sealed watertight.
   b.  Roof A: Mechanically screw fasten new 2” thick paper faced polyisocyanurate roof insulation securely into existing tapered modified bitumen roof system approximately 4” +/- thick into existing 1 ½” thick steel roof decking, then adhere 1/2” thick gypsum protection board (Dens Deck Prime or Equal) with low
rise foam adhesive, and fully adhere 60 mil TPO Roof Membrane with SBR rubber adhesive as recommended by roof manufacturer as required a 90 mph warranty per roof manufacturer’s requirements.

c. Roof B: Fully adhere new 2” thick paper faced polyisocyanurate insulation securely to existing modified bitumen roof surface with low rise foam adhesive since this is the existing gymnasium roof with exposed acoustic steel roof deck, and there can be no exposed steel fasteners that penetrated gymnasium roof deck, then adhered 1/2” thick gypsum protection board (Dens Deck Prime or Equal) with low rise foam adhesive, and fully adhere 60 mil TPO Roof Membrane with SBR rubber adhesive as recommended by roof manufacturer as required a 90 mph warranty per roof manufacturer’s requirements.

5. Install walkway pads around at top and bottom of two roof ladders and two doors openings leading on to existing roof.

6. Wood Roof Edge Blocking: Provide all wood M.D.O sheathing and 2x wood blocking to fasten new prefinished metal fascia / gravel stop flashing and raise existing wood curbs as shown in drawings. Refer to Section 06100 Rough Carpentry.

7. Raise Existing Low Mechanical Curbs: Install 2x6 wood blocking on edge on top of existing mechanical curb as required as to raise the existing mechanical curbs as shown on drawings. Refer to Section 06100 Rough Carpentry.

8. Installation of Prefinished Parapet, Metal Fascia / Gravel Stop Flashing and Thru Wall Scuppers with continuous galvanized steel clip and Prefinished Wall Counter Flashing and any misc. wall flashing as shown on drawings. Refer to Section 07600 Sheet Metal Flashing.

9. Removal and reinstallation of existing mechanical / electrical powered roof vent units to raise roof curb. Reconnect existing electrical connections for proper operation of power roof ventilators as required for proper operation.

10. Clean and wire brush existing roof drain bee hives and prime and paint and reinstall and seal watertight to the new roof membrane.

11. Provide and install all other roofing-related items specified or indicated on the drawings or otherwise necessary to provide a complete weatherproof roofing system at no additional cost to owner.

C. Disposal of removed roofing debris and construction waste is the responsibility of Contractor. Perform disposal in manner complying with all applicable federal, state, and local regulations.

D. The Owner has tested the existing roofing insulation and modified bitumen granular roof membrane by an independent testing company, and the existing roof does not have any materials that contain asbestos. No abatement procedures are required for this project. If during the removal of any existing roofing materials and / or installation of any new materials, the contractor suspects a material may contain asbestos it shall be report to the owner for further testing.

E. Infrared Roof Scan: The Architect completed an Infrared Roof Scan June 18, 2021 of the Existing Roof and have identified some of the damp and wet areas of roof insulation that the scan appears to have identified. If any additional insulation is found that is wet or damp, notify the Owner and Architect immediately to determine if the wet insulation needs to be replaced. The contract price will be adjusted up of down per the unit price on bid form at the end of the project base on how much existing wet insulation was required to be removed.

F. Commencement of work by the Contractor shall constitute acknowledgement by the Contractor that this specification can be satisfactorily executed, under the project conditions and with all necessary prerequisites for warranty acceptance by roofing membrane manufacturer. No modification of the Contract Sum will be made for failure to adequately examine the Contract Documents or the project conditions.
1.02 RELATED SECTIONS

A. Divisions 0 & 1: Administrative Requirements related roof installation.

B. Section 06100 Rough Carpentry: Coordinate installation of new wood blocking and plywood sheathing.

C. Section 07600 Sheet Metal Flashing: Coordinate installation of new sheet metal flashing as shown on the drawings.

D. Section 07900 Sealant: Coordinate installation of required Sealant not part of the roofing system sealant. Mainly the sealant between counter flashing and existing wall surfaces and seam cover flashing.

1.03 REFERENCES

A. Referenced Standards: These standards form part of this specification only to the extent they are referenced as specification requirements.


G. ASTM D1621 – Compressive Properties of Rigid Cellular Plastics.


K. UL1256 – Fire Test of Roof Deck Construction.


1.04 SUBMITTALS

A. Product Data:
   1. Provide membrane manufacturer's printed data sufficient to show that all components of roofing system, including insulation and fasteners, comply with the specified requirements and with the membrane manufacturer's requirements and recommendations for the system type specified; include at least the following:
b. Technical data sheet for each insulation type.
c. Technical data sheet for each protection cover board type.
d. Technical data information and profile drawings for sheet metal flashing.
f. Technical data information for all types of insulation, blocking and flashing fasteners.
g. Technical data sheet for roof insulation washers and screw fasteners.

2. Where UL or FM requirements are specified, provide documentation that shows that the roofing system to be installed is UL-Classified or FM-approved, as applicable; include data itemizing the components of the classified or approved system.

B. Shop Drawings: Provide:
   1. Roof membrane seaming plan.
   2. Flashing profiles, details and layout and color selection sheets.
   3. Tapered insulation plan and details.
   4. Roof Termination / Flashing Details of all different conditions.

C. Installer Qualifications: Letter from manufacturer attesting that the roofing installer meets the specified qualifications.

D. Pre-Installation Notice: Copy to show that manufacturer's required Pre Installation Notice (PIN) has been accepted and approved by the manufacturer.

E. Submit a copy of the Fifteen (15) year 90 MPH Material Warranty with 1 Year Roofing Contractors Watertight Warranty meeting all specified roof warranty requirements.

1.05 QUALITY ASSURANCE

A. Applicator Qualifications: Roofing installer shall have the following:
   1. Current approval, license, or authorization as applicator by the roof manufacturer.
   2. Capability to provide insurance, labor, payment and performance bond to building owner.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Store material in weather protected environment clear of ground and moisture. Protect foam insulation board from direct sunlight exposure.

B. All. Products shall be delivered to the job site in the original unopened containers or wrappings bearing all seals and approvals.

C. Handle all materials to prevent damage. Place all materials on pallets and fully protect from moisture.

D. Membrane rolls shall be stored lying down on pallets and fully protected from the weather with clean canvas tarpaulins. Unvented polyurethane tarpaulins are not accepted due to the accumulations of moisture beneath the tarpaulins in certain weather conditions that may contaminate seams.

E. As a general rule all adhesives shall be stored at temperatures between 40° F. and 80° F. Read instructions on adhesive canister for specific storage instructions. Keep adhesive containers out of direct sun.
F. All flammable materials shall be stored in a cool, dry area away from sparks and open flames. Follow precautions outlined on containers or supplied by material manufacturer / supplier.

G. All materials damaged by Applicator are to be removed from the job site and replaced at no additional cost to the Owner.

H. Contractor shall provide all lift and crane operations to lift materials upon existing roofs. Contractor shall distribute materials around the roof so as not to stress or permanently damage the existing roof structures. Should roof structure become damaged by roof contractor, they shall be required to replace the existing damaged structure to satisfactory methods as approved by independent structural engineer, paid for by roofing contractor.

I. Contractor shall repair any newly crack pavement and repair any damage lawn with new sod to like new condition should these surfaces be damaged by the contractor.

1.07 ENVIRONMENTAL & JOB SITE REQUIREMENTS

A. Do not apply membrane during inclement, adverse weather conditions or when air temperature is below 40° F. Only install after Roof Manufacturer has been notified as installation time and system integrity may be affected.

B. Only install as much of the new roofing as can be made weathertight each day, including all flashing and detail work, shall be installed. All seams shall be cleaned and adhered watertight before leaving the job site that day. When removing existing designated wet roof system to be removed and mechanical equipment, permanently seal all openings watertight by the end of each workday.

C. All work shall be scheduled and executed without exposing the interior building areas to the effects of inclement weather. The existing building and its contents shall be protected against all risks by contractor’s project insurance. If any interior materials or furnishing are damaged do to roofing contractor’s inability to keep water out of the building, the roofing contractor’s insurance company shall reimburse the Owner to repair or replace all interior materials and furnishings with no insurance deductible. If the roofing contractor’s insurance company does not pay all of the Owner’s expenses to restore the building interior to the original condition, the Owner will impose a De-Duct Change Order for the difference in cost.

D. All new insulation, protection board, membrane and flashing materials being installed shall be dry. Should surface moisture occur, the Roofing Contractor shall provide the necessary equipment to dry the surface prior to application.

E. All new and temporary construction, including equipment and accessories, shall be secured in such a manner as to preclude wind blow-off and subsequently causing roof or equipment damage.

F. Uninterrupted water-stops shall be installed at the end of each day’s work. Waterstops shall not emit dangerous or unsafe fumes and shall not remain in contractor’s finished roof system as the installation progresses. Contaminated membrane shall be replaced at no cost to Owner.

G. Arrange work sequence to avoid use of newly constructed roofing as a walking surface or for equipment movement and storage. Where such access is absolutely required, the Roofing Contractor shall provide all necessary protection and barriers to segregate the work area and to prevent damage to adjacent areas. A substantial protection layer consisting of plywood.
over insulation board shall be provided for all new and existing roof areas that receive rooftop traffic during construction.

H. Prior to application of all new roofing materials, all dirt, debris and dust shall be removed from surfaces either by vacuuming, sweeping, blowing with compressed air and/or similar methods.

I. The Roofing Contractor shall follow all safety regulations as required by OSHA and any other applicable authority have jurisdiction to prevent any injuries to workers and building users.

J. The Owner has had a Testing Agency sampled and tested the existing roof materials and flashing, which tested negative for asbestos containing materials. Should Roofing Contractor suspect other and materials are hazardous materials they shall notify the Owner immediately and the Owner will have those materials tested, and if positive for asbestos material will have these items abated from the project before work proceeds by roofing contractor.

K. All new waste material (i.e., scrap roof membrane, flashings, empty cans of adhesive, unused insulation and protection board) shall be removed from the site by Applicator and properly transported to a legal dumping area or recycling center authorized to receive such materials.

L. The Roofing Contractor shall take precautions when storing and/or applying new roofing materials and/or equipment does not overload the existing roof deck or building structure.

M. Flammable adhesives shall not be stored and not be used in the vicinity of open flames, sparks and excessive heat.

N. The Roofing Contractor shall verify that all roof drain lines are functioning correctly (not clogged or blocked) after completing work on the roof. Roof Contractor shall report any such blockage in writing to Architect and Owner. Should corrective action be required to unclog any existing roof drain the Owner shall employ a sewer-cleaning contractor to open the roof drains prior to installation of the new roof system.

O. Site cleanup, including exterior building staging areas that have been affected by construction, shall be completed to the Owner and Architect’s satisfaction.

P. All landscaped areas damaged by construction activities shall be repaired at no cost to the Owner.

Q. The roofing contractor shall conduct fastener pullout tests in accordance with Roof Membrane Manufacturers requirements in roof membrane terminations at perimeter of all and in field of roof deck systems prior to submitting shop drawings.

R. Precautions shall be taken when using adhesives at or near rooftop vents or air intakes to prevent adhesive odors from entering the building. Coordinate the operation of vents and air intakes in such a manner as to avoid the intake of adhesive odor while ventilating the building. Keeps lids on unused cans at all times.

S. Protective wear shall be worn when using solvents or adhesives or as required by the job conditions.
1.08 WARRANTY & GUARANTEES

A. Fully Adhered 60 Mil TPO Roof Warranty: Provide Fifteen (15) Year Non-Prorated Manufacturer’s Watertight Material Warranty for all Material costs to cover failure to prevent penetration of water below roof system. This warranty shall carry Roof Manufacturer’s 90 Mile Per Hour Wind Rating @ 30 feet above the ground. This warranty does not cover acts of God except for winds to 90 Mile Per Hour @ 30 feet above the ground. This warranty shall begin at time of Substantial Completion as determined by the Owner & Architect. Architect will require Roof Contractor shall install roofing sealant on both edges of seam tape flashing even if not required for manufacturers warranty.

B. Provide One (1) Year Non-Prorated Roofing Applicator Watertight Workmanship Warranty for Labor and Material Cost guaranteeing that in the event any work relating to the roofing, flashing, or metal is found to be within the Applicator warranty term, is leaking or in defect otherwise not in accordance with the Contract Documents, the Roof Applicator shall repair those Conditions at no additional cost to the Owner in a timely manner so as not allowing building interior furnishing and finishes to be damaged. Roofing Applicator Workmanship Warranty shall be directly with the Owner. This warranty does not cover acts of God accept for winds to 90 Mile Per Hour @ high roof level of this project. This warranty shall begin at time of Substantial Completion as determined by the Architect.

PART 2 PRODUCTS

2.01 ACCEPTABLE TPO ROOF MEMBRANE MANUFACTURERS

A. Acceptable Manufacturer - Roofing System as provided by the following manufacturer’s
   1. Roofing systems manufactured by the companies listed below are acceptable provided they meet or exceed this specification with materials, installation methods and all required warranty requirements:
      1) Carlisle - Sure-Weld, 60 mil reinforced TPO
      2) Firestone Building Products Co. – UltraPly, 60 mil reinforced TPO
      3) GAF Everguard 60 mil reinforced TPO
      4) GenFlex EX TPO – 60 mil white roof membrane.
      5) Versico Inc., Versiweld .60 mil reinforced TPO

2. Roofing systems manufactured by others are acceptable provided the roofing system meets or exceeds this specification with materials, installation methods and all required warranty requirements. Roof Manufacturer’s desiring to bid a non-list manufacturer must submit approval request to Architect 7 days prior to the bid date to allow Architect to review and issue an addendum if the roof system meets this specification.

3. All Roof Manufacturer shall meet the following requirements.
   a. ISO 9002 certified.
   b. Able to provide polyisocyanurate insulation that is produced in own facilities.
B. Membrane: 60 mil thick reinforced TPO unaged properties, conforming to the following criteria:

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>TEST</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Membrane Thickness</td>
<td>ANSI/ASTM D412</td>
<td>60 mil min. +/- 2 mils</td>
</tr>
<tr>
<td>Thickness over Skim</td>
<td>--</td>
<td>0.024” +/- 2 mils</td>
</tr>
<tr>
<td>Breaking Strength</td>
<td>ASTM D 4637</td>
<td>350 lbf</td>
</tr>
<tr>
<td>Tearing Strength</td>
<td>ANSI/ASTM D 751</td>
<td>86 lbf</td>
</tr>
<tr>
<td>Elongation at Reinf. Break</td>
<td>ANSI/ASTM D751</td>
<td>30% min.</td>
</tr>
<tr>
<td>Brittleness Point</td>
<td>ASTM D 2137</td>
<td>-50 degrees</td>
</tr>
<tr>
<td>Linear Dimension Change</td>
<td>ASTM D 1204</td>
<td>+/- 15%</td>
</tr>
<tr>
<td>Change</td>
<td>(6 Hours @ 70 Degrees)</td>
<td>--</td>
</tr>
<tr>
<td>Ozone Resistance</td>
<td>ASTM D 1149</td>
<td>Pass (no cracks)</td>
</tr>
<tr>
<td>Factory Seam Strength</td>
<td>ASTM D 751</td>
<td>265 lbf</td>
</tr>
<tr>
<td>Puncture Resistance</td>
<td>ASTM FTM 101 C – 2031</td>
<td>265 lbf</td>
</tr>
<tr>
<td>Solar Reflectance</td>
<td>ASTM C 1549</td>
<td>.79</td>
</tr>
<tr>
<td>Solar Emittance</td>
<td>ASTM E 408</td>
<td>.92</td>
</tr>
<tr>
<td>Solar Reflective Index</td>
<td>ASTM 1980</td>
<td>95</td>
</tr>
</tbody>
</table>

2.02 TPO ROOF MEMBRANE MATERIALS:

A. Membrane: 60 mil Color: **GRAY**, thick reinforced TPO, conforming to the following criteria:

B. Membrane: Flexible, heat weldable sheet composed of thermoplastic polyolefin polymer and ethylene propylene rubber; complying with ASTM D 6878, with polyester weft scrim inserted reinforcement and the following additional characteristics:
   1. Thickness: 0.060 inch plus/minus 2% percent, with coating thickness over reinforcement of 0.024 inch plus/minus 2 percent.
   2. Sheet Width: Provide the widest available sheets to minimize field seaming.
   4. Solar Reflectance: 0.79, minimum, when tested in accordance with ASTM C 1549.

C. Membrane Termination Bar Fasteners: Type and size as required by roof membrane manufacturer for roofing system and warranty to be provided; use only fasteners furnished by roof membrane manufacturer. All termination bars shall be aluminum. Membrane Manufacturer approved 6” wide edge reinforcing strips are acceptable as long as they meet manufacturer’s installation requirements.

D. Curb and Parapet Membrane Flashing: Same material as roof membrane, with encapsulated edge, which eliminates need for seam sealing the flashing-to-roof splice.

E. Formable Flashing: Reinforced, flexible, heat weldable sheet, composed of thermoplastic polyolefin polymer.

F. Membrane Seam Tape Flashing: 5-1/2” or 9 1/2” inch nominal wide TPO membrane laminated to cured rubber polymer seaming tape, overall thickness 0.065 inch nominal.

G. Membrane Bonding Adhesive: Neoprene and SBR rubber blend, formulated for compatibility with the membrane other substrate materials, including masonry, wood, and insulation facings.

H. Pourable Sealer: Two-part polyurethane, two-color for reliable mixing.

I. Reinforcing Seam Plates: Steel with barbs and galvalume coating; corrosion-resistance complying with FM 4470 for quick seam edge termination fastening.
J. Termination Bars: Aluminum bars with integral caulk ledge; 1.3 inches wide by 0.10 inch thick as approved by manufacturer.

K. Cut Edge Sealant: Synthetic rubber-based, for use where membrane reinforcement is exposed.

L. General Purpose Sealant: Polyurethane, white general purpose sealant for sealing membrane to dissimilar materials.

M. Lap Sealant: Manufacturer’s recommended lap sealant of both edges of all manufacturer’s seam tap.

N. Coated Metal Flashing and Edgings: Galvanized steel with roofing manufacturer's bonded TPO coating. Use at all thru-wall and overflow scuppers and difficult areas to seal membrane to unique shaped area and at dissimilar materials. Use as required at all new collector heads.

O. Pre-Molded Flashing Accessories: Unreinforced TPO membrane pre-molded inside and outside corners to suit a variety of flashing details, including pipe boots, inside corners, outside corners, etc.

P. Water Block Seal: Butyl rubber sealant for use between two surfaces, not exposed.

Q. Roof Walkway Pads: Non-reinforced TPO walkway pads, 0.130 inch by 30 inches by 50 feet around one existing roof hatch opening and at top and bottom of all roof ladders and large mechanical HVAC units as shown on Roof Plan Drawings.

R. TPO Reinforce Flashing: 60 mil thick TPO Reinforced; tensile strength of 1200 psi; elasticity of 50 percent with full recovery without set: Gray color; manufactured by membrane manufacturer.

2.03 TPO ROOF MEMBRANE ACCESSORIES FURNISHED BY ROOF MANUFACTURER

A. Materials and accessories provided TPO roof manufacturer.
   1. Membrane Flashing and Adhesives.
   2. Sealant Pocket filler shall be non-shrink grout topped with Pourable Sealant.
   5. Screw Fasteners for compression boards and wood curbs – Firestone All–Purpose Fasteners – Contract to verify required screw length to penetrate steel deck 1” min. 1 ½” maximum with 13 treads per inch and .235” tread size or approved equal.
   6. Termination Bar & Compression Boards Fasteners: Firestone Heavy Duty Screw Fasteners, #15 Screws or approved equal and acceptable with roof membrane manufacturer.
   7. Washer Plates as need for Quick Seam RFP Fastener: 2” diameter galvalume W56RAC419 or approved equal.

B. Membrane Termination Fasteners: Type and size as required by roof membrane manufacturer for roofing system and warranty to be provided; Firestone (or approved equal) fasteners, plates, termination bar and fasteners as specified above and / or approved by Roof Manufacturer.

C. Curb and Parapet Membrane Flashing: Same material as membrane and adhered with seam adhesive and sealed with lap slicing adhesive as require on drawings.

D. Seam Tape Cover Strip: 5 1/2” or 9 1/2” inch nominal width at all gravel stop flashing with lap sealant on both edges of cover strip.
E. Bonding Adhesive to adhere membrane flashing to wood sheathing and blocking at roof edges: Standard Solvent Based Bonding Adhesive formulated for compatibility with the membrane other substrate materials, including masonry, wood, and insulation facings. Firestone UltraPly Bonding Adhesive W56-358-7052 (or approved equal).

F. Pourable Sealer: Two-part polyurethane, two-color for reliable mixing Pourable Sealer for pitch pockets or one part, moisture curing elastomeric polyether sealant.

G. Cut Edge Sealant / Lap Sealant: As approved by Roof Manufacturer.

H. Molded Flashing Accessories: Reinforced TPO membrane pre-molded to suit a variety of flashing details, including pipe boots, inside corners, outside corners, etc.

I. Water Block Seal: Butyl rubber sealant for use between two surfaces not exposed.

2.04 GYPSUM PROTECTION BOARD

A. Gypsum-Based Protection Board: Non-combustible, water resistant gypsum core with embedded glass mat facers, complying with ASTM C 1177/C 1177M, and with the following additional characteristics:
   1. Size: 48 inches by 48 inches or 96 inches, nominal.
   2. Thickness: 1/2”
   3. Acceptable Product:
      a. United States Gypsum Corporation: Securock, Gypsum-Fiber Roof Board
      b. Georgia-Pacific Dens Deck PRIME.

B. Attachment: Fully Adhered Protection Board on all Roof Areas covering all new Rigid Paper Faced Polyisocyanurate Insulation Board and adhere as listing in Part 3 of this specification.

2.05 PROTECTION BOARD ADHESIVE ATTACHMENT

A. Polyisocyanurate Board Insulation: Fastening of new 1/2” thick glass faced high density polyisocyanurate insulation protection board shall use Dow-OlyBond Classic dual component, reaction cure polyurethane adhesive which can be applied with both traditional foam equipment and the Garlock Pacer Setter 1000. Dow-OlyBond Classic rises 1/8” to 1/4” above the substrate and board stock is placed into the adhesive. The chemical cure takes place in approximately 4-8 minutes after application, depending on temperature and weather conditions. It is compatible with felt faced polyisocyanurate insulation board and gypsum protection board, which shall be bonded together. Weight board into adhesive to provide proper adherence.
   a. Other Approved Adhesive:
      1. Firestone, I.S.O. Twin Pack Adhesive.
      2. Other adhesives approved by Architect prior to bidding.

2.06 ROOF INSULATION

A. Polyisocyanurate Board Insulation: Closed cell polyisocyanurate foam with black glass reinforced paper mat laminated to both faces, complying with ASTM C 1289 Type I Class 1, with the following additional characteristics:
   1. Roofs A & B: Thickness: 2” actual thickness.
   2. Size: 48 inches by 48 inches maximum size.
   3. Compressive Strength: 20 psi when tested in accordance with ASTM C 1289.

B. Insulation Fasteners: Provide painted steel screw fasteners and galvanized steel insulation plate washer as required by roof membrane manufacturer.
C. Screws fasteners must penetrate a minimum of 1-inch and a maximum of 1 1/2” from the top surface of steel or wood roof decks. Confirm washer size with roof manufacturer. Do not penetrate any existing conduits.

D. Replacement Insulation Fasteners at Wet Insulation Replacement: Screw fastener new insulation to existing metal deck with new Firestone or equivalent – All Purpose Screw Fastener and 3” diameter washer plates galvalume W56RAC419 or approved equal.

2.07 ROOF DRAINS
A. Remove existing roof drain cast iron clapping ring and wire brush clamp ring and drain body clean without damaging roof seal. Prime and paint existing cast iron roof drain clapping ring and seal new roof membrane watertight to existing roof drain casting per manufactures detail.

B. Wire brush existing roof drain strainer / grate at all existing roof drains. Prime and paint and reinstall all existing roof drain strainer / grate. If they are missing provide new cast iron strainer matching roof drain body. Currently there are 2 grate / strainers missing.

2.08 EXISTING ROOF VENT WITH NEW PIPE EXTENSIONS.
A. Roof Vent Extensions: Extend existing designated roof vents with matching diameter Schedule 40 PVC piping minimum of 1’-6” to 1’-8” maximum. Refer to Roof plan for new raise roof vents. Seal so that all vents are water tight and new joint between new and old pipe.

PART 3 EXECUTION

3.01 EXAMINATION
A. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.

B. Report in writing to Architect prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected.

C. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the Owner.

3.02 INSPECTION
A. Verify deck is clean and smooth, free of depression, waves, or projections.

B. Verify roof openings and penetrating elements through roof are solidly set.

C. Do not apply roof materials to damp, frozen, dirty, dusty, or deck surfaces unacceptable to manufacturer.

D. Verify deck surfaces are dry and free for snow or ice.

E. Verify all wood roof curbs and roof edge blocking is properly anchored and secured to structure before beginning installation of any new roof membrane.
3.03 GENERAL INFORMATION

A. Install roof membrane, cover board, insulation, flashings, and accessories in accordance with roofing manufacturer's published instructions and recommendations for the specified roofing system. Where manufacturer provides no instructions or recommendations, follow details on drawings or follow good roofing practices and industry standards.

B. Comply with federal, state, and local regulations. If manufacturer’s material installation instructions conflict with architects drawings and specifications, contractor shall bring these contradictions to the architect’s knowledge at lease 5 days prior to bidding so an addendum can be issued. If not brought to the architect’s knowledge a change in contract price may not be issued for these items.

C. Obtain all relevant Instructions and maintain copies at project site for duration of installation period.

D. Do not start work until Notice of Award (NOA) forms has been submitted to manufacturer as notification that this project requires a manufacturer's warranty.

E. Perform work using competent and properly equipped personnel.

F. Provide temporary enclosures, which ensure that moisture does not damage any incomplete sections of the new roofing system, which is the responsibility of the applicator. Completion of flashings, terminations, and temporary closures shall be completed as required to provide a watertight condition.

3.04 PREPPING & REPAIRING EXISTING ROOF TO BE RE-ROOFED

A. Remove Abandoned Curbs: Remove and dispose of designated abandoned capped skylights and abandon capped mechanical curbs and rails. Refer to Roof Plan for quantity and locations. Infill existing holes in roof deck with new 20 gauge 1 ½” steel roof deck to match existing deck profile. Extend steel decking minimum of 6” min. beyond opening in all directions and securely screw fasten to existing steel roof deck at 6” max. o.c. around 4 side of deck or use Z Clip as detailed on drawings if existing deck profile cannot be matched. Then infill existing void with matching insulation thickness with 2 layers of polyisocyanurate insulation and screw fasten board to existing plywood sheathing level with existing modified bitumen membrane.

B. Wet Roof Replacement: Cut out and replace all wet perlite board, wet roof insulation and modified bitumen roof above all wet insulation down to existing steel roof and infill with matching paper faced tapered polyisocyanurate roof insulation thickness (4” +/- thick) with 2 layers of matching thickness and mechanically attach to existing steel roof deck as shown on drawings.

C. Blow or sweep all loose particles from top of existing modified bitumen roof membrane prior to installing new roof insulation.

3.05 INSTALLATION OF NEW ROOF TYPE ‘A’ (NEW ROOF OVER EXISTING STEEL ROOF MECHANICALLY ATTACHED ON ALL ROOFS BUT THE GYMNASIUM ROOF.)

A. New Roof Type ‘A’ System:

1. Complete Roof Demolition and Prepping prior to beginning new roof installation, which includes removing all capped curbs and wet insulation with new roof deck and new insulation.
2. Insulation: Mechanically screw fasten all 2” thick paper faced polyisocyanurate roof insulation securely into existing 1 ½” thick steel roof decking as required by roof manufacturer for a 90 mph warranty as shown on drawings. All screw fasteners shall penetrate existing steel roof deck, 1” min. and 1 ½” max to achieve 180 lbs of pullout strength.

3. Fastener locations and quantities:
   1. 4’ x 4’ Roof Corners: 16 screw fasteners / 1 per square foot.
   2. First 4’ along roof edges Roof Edges: 16 screw fasteners in a 4’x 8’ rigid insulation board (1 per every 2 square feet.)
   3. Roof Field Area: minimum 8 screw fasteners per 4’ x 8’ insulation board. (1 per every 4 square feet.)
   4. These are the minimum mechanically fastened insulation requirements. Verify with roof membrane manufacturer’s insulation fastening for 90 mph roof warranty. If they require more fasteners, contractor shall install the additional manufacturer required fasteners at no additional cost.

B. See Paragraph 3.07 & 3.08 for New Cover Board and Membrane Roof Insulation

3.06 INSTALLATION OF NEW RIGID INSULATION NEW ROOF TYPE ‘B’ (NEW ROOF OVER EXISTING EXPOSED ACOUSTIC STEEL GYMNASIUM ROOF DECK.)

A. New Roof Type ‘B’ System:
   1. Complete Roof Demolition and Prepping prior to beginning new roof installation, which includes removing all capped curbs and wet insulation with new roof deck and new insulation.
   2. Insulation: Adhere 2” rigid paper faced polyisocyanurate insulation with low rise foam adhesive for Roof Type B since Roof B is the Gymnasium Roof with exposed acoustic steel roof deck and no fasteners can penetrate the Gymnasium Roof are to have the rigid insulation adhered to the existing modified bitumen roof deck securely adhere to existing roof as required my roof manufacturer to provide a 90 mph warranty. Weight insulation into adhesive as required for proper bonding. Install insulation protection board as required in accordance with roof membrane manufacturer’s instructions before installing roof membrane but a minimum of spacing listed below:
      1. Roof Corners: Continuous rows of adhesive at 4” o.c. minimum.
      2. Roof Edges: Continuous rows of adhesive at 6” o.c. minimum.
      3. Roof Field Area: Continuous rows of adhesive at 12” o.c. minimum.

3.07 INSTALLATION OF PROTECTION BOARD ON ROOF TYPE B.

A. Protection Board: Fully adhered new 1/2” thick gypsum protection board (Securock or Dens Deck Prime) over new paper faced polyisocyanurate rigid insulation with joints fit tight using low rise foam adhesive.

B. Adhere one layer of 1/2” thick high density polyisocyanurate insulation board with low-rise adhesive as required by manufacturer over felt faced polyisocyanurate insulation board. Weight insulation into adhesive as required for proper bonding. Install insulation protection board as required in accordance with roof membrane manufacturer’s instructions before installing roof membrane but a minimum of spacing listed below:
1. Roof Corners: Continuous rows of adhesive at 4” o.c. minimum for each 4’ x 4’ corner section of roof.
2. Roof Edges: Continuous rows of adhesive at 6” o.c. minimum for first 4’-0” inside existing parapet walls or roof edge.
3. Roof Field Area: Continuous rows of adhesive at 12” o.c. minimum.

C. Lay insulation protection boards to moderate contact without forcing joints. Cut board to fit neatly to perimeter blocking and around protrusions through roof with gaps not to exceed 1/8 inch. Install close cell spray foam insulation in all gaps larger than 1/8” wide.

D. Lay tapered or cut boards to slope to establish pitch to drains at location shown on drawings.

E. Install no more insulation protection board than can be covered with membrane in same day.

F. Install in insulation protection board staggering edges and end joints of insulation board below.

3.08 MEMBRANE INSTALLATION ON ROOF TYPE B.

A. Install membrane roofing in accordance with membrane manufacturer’s instruction.

B. Overlap edges and ends minimum 3 inches and solvent seal. Apply uniform bead of sealant to joint edge.

C. TPO Roof Membrane: Fully adhered 60 mil TPO membrane roof system over gypsum protection board per details shown on drawings. Provide all associated and required 60 mil TPO membrane flashings and pipe boot flashings. Install edge reinforcing strips or aluminum termination bar at perimeter of all roof edges with direct penetration into existing masonry parapet wall or steel roof deck if the distance from the top of the new roof insulation to top of steel roof deck is not more than 6” providing proper edge securement to existing roof or roof edge blocking.

D. Install membrane joints in lapped shingle method on sloped substrate in direction of drainage.

E. Minimize wrinkles and bubbles. Cut and remove all wrinkles and patch roof membrane with smooth surface at no cost to owner.

F. Seal roof membrane watertight to adjusting surfaces.

G. Continue membranes up vertical surfaces minimum 8” and over top of parapet wood blocking and 2” below outside face of wood blocking and nail tight to exterior edge of wood block as shown in roof details. Membrane to overlap exterior brick veneer 1” on exterior side of parapet wall and cut in neat straight line.

H. Seal items penetrating membrane with counterflushing membrane material.

I. Install flashings. Seal watertight to membrane.

J. Reinforce membrane with multiple thickness of membrane material over joint, whether joints are static or moving.
K. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed during same day.

L. Sweep roof clean of all debris when roof is complete.

M. Hot-Air Welding
1. Position the membrane so that the top membrane overlaps the bottom membrane a minimum of 3-inches. Ensure the welding area is dry, clean and free of foreign material.

2. Weld the top membrane to the bottom membrane using a hand-held welder or an automatic welding machine, and silicone roller. A minimum 1-1/2-inch wide continuous weld is required.

3. All field-welded seams must be inspected with a tack claw or similar tool (cotter key extractor), and all deficiencies repaired prior to inspection by Membrane Manufacturer’s Representative providing roof warranty.

N. Fully Adhered Wall Membrane
1. Adhesive must be applied to both the wall/substrate and to the membrane. See the product data sheets on the adhesive being used for coverage rates between both surfaces. The actual coverage may vary depending upon the type of substrate and atmospheric conditions.

2. It is not acceptable to adhere the same sheet of membrane that is covering the roof deck to a wall unless a reinforcing edge strip is provided. If a reinforcing edge strip is used, provide a continuous termination bar into parapet walls. If a reinforcing edge termination strip is used omit the aluminum termination bar, and install the reinforcing strips and mechanical fasteners installed into roof deck or parapet wall. Fasten into wall when total roof thickness is more that 6” thick between the back of the reinforcing edge strip and the existing roof deck.

3. The minimum height of termination of the wall sheet is 8-inches above the roof membrane. Refer to the appropriate detail drawings for information regarding the proper termination.

4. A row of mechanical fasteners are required at all transitions on the wall except at the top if the membrane will extend to the outside face of the wall. These rows of fasteners can be approved fasteners with the appropriate plate or termination bar, and installed through fastening tabs on prefabricated sheets.

5. It is recommended that wall sheets be kept small for easier handling. The installer may wish to install the membrane on the walls prior to installing on the roof deck. This will avoid potential problems with keeping the new membrane on the roof deck clean while working on the walls.

O. Roof Membrane Installation: Roof Membrane shall be unrolled and positioned without stretching as close to and parallel with roof edges as possible. Adjoining roofing membrane shall be unrolled perpendicular to the continuous joint of the thermal insulation and be positioned without stretching, lapping the previous edges a minimum of 3 inches. Installation of roof membrane should start at high point of roof and proceed to lowest point of roof. End joints shall be staggered. The membrane shall then be allowed to relax for 1/2 hour before sealing. Then clean and dry laps shall be adhered together as required by Roof membrane manufacturer’s requirements. The roof membrane shall be overlapped 3” on edges and 4” on ends minimum and sealed with seam tape. Apply uniform bead of lap sealant to all joint edges. All seams shall be tested for integrity. Install Roof Membrane per Roof Manufacturer’s strict
requirements. If roofer desires to deviate from Architect’s drawings or specification, notify
Architect for approval prior to installing roof, or it will be required to be done as shown on
drawings and in this specification.

P. Continue membranes up vertical surfaces minimum 8” to 12” maximum and under top of
parapet and counter flashing as shown at details. Adhere new TPO membrane to new MDO
plywood sheathing with SBR adhesive as approved by roof manufacturer. Seal items
penetrating membrane with counter flashing membrane material. At vertical roof transition
walls the 60 TPO membrane roof shall be installed and every joint heat welded prior to
installing new pre-finished counter flashing over new membrane flashing.

Q. Minimize wrinkles and bubbles in new membrane. Cut out all wrinkles that can be folded over
and squeezed together and touching the roof membrane together.

R. Temporary Seals: The roofing membrane shall be sealed to the monolithic existing roof system
at the end of the each day or at the onset of inclement weather to prevent water and wind from
flowing into the completed roof system. Temporary seals shall be removed upon resumption of
work.

S. Do not expose materials vulnerable to water or sun damage in quantities greater than can be
weatherproofed during same day.

3.09 FLASHING AND ACCESSORIES INSTALLATION

A. Install membrane flashings, including laps, splices, joints, bonding, adhesion, and attachment,
as required by membrane manufacturer's recommendations and details. Coordinate with
Section 07600 Sheet Metal & Flashing.

B. Metal Accessories: Install metal flashings and continuous flashing clips in locations indicated
on the drawings, with horizontal leg of clip over roof membrane and nail at 4” o.c. with 1 ¼”
galvanized roofing nails into new or existing wood blocking or ramset anchors into existing
masonry units at vertical transition walls where counter flashings are terminated.
1. Follow roofing manufacturer's instructions for proper flashing installation.
2. Remove protective plastic surface film immediately before installation.
3. Install water block sealant under the membrane anchorage leg.
4. Flash with recommended 24 gauge flashing sheet unless otherwise indicated.
5. If the roof edge includes fascia / gravel stop flashing and seam covers, sealant shall be
   applied between the laps in the metal edging from the roof surface to the top of the gravel
   stops at all joints.

C. Flashing at Walls, Curbs, and Other Vertical and Sloped Surfaces: Install weathertight flashing
at all walls, curbs, parapets, and other vertical and sloped surfaces that the roofing membrane
abuts to; extend flashing a minimum of 8 inches high and at least 4” under the existing vertical
metal skylight flashing above or as shown on drawings.
1. Use the longest practical flashing pieces.
2. Evaluate the substrate and overlay and adjust installation procedure in accordance with
   membrane manufacturer's recommendations.
3. Complete the splice between existing PVC flashing and existing main PVC roof sheet with
   specified splice adhesive before adhering flashing to the vertical surface.
4. Provide termination directly to the vertical substrate as shown on roof drawings.
5. Do not cover any thru-wall flashing or weep holes with new wall flashing.
D. Roof Drains:

1. Remove, wire bush clean all rust of clamp ring and prime and paint and reinstall existing cast iron roof clamping rings and connected to existing roof drain body. Install new water cut-off mastic on roof drain body and set new roof membrane in mastic and tighten existing clamping ring over new roof membrane. No Roof Drain inserts allowed.
2. Install cover board around drain to provide smooth transition from roof surface to drain. Slope not to exceed manufacturer's recommendations.
3. Position membrane, then cut a hole for roof drain to allow 1/2 to 3/4 inch of membrane to extend inside clamping ring past drain bolts.
4. Make round holes in membrane to align with clamping bolts; do not cut membrane back to bolt holes.
5. Maintain watertight seal of existing roof membrane to existing roof drain body. If seal is broken, then remove existing loose membrane and seal new membrane air tight to existing roof drain body.
6. Install roof drain clamping ring and clamping bolts; tighten clamping bolts to achieve constant compression. Then re-install existing cast iron roof drain strainer.

E. Flashing at Penetrations: Flash all penetrations passing through the membrane; make flashing seals directly to the penetration.

1. Many pipe penetrations will utilize existing flashings. Pipes, Round Supports, Preparation: Wire brush, sand or grind all rust and sealant of metal pipes or supports prior to installing roof membrane flashings or boots.
2. Pipes, Round Supports, and Similar Items: Flash with specified pre-molded pipe flashings wherever practical; otherwise use specified self-curing elastomeric flashing.
3. Pipe Clusters and Unusual Shaped Penetrations: Provide penetration sealant pocket at least 2 inches deep of pourable sealant, with at least 1 inch clearance from penetration, sloped to shed water.
4. Install flashings. Seal membrane watertight as detailed on drawings.
5. Membrane Flashing: Membrane flashings at the roof perimeter and at all penetrations, including drains, pipes, conduits, curbs, walls, expansion joints, and vents shall be installed as shown on approved shop drawings. Flashing shall be fabricated from 60 mil White, TPO, Reinforced roof membrane. Used prefabricated inside and outside corners shall be used wherever possible. All flashings shall be sealed to both penetration and the monolithic deck as shown on approved shop drawings or architect’s drawings. Flashing shall be installed as roof membrane install progresses.

3.10 FIELD QUALITY CONTROL

A. Intermediate Roof Inspection by roof membrane manufacturer representative / inspector: Provide intermediate inspection by roof manufacturer at the beginning of the reroofing project to observe the total process of the roofing installation so that any corrective measures can be made prior to final inspection. Inspect roof project every two weeks maximum to insure system is being install properly.

B. Final Roof Inspection by Membrane Roof Manufacturer: Provide final inspection of the roofing system by a Technical Representative employed by roofing system manufacturer specifically trained by manufacturer to inspect that roof type installation for warranty purposes (i.e. not a sales person). Have Technical Representative recheck any modifications required by roofing installer to make sure modifications have been made correctly.

C. Perform all corrections necessary for issuance of warranty.
3.11 CLEANING
   A. Clean all contaminants generated by roofing work from building and surrounding areas, including bitumen, adhesives, sealants, and coatings.
   B. Repair or replace building components and finished surfaces damaged or defaced due to the work of this section; comply with recommendations of manufacturers of components and surfaces.
   C. Roofing Contractor shall walk the entire roof prior to the Owner and Architect substantial completion punchlist review to remove all debris, mainly sharp objects such as nails, screws and sharp piece of metal flashing!!!!!!
   D. Contractor shall remove leftover materials, trash, debris, equipment from project site and surrounding areas. Sweep all roofs clean of roof debris, dirt, sharp objects, nails, screws and flashing trimmings. Architect will not release final payment until roof is sweep clean of all debris and unused materials!!!!!!!!!!!!!!!!!!!!!!!

3.12 PROTECTION
   A. Where construction traffic must continue over finished roof membrane, provide durable protection and replace or repair damaged roofing to original condition.

END OF SECTION 07550
PART 1 GENERAL

1.01 SECTION INCLUDES

A. Shop fabricated prefinished steel, fascia / gravel stops and wall counter flashings.

B. Flashing accessories required for a complete flashing installation, including but not limited to 4” wide crimped seam covers at all fascia / gravel stop seams, continuous galvanized clip at all gravel stop / fascia flashing, sealant, flashing fasteners.

C. All flashing accessories for a complete flashing installation including fastener, clips etc.

1.02 RELATED SECTIONS

A. Section 06100 – Rough Carpentry: Wood curb blocking and sheathing.

B. Section 07500 – Vented TPO Membrane Roof System: Install new flashing in manner to terminate new roof membrane in durable, aesthetically watertight method.

C. Section 07550 – Fully Adhered TPO Membrane Roof System: Install new flashing in manner to terminate new roof membrane in durable, aesthetically watertight method.

C. Section 07900 – Joint Sealers: Install concealed sealant at all sheet metal flashing joints and up the back 1” high lip of all gravel stops and under both edges of crimped seal covers.

1.03 REFERENCES


1.04 SUBMITTALS

A. See Section 01300 – Administration Requirements, for submittal procedures.

B. Shop Drawings: Indicate flashing material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.

C. Color Chart: Provide color chart of manufacturer standard colors.
1.05 QUALITY ASSURANCE

A. Perform work in accordance with SMACNA Architectural Sheet Metal Manual requirements and standard details, except as otherwise indicated.

B. Fabricator and Installer Qualifications: Company specializing in sheet metal work with 5 (five) years of experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.

B. Prevent contact with materials, which may cause discoloration or staining.

1.07 WARRANTY

A. Provide a Twenty (20) Year Manufacturer Warranty against cracking, peeling and fading.
   1. Not showing a color change greater than 5NBS color units per ASTM D2244-79.
   2. Not to show chalking in excess of 8 per ASTM D659-80.
   3. One Year Warranty against flashing being blowing off building.

PART 2 PRODUCTS

2.01 SHOP FABRICATED ROOF FLASHING MATERIAL

A. Prefinished Galvanized Steel Flashing Material: Use at exposed flashing locations only. ASTM A 653/A 653M, with G90/Z275 zinc coating; 24 gauge thick base metal. Kynar 500 Finish, with Primer 0.25 +/- .05 mils and Topcoat of 0.8 mils +/- .05 mils.

   1. Approved Manufacturer:
      a. Berridge Manufacturing Company
      b. Firestone Building Products / Una-Clad
      c. Pac-Clad
      d. Other approved Manufacturer providing equal materials as approved by the architect and list in any addendums prior to bidding.


   3. Flashings for custom bent fascia / gravel stops flashings and wall counter flashings for 24 gauge prefinished Kynar 500 Finish, Color: Sierra Tan

B. Galvanized Steel Flashing Continuous Concealed Clip Material: Use under all fascia / gravel stop locations to secure these types of flashing exposed exterior edges tight to building. ASTM A 653/A 653M, with G90/Z275 zinc coating; 20 gauge thick base metal with galvanized metal finish. See drawing details.
1. Custom bent metal roof edge fascia / gravel stop continuous clips hooked into exposed ½” drip edge in and ‘L’ Shape profile and lapped over top of roof membrane and wood roof edge wood blocking as shown on drawings minimum 3” horizontal leg and nailed in wood blocking every 4” o.c. with 1 ¼” galvanized roofing nails.

C. Provide all flashing as shown on drawings or as required to properly flash all roof edges vertical roof interruptions and mechanical and electrical penetrations.

2.02 ACCESSORIES

A. Continuous Flashing Clip Galvanized Roofing Nail Fasteners: 1 1/4” long galvanized steel roofing nails at 4” o.c minimum or as recommended by flashing manufacturer to fasten galvanized metal 20 gauge continuous roof clips.

B. Continuous Fascia / Gravel Stop Galvanized Roofing Nail Fasteners: 1 1/4” long galvanized steel roofing nails at 4” o.c minimum or as recommended by flashing manufacturer to fasten 24 gauge Fascia / Gravel Stop flashing.

C. Gasketed Steel Screw Fasteners: Galvanized pre-finished shelf tapping hex headed screw fastener with small neoprene gasket for counter flashings. **Color of screw fastener to match color of selected flashing color as approved by architect.**

D. Pop Rivets: Install colored pop rivets to match the color of the flashing at exposed locations, such as corner of fascia flashing and on clerestory wall outside corner trim as required to fasten corner trim.

C. Primers: Zinc chromate type. Used for touch-up primer paint if flashing is damaged during installation.

D. Sealant: Type specified in Section 07900.

E. Plastic Cement: ASTM D 4586, Type I.

F. Solder: ASTM B 32; Sn50 (50/50) type.

G. Protective Backing Paint: Zinc molybdate alkyd.

H. Plastic Cement: ASTM D 4586, Type I. Use as required in concealed locations to maintain building watertight.

2.03 SHOP FABRICATED CUSTOM MISCELLANEOUS FLASHINGS

A. Form sections true to shape, accurate in size, square, and free from distortion or defects of 24 gauge thick base metal, Kynar 500 Finish.

1. Fascia / Gravel Stop Flashings: **Color: Firestone: Sierra Tan or equal.**
B. Form pieces in longest possible lengths.

C. Hem exposed edges on underside 1/2 inch, miter and seam corners.

D. Form material with flat lock seams, except where otherwise indicated. At moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.

E. Fabricate fascia / gravel stop corner flashing pieces from one piece with minimum 18 inch long legs returns around corner; seam for rigidity, seam with sealant.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify roof wood curbs and blocking, pipes, sleeves and vents, throughout roof solidly set, reglets in place, and nailing strips located.

B. Verify roofing membrane termination and base flashings are in place, sealed and secure.

C. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.

D. Report in writing to Architect prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected.

E. By beginning Work, indicates the Roofing Contractor accepts existing conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the Owner.

3.02 PREPARATION

A. Install cleats before starting installation of finished gravel stop / fascia flashing.

3.03 INSTALLATION

A. Install sheet metal and roof flashing with trained qualified personnel and conform to detail drawings.

B. Secure flashings in place using concealed fasteners. Use exposed fasteners only where permitted.

C. Apply polyurethane sealant compound between metal flashings pieces, but sealant should not be exposed.

D. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
E. Seal metal joints watertight. Install sealant on back side of all 1” high gravel stop joints to prevent water from leaking between gravel stop flashing joints.

F. Install flashings to minimize oil can effects in flashings.

G. Secure flashing using concealed fasteners where possible. Use colored pop rivets where fasteners are exposed. On wall counter flashings install painted gasketed screw fasteners to match flashing color.

H. Remove all protective plastic film coating over all pre-finished metal flashings before installing the flashing components.

I. Install work watertight and weather tight throughout project.

J. Install 4” wide seam covers over all flashing joints. Leave a ½” minimum to 1” gap between 10'-0” long flashing pieces and in hemmed edge seam cover of all seams and set seam covers in continuous bead of sealant on both sides of seam covers for thermal expansion of flashing.

K. Install and perform all flashing work in accordance with SMACNA Architectural Sheet Metal Manual requirements and standard details and NRCA Roofing and Waterproofing Manual, except as otherwise indicated on drawings.

L. All wall counter flashings shall have a gasketed screw fastener installed every 24” o.c. maximum

3.04 PROTECTION OF FLASHINGS

A. Protect all metal flashing from damage. Replace any flashings damage prior to completion of the project.

B. Remove all plastic protection sheet from just prior to flashing installation.

C. Replace all damaged flashings with new flashings at no additional cost to Owner.

END OF SECTION 07600
PART 1   GENERAL

1.01   SECTION INCLUDES

   A. Preparing sealant substrate surfaces for proper installation of sealant and accessories.

   B. Joint Primer, Backer Rod and Sealant material for all sealant joints required to keep water out of building interior.

   C. Polyurethane Sealant used for exterior flashing joints.

   D. Accessories:
      1. Joint Backing: Round, closed cell polyethylene foam rod; oversize 30 to 50 percent larger than joint width.
      2. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.
      3. Sealant Primer: Sealant Primer recommended by the sealant manufacturer shall be installed prior to installing sealant in all joints to receive sealant.

1.02   RELATED SECTIONS

   A. Section 07500 – Vented TPO Membrane Roof System: Sealant required to seal all roof and wall flashings watertight to masonry concrete wall, metal wall panels, roof membrane and metal flashings.

   B. Section 07550 – Fully Adhered TPO Membrane Roof System: Sealant required to seal all roof and wall flashings watertight to masonry concrete wall, metal wall panels, roof membrane and metal flashings.

   B. Section 07600 – Flashing Metal Flashing and Trim. Seal all lap joints and flashing seam cover so no sealant is exposed on face of prefinished metal fascia / gravel stop. Install sealant on back seam of all gravel stop / fascia joints from lap sealant on roof to top of inside gravel stop joints. Install sealant at top edge of counter flashing where counter flashing meets the existing exterior wall. No Vulcum Sealant Allowed.

1.03   REFERENCES


   C. ASTM C790 - Use of Latex Sealing Compounds.

   D. ASTM C804 - Use of Solvent-Release Type Sealants.

   E. ASTM C834 - Latex Sealing Compounds.
F. FS TT-C-00598 - Caulking Compound, Oil and Resin Base Type.

G. FS TT-S-00227 - Sealing Compound: Elastomeric Type, Multi-Component.

H. FS TT-S-00230 - Sealing Compound: Elastomeric Type, Single Component.

I. FS TT-S-001543 - Sealing Compound, Silicone Rubber Base.

J. SWI (Sealing and Waterproofers Institute) - Sealant and Caulking Guide Specification.

1.04 SUBMITTALS

A. Submit product data indicating sealant chemical characteristics, performance criteria, limitations, and color availability.

B. Manufacturer's Installation Instructions: Indicate special procedures surface preparation, perimeter conditions requiring special attention.

1.05 QUALITY ASSURANCE

A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

B. Perform acoustical sealant application work in accordance with ASTM C919.

1.06 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing the Products specified in this Section with a minimum three (3) years experience.

B. Applicator: Company specializing in performing the work of this Section with minimum three (3) years experience approved by manufacturer.

1.07 WARRANTY

A. Provide five (5) year warranty under provisions of Section 01700.

B. Warranty: Include coverage for installed sealants and accessories, which fail to achieve air tight seal, water tight seal, and exhibit loss of adhesion or cohesion, or do not cure.

1.08 ENVIRONMENTAL REQUIREMENTS

A. Do not install solvent curing sealants in enclosed building spaces.

B. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.
PART 2 PRODUCTS

2.01 SEALANTS
   A. Polyurethane Sealant: Use for exterior flashing joints, flashing abutting masonry walls and any exterior general roof caulking.
      1. Sika Flex - 1A or 2C if using adjacent to E.F.I.S.
      2. Tremco - Dymeric
      3. BSAF - Sonneborn - Sololastic NP1
      4. Dynatrol I – Pecora Corporation

2.02 ACCESSORIES
   A. Primer: Non-staining type, to suit application for all sealants as recommended by sealant manufacturer.
   B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
   C. Joint Backer Rod: ANSI/ASTM D1056; round, closed cell polyethylene foam rod; oversized 30 to 50 percent larger than joint width.
   D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application where the joint is not deep enough to install proper sealant depth and backer rod.

PART 3 EXECUTION

3.01 EXAMINATION
   A. Verify that field conditions are acceptable and are ready to receive work.
   B. Verify items provided by other Sections of Work are properly sized and located.
   C. Verify that built-in items are in proper location, and ready for installing sealant primer, backer rod and sealant material.
   D. Verify that substrate surfaces and joint openings are ready to receive work and field measurements are as shown on Drawings and recommended by the manufacturer.
   E. Verify that joint backing and release tapes are compatible with sealant.
   F. Verify backer rods are not punctured in any way. If so remove the damaged backer rod and replace with new backer rod, as punctured backer rod will off-gas and bubble the new sealant.
   G. Report in writing to Architect prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected.
H. By beginning Work, Contractor accepts existing conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the Owner.

3.02 PREPARATION

A. Clean and prime joints in accordance with manufacturer's instructions.

B. Remove loose materials and foreign matter, which might impair adhesion of sealant.

C. Perform preparation in accordance with manufacturer's instructions.

D. Protect elements surrounding the work of this Section from damage or disfiguration.

E. All surfaces in contact with sealant shall be dry, sound, well brushed and clean, and wiped free from dust.

F. Use Solvent to remove oil and grease, wiping the surfaces with clean clothes.

G. Verify that joint backing and release tapes are compatible with sealants.

3.03 INSTALLATION

A. Seal joints all between dissimilar materials.

B. Install sealant in accordance with manufacturer's instructions.

C. Measure joint dimensions and size materials to achieve required 2:1 width/depth ratios.

D. Install joint backing to achieve a neck dimension no greater than 1/3 of the joint width.

E. Install bond breaker where joint backing is not used or deep enough to install backer rod.

F. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

G. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.

H. Tool joints concave unless detailed otherwise.

I. Install sealant as shown on drawings.

3.04 CLEANING AND REPAIRING

A. Clean adjacent soiled surfaces.

B. Repair or replace defaced or disfigured finishes caused by work of this Section.

C. Remove masking tape immediately after joints have been tooled.
3.05 PROTECTION OF FINISHED WORK

A. Protect sealants until cured.

3.06 SCHEDULE

A. Exterior Sealant Joints:
   1. Install sealant along top edge of all vertical wall counter flashings.
   2. Install concealed sealant under both crimped edges of 4” wide metal fascia / gravel stop seam covers.
3. Install sealant on backside of all 1” high metal gravel stop flashing joints.
   4. Install sealant between all new flashing joints at gravel stop / fascia flashing and wall counter flashings.
   5. Install sealant in joints in mechanical and electrical roof and wall penetrations that are not sealed by the roofing membrane.
   6. Install sealant between all misc. metal flashing and trim to prevent water penetration.
   7. Install sealant in joints in all exterior building envelope to prevent unwanted water penetration

END OF SECTION 07900