

PROJECT MANUAL

PROJECT NAME:

DOC MPCF Interlocking Door Replacement

PROJECT ADDRESS:

1200 E Washington St.
Mount Pleasant, Iowa 52641

PROJECT DATE: September 20, 2023

-
OWNER:

Iowa Department of Administrative Services
109 Southeast 13th Street
Des Moines, Iowa 50319



OWNER PROJECT NUMBER: 9317.00

OWNER REQUEST FOR BID NUMBER: RFB 931700-01

-
CONSTRUCTION MANAGER:

McGough Construction
217 E. 2nd St. Suite 120
Des Moines, IA 50309



CONSTRUCTION MANAGER PROJECT NUMBER: 100877.009

-
ARCHITECT:

Horizon Architecture
3116 Alpine Court
Iowa City, IA 52245



ARCHITECT PROJECT NUMBER: G23-014

SECTION 00 0107

SEALS PAGE

I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge.

Discipline: _____ Architecture _____

Stamp:



Company Name: _____ Horizon Architecture _____

Address: _____ 3116 Alpine Court _____

Telephone: _____ (563) 506-4965 _____

Name: _____ Michael Nolan, AIA _____
Specs

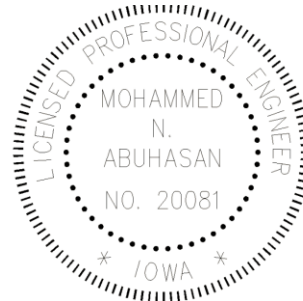
Responsibility: All Architecture Sheets and

License#: _____ 06926 _____

I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge.

Discipline: Electrical & Controls _____

Stamp:



Company Name: Innovative Engineers, Inc. _____

Address: 2871 Heinz Rd Suite B, Iowa City, IA 52240

Telephone: 319-855-4115 _____

Name: Mohammed Abu-Hasan, PE _____

Responsibility: Electrical & Controls Sheets

License#: 20081 _____

END OF SECTION

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END OF SECTION

SECTION 00 0116

BID SUBMITTAL CHECKLIST

PART 1 - GENERAL

1.01 BID SUBMITTAL CHECKLIST

- A. The Bidder is responsible to see that the bid is submitted online at [IMPACS Electronic Procurement System](#) on or before the due date and time specified. Late bids shall not be accepted.
- B. Bids shall be typewritten or in ink. All information requested shall accompany the bid. All blocks shall be completed. Errors shall be lined out and initialed.
- C. The right is reserved to reject any or all bids. The State may waive minor deficiencies or informalities in the best interest of the State of Iowa.
- D. A properly prepared and submitted bid document is the bidder's responsibility.
- E. Bids cannot be changed after the bid opening.
- F. In all cases, no verbal communications by any party will override written communications from the issuing office.
- G. The Bid Form shall be completed in full and signed and submitted by an officer of the bidder with authority to bind in a contract.
- H. If Bid Bond is called for, it shall accompany the Bid submission.
- I. If Non-discrimination Clause information is called for, it shall accompany the Bid submission.
- J. If Targeted Small Business Pre-bid Contact information is called for, it shall accompany the Bid submission.
- K. If Certificate of Site Visit form is called for, it shall accompany the Bid submission.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

SECTION 00 1113

NOTICE TO BIDDERS

RFB #931700-01

The Iowa Department of Administrative Services will be receiving bids for replacing 25 doors at Mount Pleasant Correctional Facility at 1200 E Washington St, Mount Pleasant, IA 54621.

The Iowa Department of Administrative Services anticipates construction to begin on May 8, 2024 and end on October 7, 2024.

Bids must be received no later than **2:00 pm, Thursday, November 30, 2023**. Late bids will not be considered. Bids shall be submitted on [IMPACS Electronic Procurement System](#). The Bid shall be accompanied by a Bid Security as set forth in the Instructions to Bidders in the amount of 5% of the total bid amount. Each bid shall be accompanied by a bid bond, cashier's check or a certified check drawn upon a solvent bank chartered under the laws of the United States of America.

Bid Opening

The time and place of bid opening will be held at meet.google.com/dwt-qkrp-xhy and teleconference number 1 520-815-1408 Pin: 105 204 549# at 3:00 pm on November 30, 2023.

The Iowa Department of Administrative Services reserves the right to reject any and all bids, and to waive irregularities and to accept a bid that is deemed in the best interest of the State of Iowa.

Bidders must comply with all affirmative action/equal employment opportunity provisions of the State of Iowa and the Federal Government.

This project is exempt from Iowa Sales Tax. Davis Bacon Wages **will not** apply to this project.

Questions must be submitted by 12:00 pm, November 15, 2023, to the Issuing Officer.

Bidding documents may stipulate a specific product. Substitute product will be considered if a written request is received by 12:00 pm, November 15, 2023 prior to bid opening. Substitution requests will be considered for all products per Section 01 2500 Substitution Procedures, even if the specification does not include a statement such as "or equal," "equal to," "equivalent to," or "basis of design," unless otherwise noted.

An **optional** Pre-Bid meeting will be held on Tuesday, November 7, 2023 at 11:00 am at Mount Pleasant Correctional Facility at 1200 E Washington St, Mount Pleasant, IA 54621. This meeting is not mandatory but is highly recommended.

Bidding Documents, including drawing sheets bearing the project name DOC MPCF Interlocking Door Replacement, Dated 09/20/2023 and the Project Manual prepared by Horizon Architecture dated 09/20/2023, may be obtained from Beeline and Blue by visiting www.beelineandblue.com or by calling (515) 244-1611 on Monday October 30, 2023 .

For further information regarding this project contact:

Michael Bradbury – Issuing Officer

Phone: (515) 823-9327

E-Mail: construction.procurement@iowa.gov

END OF SECTION

SECTION 00 2113
INSTRUCTIONS TO BIDDERS
RFB #931700-01

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Project Description
- B. Owner
- C. State Agency Representatives and Contacts
- D. Proposal Form and Submissions
- E. Taxes
- F. Alternate Bids
- G. Drawings
- H. Bid Security
- I. Due Date and Time for Receipt of Bids
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- M. Questions
- N. Addenda and Interpretations of the Contract Documents
- O. Substitutions
- P. Obligation of Bidder
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- X. Qualifications
- Y. Insurance
- Z. Form of Agreement between Owner and Contractor
- AA. Execution of Contract
- BB. Laws and Regulations
- CC. Contract Documents and Order of Precedence
- DD. Conditions of the Work
- EE. Subcontracts
- FF. Project Manual/Drawings

1.02 PROJECT DESCRIPTION

- A. Project Description: Replacement of 25 doors at Mount Pleasant Correctional Facility at 1200 E Washington St, Mount Pleasant, IA 54621.

1.03 OWNER

- A. State of Iowa, Department of Administrative Services, 109 SE 13th St, Des Moines, IA 50319

1.04 STATE AGENCY REPRESENTATIVES AND CONTACTS

- A. PURCHASING AGENT: Michael Bradbury – Issuing Officer, State of Iowa, Department of Administrative Services, Hoover State Office Building, 3rd floor, 1305 East Walnut Street, Des Moines, IA 50319-0105, Phone: 515-823-9327; email: construction.procurement@iowa.gov
- B. OWNER REPRESENTATIVE: James Trower, State of Iowa, Department of Administrative Services, 109 SE 13th Street, Des Moines, IA 50319, Phone: 515-725-4150 email: james.trower@iowa.gov
- C. ON-SITE COORDINATOR: Jeremy Howk, Facility Manager, 1200 E. Washington St. Mount Pleasant, IA 52641 Phone: 319-385-9511; email: jeremy.howk@iowa.gov
- D. CONSTRUCTION MANAGER CONTACT: Adam Douglas, McGough Construction, 217 East 2nd St, Suite 120, Des Moines, IA 50309, Phone: 515-822-4229; email: adam.douglas@mcgough.com
- E. DESIGN PROFESSIONAL CONTACT: Michael Nolan, Horizon Architecture, 3316 Alpine Court, Iowa City, IA 52245, Phone: 563-506-4965; email: michael@horizon-architecture.com

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.01 PROPOSAL FORM AND SUBMISSION

- A. A properly prepared and submitted bid is the bidder's responsibility. Bids are to be made in accordance with these Instructions to Bidders and items included on the Bid submission. Failure to comply may be cause for rejection.
- B. The Bid is to consist of the required Bid information, together with the other information specified below to be submitted with the Bid, in which copies are included with these Bidding Documents.
 - 1. The total bid package submitted is required to include the following:
 - a. An online submission including:
 - 1) Required Bid Form (To be uploaded online)
 - 2) Required Non-discrimination Clause Information
 - 3) Required Targeted Small Business Pre-bid Contact Information
 - 4) Bid Security (documentation provided by Bidder) (To be uploaded online) (Required)
 - 5) Certification of Site Visit (To be uploaded online if Pre-Bid is Mandatory)
- C. Include the amount for performing all work described in the drawings and specifications for Base Bid and for each Alternate Bid requested.
- D. Acknowledge receipt of all Addenda issued, where so indicated on the Bid Form
- E. All required information to be submitted, by an officer of the company having authority to bind the company in a contract.
- F. Commencement of the work of the contract shall begin with the Contractor's receipt of a fully executed contract (signed by both parties).
- G. The Owner reserves the right to award a contract for Base Bid only, or for Base Bid in combination with any, or all, identified Alternate Bids. The Owner reserves the right to award a contract for individual Bid Packages, or any combination of Bid Packages. Each Bidder must comply with all of the General Requirements of the project and any requirements of the Project manual that apply to their scope of work.
- H. The company's Federal I.D. Number and the Iowa Contractors Registration Number shall be included in the Bid Form.
- I. Unless indicated otherwise, the Bid shall be for a single responsibility contract for all work as indicated on the Drawings and specified in the Project Manual, and shall be a lump sum amount. If no change in the Base Bid amount is required with respect to consideration of a particular Alternate Bid, enter "No Change" in the blank for that Alternate Bid.
- J. Where so requested, provide Unit Prices for the designated types of work and in the units specified, in which the Unit Prices would be used as adjustments to the quantities described in

- the instructions as the basis for the Base Bid and any Alternate Bid work. A Unit Price would be applicable in the event the Owner should request additional work of that type beyond the extent and quantity that has been established as the scope of the work by graphic delineation and notations on the Drawings, or by otherwise stipulating in the Bidding Documents a numerical quantity of the work, for the Bidder's use in determining the lump sum bid amount for the Base Bid and any requested Alternate Bid containing such work. The Unit Prices shall also be used to adjust the Contract Amount for actual quantities of work involved when the work subject to Unit Price adjustment differs by being less in quantity than that contemplated by the original scope of work for the respective Base Bid or Alternate Bid.
- K. Completed State of Iowa Nondiscrimination Clause information and Subcontractor Targeted Small Business Enterprise Pre-Bid Contact Information, included in these Bidding Documents, are to accompany the Bid submission. Bidders shall comply with all affirmative action/equal opportunity provisions of State and Federal laws. The Owner seeks to provide opportunities for Targeted Small Businesses in accordance with the provisions of Chapter 73 of the Code of Iowa.
 - L. All Bid information is to be submitted online. Any required Bid Security shall be provided, in the form and amount specified elsewhere in these Instructions to Bidders, at the time of submission of the Bid. When a site visit is mandatory as specified elsewhere in these Instructions to Bidders, and a Certificate of Site Visit is required to be submitted with the Bid as evidence of such visit having occurred for purposes of observing the conditions of the site and the work proposed therein, the Certificate shall be uploaded with the bid submission.

3.02 TAXES

- A. In accordance with Section 423 of the Code of Iowa and 701-19 of the Iowa Administrative Rules, Iowa Construction Sales Tax Exemption Certificates for this project will be issued. Do not include Iowa sales tax or use tax, or any local option sales tax, on construction materials in determining your bid prices. The successful Contractor will be required to notify the Department of Administrative Services project manager of all Subcontractors within forty-eight (48) hours after the published date and time by which bids must be submitted. Information on the Contractor and each Subcontractor shall include the firms' name, address, contact person, federal tax identification number, and the Iowa contractor registration number. For the Contractor and each Subcontractor, designate the type of trade or category of work that is to be provided on the project. The Construction Manager for the Department of Administrative Services must be informed when any Subcontractor is added to the project. Following receipt of the information, the Construction Manager for the Department of Administrative Services will arrange to have an authorization letter and certificate (please see sample, included in the Project Manual) issued on behalf of the Contractor and each Subcontractor and will forward the documents to the Contractor for distribution and use by each in purchasing construction materials for this project. Certificates issued for this project shall be used for tax-exempt purchasing construction materials for this project only.

3.03 ALTERNATE BIDS

- A. Bidders are to bid all Alternates requested on the Bid Form. Alternates quoted will be reviewed and accepted or rejected at the option of the Department of Administrative Services. Accepted Alternates will be identified in the Owner-Contractor agreement. Indicate the price for Alternates described, as shown on the Drawings and specified in the Project Manual, and identify in the correct location on the Bid Form.

3.04 DRAWINGS AND PROJECT MANUAL

- A. Drawings and Project Manual are specified in the Notice to Bidders or any extension thereof made by Addendum.

3.05 BID SECURITY

- A. Each Bid shall be accompanied by Bid Security.
- B. The Bid Security shall be in the form of a Bid Bond, Certified check, or Cashier's check in an amount not less than five percent (5%) of the maximum value of the Bid, including any additive Alternates. NOTE: Checks other than Certified checks and Cashier's checks will not be accepted. Bonds shall be issued by a bonding company licensed to transact business in the State of Iowa. The Attorney in Fact who signs the Bond shall file with the Bond a certified and effectively dated copy of their Power of Attorney. The Bid Security shall be made payable to the Iowa Department of Administrative Services, and shall accompany the Bid. If a Bid Bond is not used, copies of Certified checks or Cashier's checks must be uploaded and hand delivered, in a sealed envelope, or mailed upon request. The Bid Security shall serve as a guarantee that a Bidder who is offered a contract will enter into an Agreement with the State of Iowa and will file an approved surety company's Performance Bond, Payment Bond and the Insurance Certificates as evidence of the required Insurance prior to execution of the contract. Upon failure to comply, the Bid Security shall be forfeited as liquidated damages. The governmental entity shall retain the bid security furnished by the successful bidder until the approved contract form has been fully executed, a bond has been filed by the bidder guaranteeing the performance of the contract, and the contract and bond have been approved by the governmental entity. The provisions of chapter 573, where applicable, apply to contracts awarded under this chapter. The governmental entity shall promptly return the checks or bidder's bonds of unsuccessful bidders to the bidders once the Notice of Intent to Award is issued.

3.06 DUE DATE AND TIME FOR RECEIPT OF BIDS

- A. Properly completed Bids shall be submitted online through [IMPACS Electronic Procurement System](#), no later than the time and date specified in the Notice to Bidder or any extension thereof made by Addendum. Written, emailed, oral or telephonic Bids are invalid, and will not receive consideration. The Bidder shall assume full responsibility for the timely online submission of the Bid. Late bids will not be accepted.

3.07 COMMENCEMENT AND COMPLETION DATES

- A. Commencement of the Work of the Contract shall be the day of receipt by the selected Contractor of the fully-executed contract. Final completion of the Work of the contract shall be acknowledged as a part of the Contractor's proposal.

3.08 SITE VISIT

- A. A site visit by the prospective bidder is highly recommended at the time of the Pre-Bid Meeting of this project.

3.09 PRE-BID MEETING

- A. Pre-Bid Meeting will be specified in the Notice to Bidders or any extension thereof made by Addendum.

3.010 QUESTIONS

- A. Questions on this project may be raised and discussed at the time of the Pre-Bid Meeting or by submitting in writing to the issuing officer as specified in the Notice to Bidders or any extension thereof made by Addendum.

3.011 ADDENDA AND INTERPRETATIONS OF THE CONTRACT DOCUMENTS

- A. Any person contemplating submitting a proposal for the proposed Contract, who is in doubt as to the true meaning of any part of the Bidding Documents, shall submit a written request for an interpretation thereof. The person submitting a request will be responsible for its prompt delivery.

Every request for such interpretation should reference the Bid Number specified in the Bidding Documents, and shall be made in writing (email preferred). Questions shall be submitted to the previously identified Purchasing Agent for the Department of Administrative Services. To be given consideration, requests shall be received as specified in the Notice to Bidders or any extension thereof made by Addendum. Replies, which revise or correct the Bidding Documents, or provide necessary clarifications, will be issued in the form of a written Addendum to the Bidding Documents. Interpretations, corrections or changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections, or changes. The Bidder is to include any resultant cost changes in the Bid Sum. Addenda will be posted electronically at the respective bid site where the bid is initially posted. Acknowledgment by the Bidder of each issued Addendum shall be noted in the location so indicated on the Bid. All Addenda issued shall become part of the Contract Documents.

3.012 SUBSTITUTIONS

- A. Where the Bidding Documents stipulate a specific product be provided by naming one or more manufacturer and model, a substitute product will be considered when a written request is received as specified in the Notice to Bidders or any extension thereof made by Addendum prior to bid opening. Substitution requests will be considered for all products per Section 01 2500 Substitution Procedures, even if the specification does not include a statement such as “or equal,” “equal to,” “equivalent to,” or “basis of design,” unless otherwise noted. Substitution requests shall be emailed to the Issuing Officer at the email address provided in Instructions to Bidders Section 1.04.

3.013 OBLIGATION OF BIDDER

- A. It shall be the responsibility of each Bidder contemplating the submission of a Bid for the proposed Contract to fully acquaint himself/herself with conditions at the work site, project requirements, and to become acquainted thoroughly with the work, and all conditions that may be related to it. No considerations or revision in the contract price or scope of the project will be considered by the Owner for any item that could have been revealed by a thorough on-site inspection and examination.
- B. By submission of a Bid, it shall be understood that the Bidder assures that he/she has reviewed and is thoroughly familiar with the project requirements, contract conditions and supplementary conditions, the drawings, specifications, addenda, and that the bidder is aware of the conditions existing at the site that may relate to the work of this project. Failure of any Bidder to examine any form, document, or other instrument shall in no way relieve the Bidder from any obligation in respect to his/her Bid.

3.014 PUBLIC RECORDS AND REQUESTS FOR CONFIDENTIAL TREATMENT

- A. The Agency’s release of public records is governed by Iowa Code chapter 22. Contractors are encouraged to familiarize themselves with Chapter 22 before submitting a Proposal. The Agency will copy and produce public records upon request as required to comply with Chapter 22 and will treat all information submitted by a Contractor as non-confidential records unless Contractor requests specific parts of the Proposal be treated as confidential at the time of the submission as set forth herein AND the information is confidential under Iowa or other applicable law.
- B. A Contractor requesting confidential treatment of specific information must: (1) fully complete Form 22 (Available at <https://das.iowa.gov/sites/default/files/procurement/pdf/Form%2022-ConfidentialityRequest-RFB.pdf>), (2) identify the request in the transmittal letter with the Contractor’s Proposal, (3) conspicuously mark the outside of its Proposal as containing confidential information, (4) mark each page upon which confidential information appears, and (5) submit a “Public Copy” from which the confidential information has been excised.
- C. Form 22 will not be considered fully complete unless, for each confidentiality request, the Contractor: (1) enumerates the specific grounds in Iowa Code chapter 22 or other applicable law that supports treatment of the material as confidential, (2) justifies why the material should be

- maintained in confidence, (3) explains why disclosure of the material would not be in the best interest of the public, and (4) sets forth the name, address, telephone, and e-mail for the person authorized by Contractor to respond to inquiries by the Agency concerning the confidential status of such material.
- D. The Public Copy from which confidential information has been excised is in addition to the number of copies requested in Section 3 of this RFP. The confidential material must be excised in such a way as to allow the public to determine the general nature of the material removed and to retain as much of the Proposal as possible.
 - E. **Failure to request information be treated as confidential as specified herein shall relieve Agency and State personnel from any responsibility for maintaining the information in confidence. Contractors may not request confidential treatment with respect to pricing information and transmittal letters. A contractor's request for confidentiality that does not comply with this section or a contractor's request for confidentiality on information or material that cannot be held in confidence as set forth herein are grounds for rejecting contractor's Proposal as non-responsive. Requests to maintain an entire Proposal as confidential will be rejected as non-responsive.**
 - F. If Agency receives a request for information that Contractor has marked as confidential and if a judicial or administrative proceeding is initiated to compel the release of such material, Contractor shall, at its sole expense, appear in such action and defend its request for confidentiality. If Contractor fails to do so, Agency may release the information or material with or without providing advance notice to Contractor and with or without affording Contractor the opportunity to obtain an order restraining its release from a court possessing competent jurisdiction. Additionally, if Contractor fails to comply with the request process set forth herein, if Contractor's request for confidentiality is unreasonable, or if Contractor rescinds its request for confidential treatment, Agency may release such information or material with or without providing advance notice to Contractor and with or without affording Contractor the opportunity to obtain an order restraining its release from a court possessing competent jurisdiction.

3.015 WITHDRAWAL OF BID

- A. A Bid may be modified or withdrawn only before the time and date for receipt of Bids. Said request for modification or withdrawal of a bid must be completed online through [IMPACS Electronic Procurement System](#). A Bid shall remain valid for consideration by the Owner for the following period(s) of time after the date specified for receipt of Bids, or until such time following that period that the apparent low bidder requests in writing that the Bid be withdrawn, after which the Bid may be withdrawn without forfeiture of any required Bid Security. The Bid shall be valid for not less than thirty (30) calendar days after the date Bids are specified to be due. With the approval of the Department of Administrative Services, a bid may be withdrawn after opening, but only if the bidder provides prompt written notification that adequately documents the commission of an honest error that may cause undue financial loss.

3.016 BID OPENING

- A. All bids received on or before the due date and time specified in the Notice to Bidder or any extension thereof made by Addendum will be opened and the name of the Bidder and the amount of their Bid will be announced.

3.017 BASIS OF BIDS

- A. The Bidder shall include all additional documents or appendices that are requested to be submitted concurrent with the Bid submission; failure to comply may be cause for rejection.
- B. In accordance with Iowa law, Section 8A.311: A bidder, to be considered for an award of a state construction contract, shall disclose to the state agency awarding the contract the names of all subcontractors and suppliers who will work on the project being bid, within forty-eight (48) hours after the published date and time by which bids must be submitted. A bidder shall not replace a

subcontractor or supplier disclosed without the approval of the state agency awarding the contract.

1. A bidder, prior to an award or who is awarded a state construction contract, shall disclose all of the following, as applicable:
 - a. If a subcontractor or supplier disclosed (under the preceding) by a bidder is replaced, the reason for replacement and the name of the new subcontractor or supplier;
 - b. If the cost of work to be done by a subcontractor or supplier is changed or if the replacement of a subcontractor or supplier results in a change in the cost, the amount of the change in cost.
 - c. Any reduction in subcontractor or supplier price as a result of the change, if the change is approved by the Owner, shall be deducted from the Trade Contract via a deductive Change Order. Any such changes, if approved by the Owner, which result in an increase in the Trade Contract Price shall be borne by the Trade Contractor.
- C. The Bidder is specifically advised that any person, firm or other party to whom it is proposed to award a subcontract under this contract must:
 1. Be registered in the State of Iowa and have an Iowa Contractor's Registration number, and
 2. Be acceptable to the Owner.

3.018 INFORMALITIES/ REJECTION OF BIDS

- A. The Iowa Department of Administrative Services reserves the right to waive any irregularities or informalities and to enter into a Contract with a Bidder, or to reject any or all bids as it deems to be in the best interest of the State, without penalty.

3.019 CONSIDERATION OF BIDS

- A. It is the intent of the Department of Administrative Services to award a Contract to the lowest responsible Bidder, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and is determined to be compliant with all Bidding Requirements, and does not exceed the funds available for construction.
- B. Bidder is to bid on each Alternate Bid requested. Failure to do so may result in disqualification of the bid. The Department of Administrative Services reserves the right to accept any, or no, Alternate Bid. Alternate Bids may be considered in any order or combination, and the low successful Bidder will be determined on the basis of the sum of the Base Bid and the Alternate(s) accepted at the time of the Contract award.
- C. In evaluating Bids, any proposal offered by a Bidder for an alternate design, or for materials other than those shown or specified for the Base Bid or for Alternate Bid construction under the proposed Construction Documents or called for by any issued Addenda to those Construction Documents, will not be considered in determining the low successful Bidder. However, the Department of Administrative Services reserves the right to consider any such Bidder-proposed (Contractor's Alternate) alternate designs or materials with the low successful Bidder, after the low successful Bidder is determined in the manner described above (A and B).
- D. Notice of Intent to Award the Bid(s) will be sent to all Respondents submitting a timely Bid and may be posted at the website shown on the RFB cover sheet. Negotiation and execution of the Contract(s) shall be completed no later than fifteen (15) days from the date of the Notice of Intent to Award or such other time as designated by Agency. If the successful Bidder fails to negotiate and deliver an executed Contract, including all required documents such as payment and performance bonds and insurance certificate, by that date, the Agency, in its sole discretion, may cancel the award and award the Contract to the remaining Bidder the Agency believes will provide the best value to the State.

3.020 PREFERENCE

- A. By virtue of statutory authority, a preference shall be given to Iowa domestic labor, products produced and provisions grown within the state of Iowa, in accordance with the provisions of Chapter 73, Code of Iowa and any amendments thereto.
- B. Enforcement of reciprocal resident bidder preference and resident labor force preference codified at Iowa Code Section 73A.21.
 - 1. NOTICE: Failure on the part of the bidder to carefully read the following paragraphs and to provide the information requested below may make the bidder's bid materially nonresponsive and therefore ineligible for contract award. Violations of Iowa Code Section 73A.21 may, among other things, result in civil penalties assessed by the Commissioner of the Division of Labor of Iowa Workforce Development. The bidder should seek out the advice of an attorney if he or she has questions about Iowa Code Section 73A.21. As a part of the competitive procurement of contracts for Public Improvements that must be awarded to the low bidder (if the bid is responsive and the bidder is deemed responsible), Public Bodies shall allow a preference to Resident Bidders if a Nonresident Bidder places a bid for the contract for the Public Improvement and that Nonresident Bidder's state or foreign country gives resident bidders of that state or foreign country a preference (including a labor force preference or any type of preferential treatment). The preference allowed, or reciprocally applied, shall be equal to the preference given or required by the state or foreign country in which the Nonresident Bidder is a resident bidder.

"Public Body" means the State of Iowa (and its agencies) and any of its political subdivisions, including school districts, public utilities, and the state board of regents.

"Public Improvement" means a building or other construction work to be paid for in whole or in part by the use of funds of the State of Iowa, its agencies, and any of its political subdivisions and includes road construction, reconstruction, and maintenance projects.

"Resident Bidder" means a person or entity authorized to transact business in of the State of Iowa and having a place of business for transacting business within the State of Iowa at which it is conducting and has conducted business for at least three years prior to the date of the first advertisement for the public improvement. Note, however, that if a nonresident bidder's state or foreign country has a more stringent definition of a resident bidder, the more stringent definition is applicable as to bidders from that state or foreign country.

"Nonresident Bidder" means a person or entity who does not meet the definition of a resident bidder.
- C. Nonresident bidders shall be required to certify on the Bid submission, where so indicated, the state or foreign country in which the firm is a resident, and if that state or foreign country uses a percentage for in-state bidders and the amount of the preference.
- D. If it is determined that this may cause denial of federal funds which would otherwise be available, or would otherwise be inconsistent with requirements of federal law, this section shall be suspended, but only to the extent necessary to prevent denial of the funds or to eliminate the inconsistency with federal requirements.

3.021 QUALIFICATIONS

- A. In accordance with Iowa Code 26.9(2) and 26.16, no potential bidder shall be required to provide confidential or proprietary information or meet any class requirements as a precondition to submitting a responsive bid. However, as noted in Iowa Code 26.9(2), the lowest responsive bidder may be required to provide additional information to verify responsibility prior to and as a condition of obtaining final award of the contract. Any qualification requirements contained in any bid document indicates only preferred qualifications, not a precondition to bid, and the lowest responsive bidder's qualifications will be evaluated individually based on all information provided.
- B. The Owner may make such investigations as he or she deems necessary to determine the ability of the awarded Bidder to perform the required work, and the awarded Bidder shall furnish to the Owner all such information and data for this purpose. The Owner reserves the right to rescind any awarded Bid if the evidence submitted by, or in investigation of, such Bidder fails to satisfy the Owner that the Bidder is properly qualified to carry-out the obligations of the Contract and to complete the Work contemplated therein.

- C. Bidders shall be registered as a Construction Contractor with the Labor Commissioner, Iowa Workforce Development Department, as required by Chapter 91C of the Code of Iowa. Bidder's Iowa Contractor Registration Number shall be included in the location provided in the Bid Form.
- D. Non-resident corporations submitting bids must be in compliance with Section 490.1501 of the Code of Iowa and legally authorized thereby to carry-on such business in the State of Iowa as is required by the Contract Documents.
- E. An out-of-state Bidder, if awarded a contract, will be required to submit evidence of authorization to do business in the State of Iowa.

3.022 INSURANCE

- A. Insurance Requirements
 - 1. The Contractor shall maintain in effect, with insurance companies of recognized responsibility, at its expense, insurance covering its work of the type and in amounts required by this Contract. The Contractor's insurance shall, among other things, insure against any loss or damage resulting from the Contractor's performance of this Contract. All such insurance policies shall remain in full force and effect for the entire life of this Contract and shall not be canceled or changed except after thirty (30) days written notice to the Owner.
 - 2. **Amounts of Insurance Required – Refer to ConsensusDOCS 802 (see template in Project Manual)**
- B. Certificates of Coverage
 - 1. Certificates of the insurance described above shall be submitted to the Owner before starting any construction activities and shall be subject to approval by the Owner. The Contractor shall provide certificates for the insurance required. The insurer shall state in the certificate that no cancellation of the insurance will be made without at least thirty (30) days prior written notice to the Contractor. Upon receipt of any notice of cancellation or alteration, Contractor shall within ten (10) days procure other policies of insurance, similar in all respects to the policy or policies, about to be canceled or altered, and, if the Contractor fails to provide, procure, and deliver acceptable policies of insurance, or satisfactory evidence thereof, in accordance with the terms hereof then, at the Owner's option, Owner may obtain such insurance at the cost and expense of Contractor, without the need of any notice to Contractor.
- C. No Limitation of Liability
 - 1. Acceptance of the insurance certificates by the Owner shall not act to relieve the Contractor of any obligation under this Contract. All insurance policies and certificates shall be issued only by companies authorized to transact business in the State of Iowa. It shall be the responsibility of the Contractor to keep the respective insurance policies and coverage's current and in force during the life of this agreement.
 - 2. A Sample Certificate of Insurance is attached for reference following this Section.

3.023 FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

- A. The Agreement for the Work will be written on ConsensusDOCS 802 Form of Agreement between Owner and Contractor (sample of the document with modifications incorporated is bound in this Project Manual).

3.024 EXECUTION OF CONTRACT

- A. Contract documents shall mean and include the following:
 - 1. Contract: ConsensusDOCS 802
 - 2. Performance and Payment Bonds
 - 3. Project Manual
 - 4. Drawings
 - 5. Numbered Addenda issued after initial publication of Bid Documents
 - 6. Numbered Modifications (Change Orders) issued after Contract is signed

3.025 LAWS AND REGULATIONS

- A. The Bidder's attention is directed to the fact that all applicable laws and regulations of Federal and State agencies having jurisdiction over the construction of this project shall apply to any contract resulting from this proposal, and it shall be deemed that those rules and regulations are made a part of such contract the same as if set forth in their entirety therein. By submitting a Bid, the Bidder confirms that he/she is familiar with and understands the Contractor's responsibility under all Federal and State of Iowa laws and regulations with respect to the Work described by the proposed Contract Documents.

3.026 CONTRACT DOCUMENTS AND ORDER OF PRECEDENCE

- A. Where an irreconcilable conflict exists among Applicable Legal Requirements, this Contract, the specifications in the Materials and the Drawings, the earliest item mentioned in this sentence involving a conflict shall control over any later mentioned item or items subject to such conflict unless doing so would result in reducing the Bidder's duty of care or obligations under this Contract, in which case the terms resulting in the highest requirements for Bidder performance shall control.

3.027 CONDITIONS OF THE WORK

- A. Each bidder must fully inform him/herself of the conditions under which the work is to be performed at the site of the work, the obstacles which may be encountered, and all other relevant matters concerning the work to be performed. Failure to do so will not relieve a successful bidder of the obligation to furnish all material and labor necessary to carry out the provisions of the contract. When a site visit is required by provisions located elsewhere in these Instructions to Bidders, as a site tour in conjunction with a mandatory Pre-Bid Meeting, it shall be the Bidder's responsibility to fulfill this obligation as a condition of bidding the Work described in the Bidding Documents.
- B. No allowance will be made for any additional compensation by reason of any matter or condition with which the bidder might have fully informed him/herself, but failed to do so prior to bidding. Insofar as possible, the Contractor and all subcontractors shall employ such methods or means in carrying out the work so as not to cause any interruption of, or interference with, the work of any other subcontractor or trade.

3.028 SUBCONTRACTS

- A. The Prime Contractor shall be responsible for notifying all subcontractors and suppliers and informing them that they are bound in each case by all applicable provisions of the bidding information and those of the proposed Form of Agreements as defined in the Contract Documents.

END OF SECTION

SECTION 00 2113.01

IMPACS Public Construction Bidders User Guide

Public construction bids must be submitted on-line at [IMPACS Electronic Procurement System](#).

Bidders must be registered in IMPACS to submit a Bid.

To create an account, enter your email address and click on “Next” and click “Create Account”. Bidder must enter all fields noted with * including legal company name, contact first and last name, phone number, confirm email address, password, re-enter password, select account recovery question including answer, confirm answer, select box accepting websites use terms and conditions and select security check box “I’m not a robot”.

On the [IMPACS Electronic Procurement System](#) Customer Portal Home page, Bidder selects “View Event” in the Sourcing Events section.

Sourcing Events ?

Show Opening or Closing Soon ▾ [Go to Public Opportunities](#)

Event Number	Status	Event Title	Dates	Action
RFB923700-02	Open	Hoover East Side Pavers	Open: 4/27/2022 12:00:00 PM CDT Close: 5/5/2022 12:00:00 PM CDT	View Event ▾

Bidders can view event details including description, prerequisites, buyer attachments, questions and answers.

To submit a Bid, Bidder must select “**Yes, I intend to Bid**”. Bidder must complete the following sections.

Prerequisites - Bidder must complete all prerequisites.

- Bidder must upload a file of the Bid Security/Bond for 5% of total Bid Amount and certify that if they are awarded the construction contract they will enter into the contract at the Bid Amount submitted.
- Bidder must upload the completed and signed Bid Form.
NOTE: Bids are to be entered on the Bid Form only; not in the IMPACS. As a result, IMPACS will display a bid amount of \$0.

Questions - Bidder must complete all questions.

Review & Submit - Bidder must select the certification box certifying that the statements and information in response are true and correct to the best of their knowledge and belief.

SECTION 00 3113

PRELIMINARY SCHEDULE

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Preliminary Construction Schedule
- B. Schedule Durations

1.02 PRELIMINARY SCHEDULE

- A. A preliminary schedule has been identified by the Owner for the implementation of the Project. Refer to the schedule following this Section for references to anticipated milestones and construction duration.
- B. Each step of the Preliminary Schedule is subject to receipt of acceptable bids, Owner's decision process and date of commencement.
- C. A proposed construction schedule shall be submitted by all Trade Contractors to the Construction Manager no later than 48 hours prior to the pre-construction meeting. A revised Construction Schedule will be submitted by the Construction Manager once all preliminary schedules are reviewed and approved by the Owner.
- D. The final construction schedule will be established post award of bids with the cooperation of all contractors.

1.03 SCHEDULE DURATIONS

- A. Anticipated Notice of Intent to Award – 12/01/2023
- B. Anticipated Date of Commencement – 05/08/2024
- C. Substantial Completion by – 10/07/2024

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

Activity ID	Activity Name	Original Duration	Start	Finish	Qtr 4				Qtr 1			Qtr 2			Qtr 3		Qtr 4
					Sep 21	Oct 22	Nov 23	Dec 24	Jan 25	Feb 26	Mar 27	Apr 28	May 29	Jun 30	Jul 31	Aug 32	Sep 33
State of Iowa DAS - 9317 MPCF Door Replace		452	23-Apr-23 A	07-Oct-24													
Preconstruction		233	23-Apr-23 A	21-Dec-23													
A1010	Award Design Firm	0	23-Apr-23 A														
A1000	Kick-Off Meeting	1	04-May-23 A	04-May-23 A													
A1020	Concepts/Recommendation	17	04-May-23 A	30-May-23 A													
A1050	McGough Prepare DD Estimate	15	01-Jun-23 A	16-Jun-23 A													
A1040	Issue 100% DD Documents/Cost Opinion	0		01-Jun-23 A													
A1560	95% CD's	29	02-Jun-23 A	31-Jul-23 A													
A1120	Issue 95% CDs	0		31-Jul-23 A													
A1570	McGough Prepare 95/100% CD Estimate	15	01-Aug-23 A	18-Aug-23 A													
A1580	Finalize 100% CDs	14	01-Aug-23 A	21-Aug-23 A													
A1590	McGough Prepare Front Ends	10	21-Aug-23 A	19-Oct-23													
A1600	DAS Front End Review	4	05-Sep-23 A	25-Oct-23													
A1620	Issue Documents for Bidding	2	26-Oct-23	27-Oct-23													
A1630	Contractor Bidding Period	22	30-Oct-23	30-Nov-23													
A1610	Award Contractor/Prepare Contract/Sign Contract/Insura	15	01-Dec-23	21-Dec-23													
Procurement		95	22-Dec-23	07-May-24													
A1130	Prepare Shops	15	22-Dec-23	15-Jan-24													
A1150	A/E Review/Approve Shops	10	16-Jan-24	29-Jan-24													
A1160	Sliding Detention Doors Lead Time	70	30-Jan-24	07-May-24													
A1390	Standard Hollow Metal Door Lead Time	60	30-Jan-24	23-Apr-24													
A1400	Security Hardware Lead Time	70	30-Jan-24	07-May-24													
Construction		93	08-May-24	19-Sep-24													
A1140	Mobilize to Site	1	08-May-24	08-May-24													
A1180	Corridor Doors CW-1	3	09-May-24	13-May-24													
A1410	Corridor Doors CE-1	3	14-May-24	16-May-24													
A1420	Corridor Doors CW-2	3	17-May-24	21-May-24													
A1430	Corridor Doors CE-2	3	22-May-24	24-May-24													
A1440	Corridor Doors CW-3	3	28-May-24	30-May-24													
A1450	Corridor Doors CE-3	3	31-May-24	04-Jun-24													
A1190	Exterior Door FE-13	4	05-Jun-24	10-Jun-24													
A1460	Install Temp Enclosure/FE-14	5	11-Jun-24	17-Jun-24													
A1470	Exterior Door FE-26	4	18-Jun-24	21-Jun-24													
A1350	Install Temporary Wall/S-1 Slider	5	24-Jun-24	28-Jun-24													
A1360	Install Temporary Wall/S-2 Slider	5	01-Jul-24	09-Jul-24													
A1370	Install Temporary Wall/S-3 Slider	5	10-Jul-24	16-Jul-24													
A1300	Install Temporary Wall/S-4 Slider	5	17-Jul-24	23-Jul-24													
A1310	Install Hardware Only S-5	2	24-Jul-24	25-Jul-24													
A1210	Install Temporary Wall/S-6 Slider	5	26-Jul-24	01-Aug-24													
A1380	Paint All Detention Center Doors/Frames	8	02-Aug-24	13-Aug-24													
A1480	Install Powerhouse Door PD-01	3	14-Aug-24	16-Aug-24													
A1490	Install Powerhouse Door PD-03/04/05	5	19-Aug-24	23-Aug-24													
A1500	Install Powerhouse Door PD-006/07	3	26-Aug-24	28-Aug-24													
A1510	Install Powerhouse Door PD-02	2	29-Aug-24	30-Aug-24													
A1520	Install Appliance Shop Door SD-01	3	03-Sep-24	05-Sep-24													
A1530	Install Appliance Shop Door SD-02	3	06-Sep-24	10-Sep-24													
A1540	Install Appliance Shop Door SD-03	3	11-Sep-24	13-Sep-24													
A1550	Paint All Powerhouse and Shop Doors/Frames	4	16-Sep-24	19-Sep-24													
Closeout		12	20-Sep-24	07-Oct-24													
A1320	Final Clean	2	20-Sep-24	23-Sep-24													
A1330	Punchlist	5	24-Sep-24	30-Sep-24													
A1340	Obtain Substantial Completion Certificate	5	01-Oct-24	07-Oct-24													

■ Remaining Level of Effort
■ Actual Work
■ Remaining Work
■ Critical Remaining Work
◆ Milestone

MPCF Interlocking Door Replacement Bid Scheduled 10/18/2023
 1 of 1



McGOUGH



Department of Administrative Services
Empowering People
Collaboration
Customer Service

SECTION 00 3126

HAZARDOUS MATERIAL TESTING REPORT

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Limited Asbestos and Lead Paint Survey Report
- B. Limited Asbestos and Lead Paint Survey Report – Northcore Building

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION



September 6, 2023

Mr. James Trower
IDAS Owner's Representative
James.Trower@iowa.gov

Ms. Leilani Hammel
McGough
217 E. 2nd Street, Suite 120
Des Moines, Iowa 50309
Leilani.Hammel@mcgough.com

Subject: Limited Asbestos and Lead Paint Survey Report

Mt. Pleasant Correctional Facility
Interlocking Door Replacement Project #9317
1200 E. Washington Street
Mt. Pleasant, Iowa
Atlas Project Number: 204BS06160

Dear Mr. Trower:

Atlas Technical Consultants (Atlas) is pleased to submit this report for the results of this limited asbestos and lead paint survey conducted on August 28, 2023 at the Mt. Pleasant Correctional Facility located in Mt. Pleasant, Iowa. This survey was conducted to identify the presence of asbestos containing building materials and surface coatings with lead paint that may be impacted as part of door replacement activities.

1.0 Limited Asbestos Survey

Mr. Matt Wagner of Atlas conducted an inspection and testing to identify the presence of asbestos containing materials (ACMs) that may be impacted by planned replacement of:

- 3 doors in the Appliance Barn
- 7 doors in the Powerhouse
- Ceilings in corridors around doors in the Main Correctional Facility

Mr. Wagner's State of Iowa Inspector license number is #23-8755. Staff certifications are provided in Attachment A. Atlas' asbestos survey was performed in general accordance with the sampling protocols as outlined in AHERA, 40 Code of Federal Regulations (CFR) 763. Approximate quantities of visible and accessible suspect materials were estimated by field measurements.

Laboratory Analytical Method

Bulk samples were collected of suspect building materials by assessing the condition of the material and removing a small piece that was then placed into a sample bag, sealed and uniquely labeled. The samples were submitted to EMSL Analytical Inc. (EMSL) Laboratory in Cinnaminson, New Jersey for analysis using Polarized Light Microscopy (PLM) in accordance with the United States Environmental Protection Agency (EPA) "Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93/116, July 1993). The laboratory is registered as an American Industrial Hygiene Association (AIHA)-accredited laboratory and participates in the National Voluntary Lab Accreditation Participation (NVLAP) (Lab #101048-0).



Asbestos Results

Atlas submitted **ten-(10)** bulk samples of suspect ACMs for laboratory analysis. A summary of the analytical results is provided in Table 1. Copies of laboratory analytical reports and chain-of-custody are provided in Attachment C.

Asbestos-Containing Materials (>1% Asbestos)

The US EPA defines an asbestos containing material as a material containing >1% asbestos. If asbestos containing materials will be disturbed as part of renovation or demolition activities, they must be abated by a State of Iowa certified asbestos abatement contractor prior to disturbance.

Table 1. Suspect Asbestos Materials Sampled			
Sample No.	Homogenous Material	Location	Asbestos Content per Layer
CTEXT1-H1	Ceiling Texture	Corridor W-2	10% Chrysotile
CTEXT2-H1	Ceiling Texture	Corridor E3	8% Chrysotile
CTEXT3-H1	Ceiling Texture	Corridor Fire Exit 13	8% Chrysotile
C1-H1	Grey Caulking	Central Door – Appliance Barn	ND
C2-H1	Grey Caulking	Central Door – Appliance Barn	ND
C3-H1	Grey Caulking	West Door – Appliance Barn	ND
I-H1	White Foam	East Door – Appliance Barn	ND
I1-H2	Honey Comb Paper Layer	East Door – Powerhouse	ND
I2-H2	Honey Comb Paper Layer	Central Door – Powerhouse	ND
I2-H2	Honey Comb Paper Layer	West Door - Powerhouse	ND

ND = None Detected

Quantities of ACM are estimations and should be verified by contractors in the field. Contractors should use caution during construction-related activities as concealed asbestos-containing materials that were not previously accessible may be encountered. If materials not sampled during this investigation are later discovered, they should be sampled and confirmed if they contain regulated quantities of asbestos by PLM analysis. If so confirmed, they will require removal and disposal in accordance with federal, state and local regulations, prior to disturbance.



Work activities involving exposure to asbestos-containing materials requires personnel training, monitoring and accreditations.

2.0 Limited Lead Paint Survey

The limited lead paint survey via lead paint chip methodology was conducted in general accordance with the United States Environmental Protection Agency (US EPA) 40 CFR Part 745 “Lead; Identification of Dangerous Levels of Lead; Final Rule”, dated January 5, 2001, and the U.S. Department of Housing and Urban Development’s (HUD) “Guidelines for the Evaluation and Control of Lead Paint Hazards in Housing” (HUD Guidelines), dated June 1995, revised 2012.

Paint Chip Sampling Method

The sampling was conducted on August 28, 2023 by Atlas representative Mr. Matt Wagner. Paint chip samples were collected and submitted to EMSL Analytical Inc. in Cinnaminson, New Jersey for analysis. EMSL is accredited by the America Industrial Hygiene Association (AIHA) Laboratory Accreditation Programs, LLC for paint chip analysis (AIHA-ELLAP No. 157245). Lead paint chip samples were analyzed by EMSL using methodology prescribed in the EPA's Test Method SW846 3050B and 7000B: Lead in Paint Chips by Flame Atomic Absorption Spectroscopy (AAS).

Lead Paint Regulatory Limits

Regulatory limits from the Housing and Urban Development (HUD) and the Environmental Protection Agency (EPA) have established a definition of lead paint as a paint or other surface coating that contains more than 0.5% lead by weight. OSHA’s “Lead in Construction Standard” (29 CFR 1926.1101) addresses any concentration of lead in paint (“lead-containing paint”).

A total of **four-(4)** paint chip samples were collected. Copies of laboratory analytical reports and chain-of-custody are provided in Attachment D.

Table 2. Lead Paint Summary					
Test No.	Paint Color	Substrate	Surface	Sample Location	Lead Concentration (% Weight)
PC-1	Light Grey	Metal	Door	Appliance Barn – East Door	<0.018
PC-2	Cream	Metal	Door	Appliance Barn – North Central Door	<0.0080
PC-3	Cream	Metal	Door	Powerhouse – 1 st Floor Door	25
PC-4	Red	Metal	Door	Powerhouse – West Door	11



Lead Paint Summary

- Lead-based paint was identified in the doors of the Powerhouse.

Contractors should use caution during construction-related activities as concealed surface coatings containing lead containing paints that were not previously tested may be encountered. If materials not sampled during this investigation are later identified to contain regulated quantities of lead concentrations, then they should be removed, controlled and/or disposed in accordance with federal, state and local regulations, prior to disturbance. OSHA considers any detectable level of lead as a “Lead Containing Paint” (LCP) and disturbance of these surface coatings is subject to the training and work practices in OSHA 29 CFR 1926.62 “Lead in Construction”.

3.0 Conclusions

- Asbestos was identified in the ceiling texture material in the corridors on the main correctional facility adjacent to doors to be replaced.
- Asbestos was not identified with the doors to be removed in the Powerhouse and Appliance Barn.
- Lead-based paint was identified in doors to be replaced in the Powerhouse.

4.0 Limitations

Atlas’ survey was limited to the minimal destructive sampling and analysis of suspect ACMs and lead paint associated with the Interlocking Door Replacement Project #9317. Atlas did not collect samples from areas that were inaccessible/could not be safely accessed or outside the scope of this limited survey.

Contractors should use caution during construction-related activities as concealed ACMs and lead containing paints that were not previously identified may be encountered. If materials not sampled during this investigation are later identified to contain regulated quantities of asbestos, then they should be removed and disposed in accordance with federal, state and local regulations, prior to disturbance. Abatement of ACMs must be performed by a licensed abatement contractor.

This report should not be utilized as a bidding document or as a project specification document since it does not have all the components required to serve as an Asbestos Abatement Project Design document or an Abatement Work Plan.

The opinions presented within this report apply to the site conditions existing at the time of Atlas’s investigation and interpretation of current regulations pertaining to ACMs and lead paints. All applicable federal, state and local regulations should always be verified prior to any work that will disturb materials potentially containing regulated quantities of asbestos.



If you have any questions regarding this report or require further clarification, please contact our office at (402) 697-9747.

Sincerely,

ATLAS TECHNICAL CONSULTANTS, LLC

Prepared By:

A handwritten signature in black ink that reads "Chase Bucknell". The signature is written in a cursive style.

Chase Bucknell
Environmental Scientist

Reviewed By:

A handwritten signature in black ink that reads "Steve Hudson". The signature is written in a cursive style.

Steve Hudson, MS, CIH
Sr. Project Manager

Attachments:

- Attachment A: Certifications/Licenses
- Attachment B: Sample Location Sketch
- Attachment C: Asbestos Analytical Results and Chain-of-Custody
- Attachment D: Lead Analytical Results and Chain-of-Custody
- Attachment E: Photo Log



**ATTACHMENT A:
CERTIFICATIONS / LICENSES**

MATTHEW WAGNER

DOB: 03-05-1997

Issued: 06-27-2023

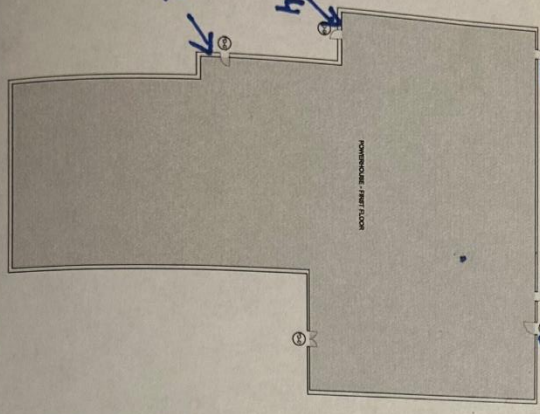


This person is licensed to perform asbestos work in the State of Iowa. ID card is intended for official use only and must be present on jobsite.

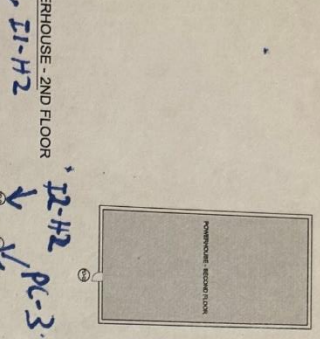


**ATTACHMENT B:
SITE SKETCH**

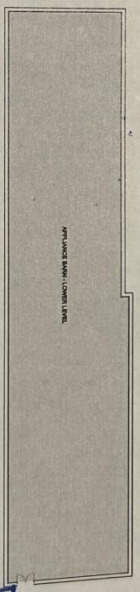
3 POWERHOUSE 1st FLOOR



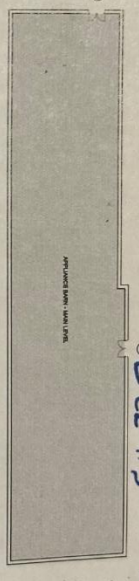
4 POWERHOUSE - 2ND FLOOR



2 APPLIANCE BARN - LOWER LEVEL



1 APPLIANCE BARN - MAIN LEVEL



QTY	Quantity	W	H	THK	FRAME DEPTH	FRAME	PANEL	GLZ	FIN SET	STENCIL	NOTES
PC-1	1	4'	7'	1 1/2"	1 1/2"	1	1	1/2"	1	1	DOUBLE DOOR WITH CLASPS
PC-2	1	4'	7'	1 1/2"	1 1/2"	1	1	1/2"	1	1	DOUBLE DOOR WITH CLASPS
PC-3	1	4'	7'	1 1/2"	1 1/2"	1	1	1/2"	1	1	DOUBLE DOOR WITH CLASPS
PC-4	1	4'	7'	1 1/2"	1 1/2"	1	1	1/2"	1	1	DOUBLE DOOR WITH CLASPS
I1-H2	1	4'	7'	1 1/2"	1 1/2"	1	1	1/2"	1	1	DOUBLE DOOR WITH CLASPS
I2-H2	1	4'	7'	1 1/2"	1 1/2"	1	1	1/2"	1	1	DOUBLE DOOR WITH CLASPS
C2-H1	1	4'	7'	1 1/2"	1 1/2"	1	1	1/2"	1	1	DOUBLE DOOR WITH CLASPS
C2-H3	1	4'	7'	1 1/2"	1 1/2"	1	1	1/2"	1	1	DOUBLE DOOR WITH CLASPS

Need to have these doors tested

- HANDMADE BITS**
- (1) SET 1 EXTENSION DOUBLE DOORS
 - (1) SET 2 EXTENSION DOUBLE DOORS
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95% CONSTRUCTION DOCUMENTS - NOT FOR CONSTRUCTION

9317.00 DOC MPCF INTERLOCKING DOOR REPLACEMENTS

1200 EAST WASHINGTON STREET
MOUNT PLEASANT, IA 52641

horizon.
original.
architecture.
MICHAEL@HORIZON-ARCHITECTURE.COM
PH | (563) 596-4965
WWW.HORIZON-ARCHITECTURE.COM

PROJECT NO.	DATE	BY	CHKD	APP'D	DESCRIPTION
	7/31/2024	MAN			APPLIANCE BARN AND POWERHOUSE KEY PLANS

A-6



**ATTACHMENT C:
ASBESTOS ANALYTICAL RESULTS
AND
CHAIN-OF-CUSTODY**



EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / cinnasblab@EMSL.com

EMSL Order: 042321428

Customer ID: ATC55

Customer PO:

Project ID:

Attention: Steve Hudson
Atlas Technical
11117 Mockingbird Drive
Omaha, NE 68137

Phone: (402) 697-9747

Fax: (402) 597-8532

Received Date: 08/30/2023 12:20 PM

Analysis Date: 08/31/2023

Collected Date:

Project:

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
CTEXT1-H1-Ceiling Tile <i>042321428-0001</i>	Corridor W2 - White Ceiling Texture	White Fibrous Homogeneous	30% Min. Wool	60% Non-fibrous (Other)	10% Chrysotile
CTEXT1-H1-Texture <i>042321428-0001A</i>	Corridor W2 - White Ceiling Texture	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
CTEXT2-H1-Ceiling Tile <i>042321428-0002</i> <i>Sample group not homogeneous.</i>	Corridor E3 - White Ceiling Texture	Tan Fibrous Homogeneous		10% Vermiculite 82% Non-fibrous (Other)	8% Chrysotile
CTEXT2-H1-Texture <i>042321428-0002A</i> <i>Result includes a small amount of inseparable attached material</i>	Corridor E3 - White Ceiling Texture	Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
CTEXT3-H1-Ceiling Tile <i>042321428-0003</i>	Corridor Fire Exit 13 - White Ceiling Texture	Gray/White Fibrous Homogeneous		10% Vermiculite 82% Non-fibrous (Other)	8% Chrysotile
CTEXT3-H1-Texture <i>042321428-0003A</i> <i>Result includes a small amount of inseparable attached material</i>	Corridor Fire Exit 13 - White Ceiling Texture	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
C1-H1 <i>042321428-0004</i>	Central Door - Grey Caulking	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
C2-H1 <i>042321428-0005</i>	Central Door - Grey Caulking	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
C3-H1 <i>042321428-0006</i>	West Door - Grey Caulking	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
I-H1 <i>042321428-0007</i>	East Door - White Foam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
I1-H2 <i>042321428-0008</i>	East Door Penthouse - Paper	Brown Non-Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
I2-H2 <i>042321428-0009</i>	Central Door Penthouse - Paper	Brown Non-Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
I3-H2 <i>042321428-0010</i>	West Door Penthouse - Paper	Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected

Initial report from: 08/31/2023 16:19:02



EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / cinnasblab@EMSL.com

EMSL Order: 042321428

Customer ID: ATC55

Customer PO:

Project ID:

Analyst(s)

Cory Caragiulo (9)

Gregory Barry (4)

Samantha Rundstrom, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA LAP, LLC-IHLAP Lab 100194, NJ DEP 03036, PA ID# 68-00367, LA #04127

Initial report from: 08/31/2023 16:19:02



Asbestos Chain of Custody (Air, Bulk, Soil)

EMSL Order Number / Lab Use Only

EMSL Analytical, Inc.
200 Route 130 North

Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
EMAIL: c@emsl.com

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

042321428

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.	
Customer Information Customer ID: Company Name: Atlas Technical Contact Name: <u>Steve Hudson</u> Street Address: 11117 Mockingbird Drive City, State, Zip: Omaha NE 68137 Country: US Phone: 402-697-9747 Email(s) for Report: <u>STEVE.HUDSON@ORCA11-S.COM</u>	Billing Information Billing ID: Company Name: Atlas Technical Billing Contact: Street Address: 11117 Mockingbird Drive City, State, Zip: Omaha NE 68137 Country: US Phone: 402-697-9747 Email(s) for Invoice:

Project Information	
Project Name/No:	Purchase Order:
EMSL LIMS Project ID: <small>(If applicable, EMSL will provide)</small>	US State where samples collected: IA
State of Connecticut (CT) must select project location: <input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable)	
Sampled By Name: <u>Morgan</u>	Sampled By Signature: <u>[Signature]</u>
No. of Samples in Shipment:	

Turn-Around-Time (TAT)

3 Hour
 4-4.5 Hour
 6 Hour
 24 Hour
 32 Hour
 48 Hour
 72 Hour
 96 Hour
 1 Week
 2 Week

TEM Air 3-6 Hour, please call ahead to schedule. 32 Hour TAT available for select tests only; samples must be submitted by 11:30 am.

Test Selection

PCM Air <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> NIOSH 7400 w/ 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> POINT COUNT <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%) POINT COUNT w/ GRAVIMETRIC <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%) <input type="checkbox"/> NIOSH 9002 (<1%) <input type="checkbox"/> NYS 198.1 (Friable - NY) <input type="checkbox"/> NYS 198.6 NOB (Non-Friable - NY) <input type="checkbox"/> NYS 198.8 (Vermiculite SM-V)	TEM - Air <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312* TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (Non-Friable-NY) <input type="checkbox"/> TEM EPA 600/R-93/116 w Milling Prep (0.1%)	TEM - Settled Dust <input type="checkbox"/> Microvac - ASTM D5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Qualitative via Filtration Prep <input type="checkbox"/> Qualitative via Drop Mount Prep Soil - Rock - Vermiculite (reporting limit) <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.25%) <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.1%) <input type="checkbox"/> TEM EPA 600/R-93/116 with milling prep (<0.1%) <input type="checkbox"/> TEM Qualitative via Filtration Prep <input type="checkbox"/> TEM Qualitative via Drop Mount Prep
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Other Test (please specify)

*Please call with your project-specific requirements.

Positive Stop - Clearly Identified Homogeneous Areas (HA)
 Filter Pore Size (Air Samples) 0.8um 0.45um

Sample Number	Sample Location / Description	Volume, Area or Homogeneous Area	Date / Time Sampled (Air Monitoring Only)
(TEXT) 1- H1	Corridor W2 / White ceiling		
2	Corridor EB		
3	Combo Fire exit 13		
C1- H1	Control Duct ^{Applina B. r.n} Area Gray Ceiling		
C2- H1	Control Duct Applina B. r.n		
C3- H1	West Duct Applina B. r.n ↓		
I- H1	White Form - East Duct Applina B. r.n		

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment: <u>Fedex</u>		Sample Condition Upon Receipt:	
Relinquished by: <u>Morgan</u>	Date/Time: <u>08/28</u>	Received by: <u>[Signature]</u>	Date/Time: <u>9/30/23 12:20p</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

Controlled Document - COC-05 Asbestos R15 4/23/2021

AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.



**ATTACHMENT D:
LEAD ANALYTICAL RESULTS
AND
CHAIN-OF-CUSTODY**



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 786-5974

<http://www.EMSL.com>

cinnaminsonleadlab@emsl.com

EMSL Order: 202307115

CustomerID: ATC55

CustomerPO:

ProjectID:

Attn: **Steve Hudson**
Atlas Technical
11117 Mockingbird Drive
Omaha, NE 68137

Phone: (402) 697-9747
Fax: (402) 597-8532
Received: 8/30/2023 11:00 AM
Collected:

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected	Analyzed	Weight	RDL	Lead Concentration
PC-1 202307115-0001		8/30/2023	0.1142 g	0.018 % wt	<0.018 % wt
	Site: Appliance Barn East/Light Grey				
PC-2 202307115-0002		8/30/2023	0.2605 g	0.0080 % wt	<0.0080 % wt
	Site: Appliance Barn West/Cream				
PC-3 202307115-0003		8/30/2023	0.1016 g	2.0 % wt	25 % wt
	Site: 1st Floor Powerhouse/Cream				
PC-4 202307115-0004		8/30/2023	0.2639 g	1.6 % wt	11 % wt
	Site: North Central Door Powerhouse/Red				

Owen Mckenna, Lead Laboratory Director
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

* Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA LAP, LLC-ELLAP Accredited #100194, A2LA Accredited - Certificate #2845.01

Initial report from 08/31/2023 14:44:57



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Lead Chain of Custody

EMSL Order Number / Lab Use Only

202307115

EMSL Analytical, Inc.
200 Route 130 North

Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
EMAIL: c@emsl.com

Customer Information		Billing Information	
Customer ID:		Billing ID:	
Company Name:	Atlas Technical	Company Name:	Atlas Technical
Contact Name:	Steve Hudson	Billing Contact:	Steve Hudson
Street Address:	11117 Mockingbird Drive	Street Address:	11117 Mockingbird Drive
City, State, Zip:	Omaha NE 68137	Country:	US
Phone:	402-697-9747	Phone:	402-697-9747
Email(s) for Report:	steve.hudson@oneatlas.com	Email(s) for Invoice:	

Project Information

Project Name/No: _____ Purchase Order: _____

EMSL LIMS Project ID: _____ US State where samples collected: IA State of Connecticut (CT) must select project location: Commercial (Taxable) Residential (Non-Taxable)

Sampled By Name: *MV* Sampled By Signature: *[Signature]* No. of Samples in Shipment: _____

Turn-Around-Time (TAT)

3 Hour 6 Hour 24 Hour 32 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.

MATRIX	METHOD	INSTRUMENT	REPORTING LIMIT	SELECTION
CHIPS <input checked="" type="checkbox"/> % by wt. <input type="checkbox"/> ppm (mg/kg) <input type="checkbox"/> mg/cm ²	SW 846-7000B	Flame Atomic Absorption	0.008% (80ppm)	<input type="checkbox"/>
Reporting Limit based on a minimum 0.25g sample weight	SW 846-6010D	ICP-OES	0.0004% (4ppm)	<input type="checkbox"/>
AIR	NIOSH 7082	Flame Atomic Absorption	4µg/filter	<input type="checkbox"/>
	NIOSH 7300M / NIOSH 7303M	ICP-OES	0.5µg/filter	<input type="checkbox"/>
	NIOSH 7300M / NIOSH 7303M	ICP-MS	0.05µg/filter	<input type="checkbox"/>
WIPE <input type="checkbox"/> ASTM <input type="checkbox"/> NON-ASTM	SW 846-7000B	Flame Atomic Absorption	10µg/wipe	<input type="checkbox"/>
If no box is checked, non-ASTM Wipe is assumed	SW 846-6010D	ICP-OES	1.0µg/wipe	<input type="checkbox"/>
TCLP	SW 846-1311 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW 846-1311 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
SPLP	SW 846-1312 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW 846-1312 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
TTLIC	22 CCR App. II, 7000B	Flame Atomic Absorption	40mg/kg (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW 846-6010D*	ICP-OES	2mg/kg (ppm)	<input type="checkbox"/>
STLC	22 CCR App. II, 7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
Soil	SW 846-7000B	Flame Atomic Absorption	40mg/kg (ppm)	<input type="checkbox"/>
	SW 846-6010D*	ICP-OES	2mg/kg (ppm)	<input type="checkbox"/>
Wastewater	SM 3111B / SW 846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
Unpreserved <input type="checkbox"/>	EPA 200.7	ICP-OES	0.020 mg/L (ppm)	<input type="checkbox"/>
Preserved with HNO3 <input type="checkbox"/> PH<2	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	<input type="checkbox"/>
Drinking Water	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	<input type="checkbox"/>
Unpreserved <input type="checkbox"/>	40 CFR Part 50	ICP-OES	12 µg/filter	<input type="checkbox"/>
Preserved with HNO3 <input type="checkbox"/> PH<2				<input type="checkbox"/>
TSP/SPM Filter				<input type="checkbox"/>
Other:				<input type="checkbox"/>

Sample Number	Sample Location	Volume / Area	Date / Time Sampled
PC-1	Applian B-1a East / Lightgl		
PC-2	Applian B-1a West / Green		
PC-3	North Central Powerhouse / Green		
PC-4	NW Powerhouse FinBox / Red		

Method of Shipment: *Fedex* Sample Condition Upon Receipt: _____

Relinquished by: *Matt Wagon* Date/Time: *08/28* Received by: *CL FX* Date/Time: *8/30/23 11am*

Relinquished by: _____ Date/Time: _____ Received by: _____ Date/Time: _____



ATTACHMENT E:
PHOTO LOG



Paint chip sample #1 from lower level of the Appliance Barn (East).

1



Paint chip sample #2 from the north central door in the Appliance Barn.

2

<p>Photograph Log Mt. Pleasant Correction Facility Appliance Barn & Powerhouse Mt. Pleasant, Iowa</p>	<p>Atlas Technical Consultants, LLC 4503 East 50th Street, Suite 800, Des Moines, IA 50317 (515) 981-4528 Project No. 204BS06223</p>
--	--



Paint chip sample #3 from the door on the first floor of the North Central Powerhouse.

3



Paint chip sample #4 from the fire door on the west side of the Powerhouse.

4

<p>Photograph Log Mt. Pleasant Correction Facility Appliance Barn & Powerhouse Mt. Pleasant, Iowa</p>	<p>Atlas Technical Consultants, LLC 4503 East 50th Street, Suite 800, Des Moines, IA 50317 (515) 981-4528 Project No. 204BS06223</p>
--	--



July 17, 2023

Ms. Jennifer Kleene
IDAS Owner's Representative
Jennifer.Kleene@iowa.gov

Ms. Leilani Hammel
McGough
217 E. 2nd Street, Suite 120
Des Moines, Iowa 50309
Leilani.Hammel@mcgough.com

Subject: Limited Asbestos and Lead Paint Survey Report
Mt. Pleasant Correctional Facility – Northcore Building
1200 E. Washington Street
Mt. Pleasant, Iowa
Atlas Project Number: 204BS05840

Dear Ms. Kleene:

Atlas Technical Consultants (Atlas) is pleased to submit this report for the results of this limited asbestos and lead paint survey conducted on June 13, 2023 at the Mt. Pleasant Correctional Facility located in Mt. Pleasant, Iowa. This survey was conducted to identify the presence of asbestos containing building materials and surface coatings with lead paint that may be impacted as part of door replacement activities.

1.0 Limited Asbestos Survey

Mr. Matt Wagner of Atlas conducted an inspection and testing to identify the presence of asbestos containing materials (ACMs) that may be impacted by planned replacement of 15 doors in the Northcore Building.

Mr. Wagner's State of Iowa Inspector license number is #23-8755. Staff certifications are provided in Attachment A. Atlas' asbestos survey was performed in general accordance with the sampling protocols as outlined in AHERA, 40 Code of Federal Regulations (CFR) 763. Approximate quantities of visible and accessible suspect materials were estimated by field measurements.

Laboratory Analytical Method

Bulk samples were collected of suspect building materials by assessing the condition of the material and removing a small piece that was then placed into a sample bag, sealed and uniquely labeled. The samples were submitted to EMSL Analytical Inc. (EMSL) Laboratory in Cinnaminson, New Jersey for analysis using Polarized Light Microscopy (PLM) in accordance with the United States Environmental Protection Agency (EPA) "Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93/116, July 1993). The laboratory is registered as an American Industrial Hygiene Association (AIHA)-accredited laboratory and participates in the National Voluntary Lab Accreditation Participation (NVLAP) (Lab #101048-0).



Asbestos Results

Atlas submitted **two-(2)** bulk samples of suspect ACMs for laboratory analysis. A summary of the analytical results is provided in Table 1. Copies of laboratory analytical reports and chain-of-custody are provided in Attachment C.

Asbestos-Containing Materials (>1% Asbestos)

The US EPA defines an asbestos containing material as a material containing >1% asbestos. If asbestos containing materials will be disturbed as part of renovation or demolition activities, they must be abated by a State of Iowa certified asbestos abatement contractor prior to disturbance. The following ACMs were identified:

Table 1. Asbestos Containing Materials (>1%)				
Sample No.	Homogenous Material	Location	Asbestos Content per Layer	Estimated Quantity
No Asbestos-Containing Materials were Detected				

SF = Square Feet

Quantities of ACM are estimations and should be verified by contractors in the field. Contractors should use caution during construction-related activities as concealed asbestos-containing materials that were not previously accessible may be encountered. If materials not sampled during this investigation are later discovered, they should be sampled and confirmed if they contain regulated quantities of asbestos by PLM analysis. If so confirmed, they will require removal and disposal in accordance with federal, state and local regulations, prior to disturbance. Work activities involving exposure to asbestos-containing materials requires personnel training, monitoring and accreditations.

2.0 Lead Paint Survey

The limited lead paint survey via lead paint chip methodology was conducted in general accordance with the United States Environmental Protection Agency (US EPA) 40 CFR Part 745 "Lead; Identification of Dangerous Levels of Lead; Final Rule", dated January 5, 2001, and the U.S. Department of Housing and Urban Development's (HUD) "Guidelines for the Evaluation and Control of Lead Paint Hazards in Housing" (HUD Guidelines), dated June 1995, revised 2012.

Paint Chip Sampling Method

The sampling was conducted on June 13, 2023 by Atlas representative Mr. Matt Wagner. Paint chip samples were collected and submitted to EMSL Analytical Inc. in Cinnaminson, New Jersey for analysis. EMSL is accredited by the America Industrial Hygiene Association (AIHA) Laboratory Accreditation Programs, LLC for paint chip analysis (AIHA-ELLAP No. 157245). Lead paint chip samples were analyzed by EMSL using methodology prescribed in the EPA's Test Method SW846 3050B and 7000B: Lead in Paint Chips by Flame Atomic Absorption Spectroscopy (AAS).



Lead Paint Regulatory Limits

Regulatory limits from the Housing and Urban Development (HUD) and the Environmental Protection Agency (EPA) have established a definition of lead paint as a paint or other surface coating that contains more than 0.5% lead by weight. OSHA’s “Lead in Construction Standard” (29 CFR 1926.1101) addresses any concentration of lead in paint (“lead-containing paint”).

A total of **five-(5)** paint chip samples were collected. Copies of laboratory analytical reports and chain-of-custody are provided in Attachment D.

Table 2. Lead Paint Summary					
Test No.	Paint Color	Substrate	Surface	Sample Location	Lead Concentration (% Weight)
Lead was not detected in the submitted samples.					

Lead Paint Summary

Lead containing paint was not identified in the representative surface coatings tested:

Contractors should use caution during construction-related activities as concealed surface coatings containing lead containing paints that were not previously tested may be encountered. If materials not sampled during this investigation are later identified to contain regulated quantities of lead concentrations, then they should be removed, controlled and/or disposed in accordance with federal, state and local regulations, prior to disturbance. OSHA considers any detectable level of lead as a “Lead Containing Paint” (LCP) and disturbance of these surface coatings is subject to the training and work practices in OSHA 29 CFR 1926.62 “Lead in Construction”.

3.0 Conclusions

Atlas did not identify asbestos-containing materials or lead containing paints associated with the 15 doors to be replaced.



4.0 Limitations

Atlas' survey was limited to the minimal destructive sampling and analysis of suspect ACMs and lead paint associated with the replacement of 15 doors in the Northcore Building. Atlas did not collect samples from areas that were inaccessible/could not be safely accessed or outside the scope of this limited survey.

Contractors should use caution during construction-related activities as concealed ACMs and lead containing paints that were not previously identified may be encountered. If materials not sampled during this investigation are later identified to contain regulated quantities of asbestos, then they should be removed and disposed in accordance with federal, state and local regulations, prior to disturbance. Abatement of ACMs must be performed by a licensed abatement contractor.

This report should not be utilized as a bidding document or as a project specification document since it does not have all the components required to serve as an Asbestos Abatement Project Design document or an Abatement Work Plan.

The opinions presented within this report apply to the site conditions existing at the time of Atlas's investigation and interpretation of current regulations pertaining to ACMs and lead paints. All applicable federal, state and local regulations should always be verified prior to any work that will disturb materials potentially containing regulated quantities of asbestos.

If you have any questions regarding this report or require further clarification, please contact our office at (402) 697-9747.

Sincerely,

ATLAS TECHNICAL CONSULTANTS, LLC

Prepared By:

Chase Bucknell, CSMI
Environmental Scientist



Reviewed By:

Steve Hudson, MS, CIH, CIEC
Sr. Project Manager



Attachments:

- Attachment A: Certifications/Licenses
- Attachment B: Site Sketch
- Attachment C: Asbestos Analytical Results and Chain-of-Custody
- Attachment D: Lead Analytical Results and Chain-of-Custody



**ATTACHMENT A:
CERTIFICATIONS / LICENSES**

MATTHEW WAGNER

DOB: 03-05-1997

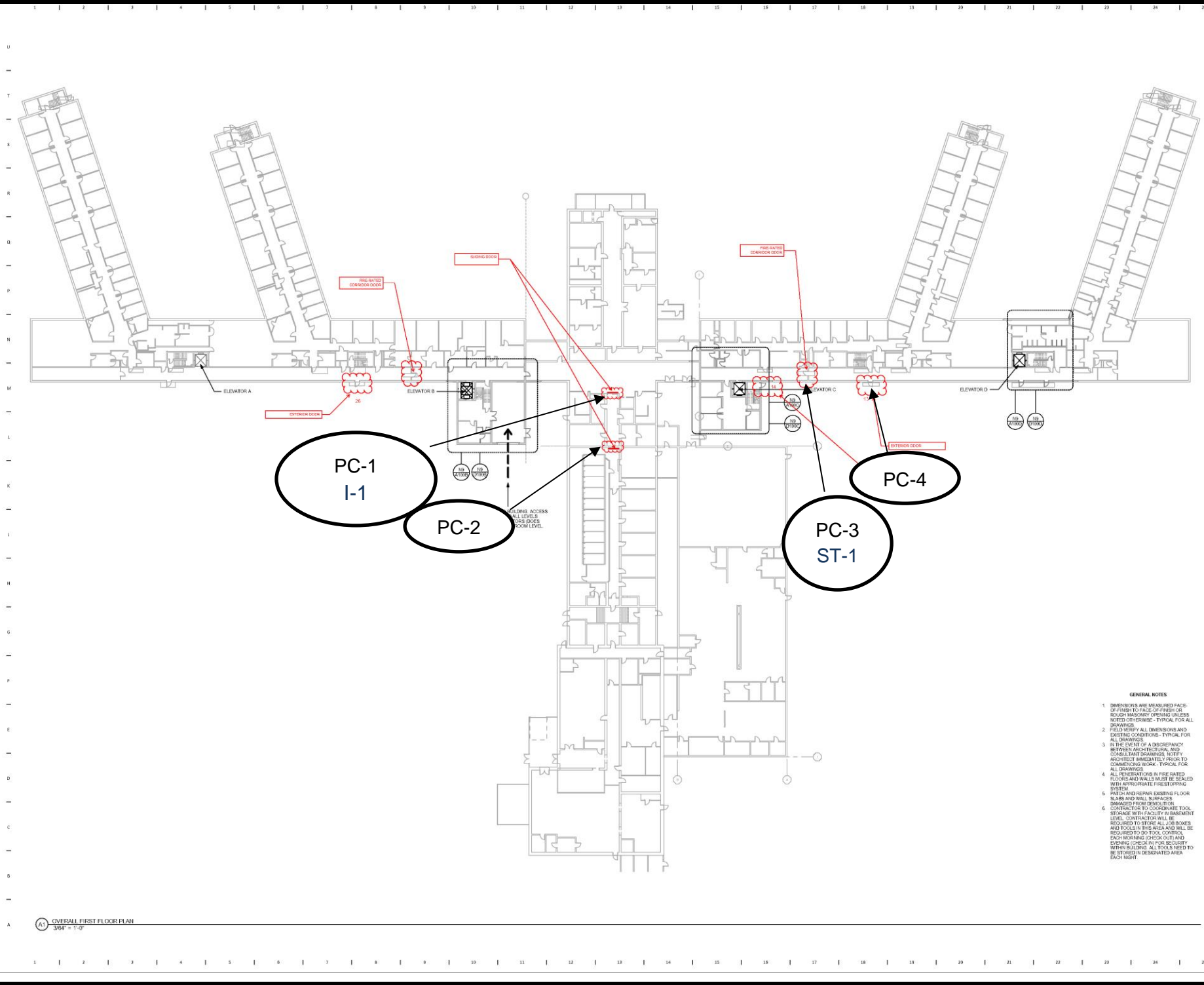
Issued: 06-27-2023



This person is licensed to perform asbestos work in the State of Iowa. ID card is intended for official use only and must be present on jobsite.



**ATTACHMENT B:
SITE SKETCH**



(A) OVERALL FIRST FLOOR PLAN
3/8" = 1'-0"

- GENERAL NOTES**
1. DIMENSIONS ARE MEASURED FACE-TO-FACE TO FACE OF FINISH OR ROUGH MASONRY OPENING UNLESS NOTED OTHERWISE. TYPICAL FOR ALL DRAWINGS.
 2. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. TYPICAL FOR ALL DRAWINGS.
 3. IN THE EVENT OF A DISCREPANCY BETWEEN ARCHITECTURAL AND CONSULTANT DRAWINGS, NOTIFY ARCHITECT IMMEDIATELY PRIOR TO COMMENCING WORK. TYPICAL FOR ALL DRAWINGS.
 4. ALL PENETRATIONS IN FIRE-RATED FLOORS AND WALLS MUST BE SEALED WITH APPROPRIATE FIRESTOPPING SYSTEM.
 5. REPAIR AND REPAIR EXISTING FLOOR SLABS AND WALL SURFACES DAMAGED THROUGH CONSTRUCTION.
 6. CONTRACTOR TO COORDINATE TOOL STORAGE WITH FACILITY IN BASEMENT LIME. CONTRACTOR WILL BE REQUIRED TO STRIKE ALL JOB BOXES AND TOOLS IN THIS AREA AND WILL BE REQUIRED TO DO TOOL CONTROL CHECK-OUT AND EVENING CHECK-IN FOR SECURITY WITHIN BUILDING. ALL TOOLS NEED TO BE STORED IN DESIGNATED AREA EACH NIGHT.

ARC
 100 Court
 Des Moines
 IA 50319
 P: 515-281-3900
 WWW.ARC-DESIGN.COM

Project:
 SOI - MI #
 Midwestern

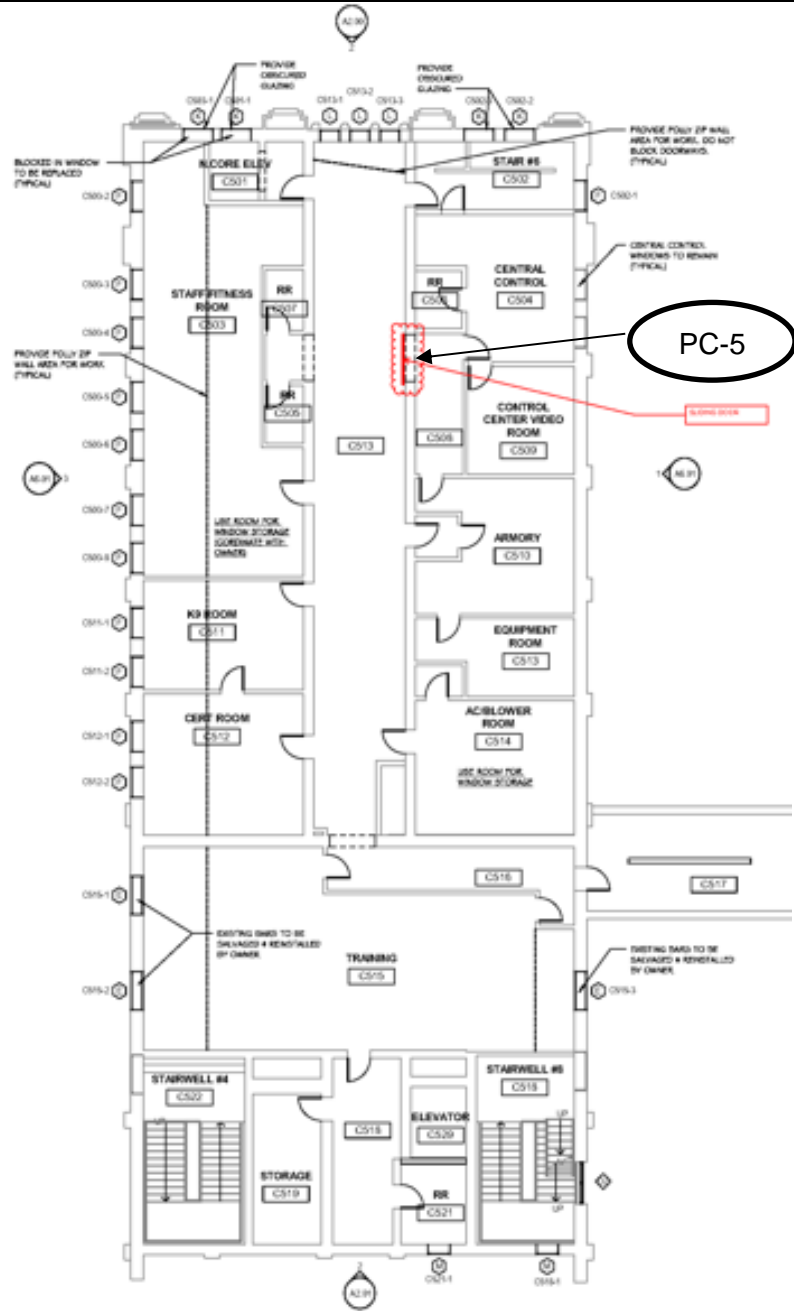
Architect:
 SAUJEL S
 2929 WEST
 84TH STREET
 WEST DES
 MOINES IA
 P: 515-281-3900

Architect of Record:
 KCI ENGINEERS
 300 4TH ST
 WEST DES
 MOINES IA
 P: 515-281-3900

Structural Engineer:
 KCI ENGINEERS
 300 4TH ST
 WEST DES
 MOINES IA
 P: 515-281-3900

MECHANICAL ENGINEER:
 LORCH & ASSOCIATES
 300 4TH ST
 WEST DES
 MOINES IA
 P: 515-281-3900

Scale:
 Overall





**ATTACHMENT C:
ASBESTOS ANALYTICAL RESULTS
AND
CHAIN-OF-CUSTODY**



EMSL Analytical, Inc.

3303 PARKWAY CENTER COURT, Orlando, FL 32808
Phone/Fax: (407) 599-5887 / (407) 599-9063
<http://www.EMSL.com> orlandolab@emsl.com

EMSL Order: 342313677
CustomerID: ATC55
CustomerPO:
ProjectID:

Attn: **Matt Wagner**
Atlas Technical
11117 Mockingbird Drive
Omaha, NE 68137

Phone: (402) 697-9747
Fax: (402) 597-8532
Received: 6/14/2023 09:45 AM
Collected: 6/13/2023

Project: **Mt. Pleasant Correctional Facility**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client SampleDescription	Collected	Analyzed	Weight	RDL	Lead Concentration
PC-1 342313677-0001	6/13/2023	6/16/2023	0.1521 g	0.013 % wt	<0.013 % wt
Site: 10 Cell Slider (Basement) Cream On Metal					
PC-2 342313677-0002	6/13/2023	6/16/2023	0.1230 g	0.016 % wt	<0.016 % wt
Site: 10 Cell Vest (Basement) Cream On Metal					
PC-3 342313677-0003	6/13/2023	6/16/2023	0.2767 g	0.0080 % wt	<0.0080 % wt
Site: Corridor E-1 (First Floor) Cream On Metal					
PC-4 342313677-0004	6/13/2023	6/16/2023	0.0806 g	0.025 % wt	<0.025 % wt
Site: Fire Exit 13 (Ground Floor) Red On Metal					
PC-5 342313677-0005	6/13/2023	6/16/2023	0.0274 g	0.073 % wt	<0.073 % wt
Site: Control Center Vessel (2nd Floor North) Blue On Metal					

Data reported may not reach applicable analytical sensitivity due to insufficient sample weights submitted. Suggested weight for analysis is 0.25 g.

Heather Ohye, Metals Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.
* Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.
Samples analyzed by EMSL Analytical, Inc. Orlando, FL AIHA LAP, LLC-ELLAP Accredited #163563

Initial report from 06/17/2023 15:26:41



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Lead Chain of Custody

EMSL Order Number / Lab Use Only

342313677

EMSL Analytical, Inc.
200 Route 130 North

Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
EMAIL: c@emsl.com

Customer Information Customer ID: ATC55 Company Name: Atlas Technical Consulting Contact Name: Matt Wagner Street Address: 11117 Mockingbird Dr City, State, Zip: Omaha NE 68137 Country: US Phone: Email(s) for Report: matt.wagner@oneatlas.com	Billing Information Billing ID: Company Name: Atlas Technical Billing Contact: Steve Hudson Street Address: 11117 Mockingbird Drive City, State, Zip: Omaha NE 68137 Country: US Phone: Email(s) for Invoice: steve.hudson@oneatlas.com
---	---

Project Information	
Project Name/No: <i>Mt. Alexu Correctional Facility</i>	Purchase Order:
EMSL LIMS Project ID: (If applicable, EMSL will provide)	US State where samples collected: IA
State of Connecticut (CT) must select project location: <input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable)	No. of Samples in Shipment: 5
Sampled By Name: Matt Wagner	Sampled By Signature: <i>[Signature]</i>

Turn-Around-Time (TAT)

3 Hour
 6 Hour
 24 Hour
 32 Hour
 48 Hour
 72 Hour
 96 Hour
 1 Week
 2 Week

Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.

MATRIX	METHOD	INSTRUMENT	REPORTING LIMIT	SELECTION
CHIPS <input checked="" type="checkbox"/> % by wt. <input type="checkbox"/> ppm (mg/kg) <input type="checkbox"/> mg/cm ²	SW 846-7000B	Flame Atomic Absorption	0.008% (80ppm)	<input type="checkbox"/>
Reporting Limit based on a minimum 0.25g sample weight	SW 846-6010D	ICP-OES	0.0004% (4ppm)	<input type="checkbox"/>
AIR	NIOSH 7082	Flame Atomic Absorption	4µg/filter	<input type="checkbox"/>
	NIOSH 7300M / NIOSH 7303M	ICP-OES	0.5µg/filter	<input type="checkbox"/>
	NIOSH 7300M / NIOSH 7303M	ICP-MS	0.05µg/filter	<input type="checkbox"/>
WIPE <input type="checkbox"/> ASTM <input type="checkbox"/> NON-ASTM	SW 846-7000B	Flame Atomic Absorption	10µg/wipe	<input type="checkbox"/>
If no box is checked, non-ASTM Wipe is assumed	SW 846-6010D	ICP-OES	1.0µg/wipe	<input type="checkbox"/>
TCLP	SW 846-1311 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW 846-1311 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
SPLP	SW 846-1312 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW 846-1312 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
TTLC	22 CCR App. II, 7000B	Flame Atomic Absorption	40mg/kg (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW 846-6010D*	ICP-OES	2mg/kg (ppm)	<input type="checkbox"/>
STLC	22 CCR App. II, 7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
Soil	SW 846-7000B	Flame Atomic Absorption	40mg/kg (ppm)	<input type="checkbox"/>
	SW 846-6010D*	ICP-OES	2mg/kg (ppm)	<input type="checkbox"/>
Wastewater Unpreserved <input type="checkbox"/> PH<2	SM 3111B / SW 846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.7	ICP-OES	0.020 mg/L (ppm)	<input type="checkbox"/>
Drinking Water Unpreserved <input type="checkbox"/> PH<2	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	<input type="checkbox"/>
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	<input type="checkbox"/>
Other:				<input type="checkbox"/>

Sample Number	Sample Location	Volume / Area	Date / Time Sampled
PC-1	10 Cell Slider (Basement) Cream on Metal		06/13/23
PC-2	10 Cell Vest (Basement) Cream on Metal		
PC-3	Corridor E-1 (First Floor) Cream on Metal		
PC-4	Fire Exit 13 (Ground Floor) Red on Metal		
PC-5	Control Center Vessel (2nd Floor North) Blue on Metal		

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by: Matt Wagner	Date/Time: 06/13/2023	Received by: <i>[Signature]</i>	Date/Time: <i>6/14/23 9:45am</i>
Relinquished by:	Date/Time:	Received by: <i>[Signature]</i>	Date/Time:

Controlled Document - COC-25 Lead R16 4/19/2021 *6010C Available Upon Request

AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.



**ATTACHMENT D:
LEAD ANALYTICAL RESULTS
AND
CHAIN-OF-CUSTODY**



EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / cinnasblab@EMSL.com

EMSL Order: 042314217

Customer ID: ATC55

Customer PO:

Project ID:

Attention: Matt Wagner
Atlas Technical
11117 Mockingbird Drive
Omaha, NE 68137

Phone: (319) 231-5791

Fax: (402) 597-8532

Received Date: 06/14/2023 9:45 AM

Analysis Date: 06/17/2023

Collected Date: 06/13/2023

Project: Mt. Pleasant Correctional Facility

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
I-1 042314217-0001	Ground Floor 10 Cell Vest - Brown Fire-proofing Insulation	Brown Fibrous Homogeneous	90% Min. Wool	10% Non-fibrous (Other)	None Detected
			HA: 1		
ST-1 042314217-0002	1st Floor Corridor E1 - White Styrofoam	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 2		

Analyst(s)

Andrew Borsos (2)

Samantha Rundstrom, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and meet method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA LAP, LLC-IHLAP Lab 100194, NJ DEP 03036, PA ID# 68-00367, LA #04127

Initial report from: 06/17/2023 11:22:12



Asbestos Bulk Building Materials - Chain of Custody

EMSL Order Number / Lab Use Only

EMSL Analytical, Inc.
200 Route 130 North

Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
EMAIL: c@emsl.com

042314217

Customer Information	Customer ID:	ATC55	Billing Information	Billing ID:	
	Company Name:	Atlas Technical Consulting		Company Name:	Atlas Technical
	Contact Name:	Matt Wagner		Billing Contact:	Steve Hudson
	Street Address:	11117 Mockingbird Dr		Street Address:	11117 Mockingbird Drive
	City, State, Zip:	Omaha NE 68137		Country:	US
Phone:	319-231-5791	Phone:	4023208396		
Email(s) for Report:	matt.wagner@oneatlas.com		Email(s) for Invoice:		

Project Information

Project Name/No: **Mt. Pleasant Correctional Facility** Purchase Order: _____

EMSL LIMS Project ID: _____ US State where samples collected: **FL** State of Connecticut (CT) must select project location:
 Commercial (Taxable) Residential (Non-Taxable)

Sampled By Name: **Matt Wagner** Sampled By Signature: *[Signature]* Date Sampled: **06/13/23** No. of Samples in Shipment: _____

Turn-Around-Time (TAT)
 3 Hour 6 Hour 24 Hour 32 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week
 Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.

Test Selection

PLM - Bulk (reporting limit)

PLM EPA 600/R-93/116 (<1%)
 PLM EPA NOB (<1%)
 POINT COUNT
 400 (<0.25%) 1,000 (<0.1%)
 POINT COUNT w/ GRAVIMETRIC
 400 (<0.25%) 1,000 (<0.1%)
 NIOSH 9002 (<1%)
 NYS 198.1 (Friable - NY)
 NYS 198.6 NOB (Non-Friable - NY)
 NYS 198.8 (Vermiculite SM-V)

TEM - Bulk

TEM EPA NOB
 NYS NOB 198.4 (Non-Friable - NY)
 TEM EPA 600/R-93/116 w Milling Prep (0.1%)

Other Tests (please specify)

Positive Stop - Clearly Identified Homogeneous Areas (HA)

Sample Number	HA Number	Sample Location	Material Description
I-1	1	Ground Floor 10 Cell Vest	Brown Fire Proofing Insulation
ST-1	2	1st Floor Corridor E1	White Styrofoam

RECEIVED
 EMSL
 CINNAMINSON, N.J.
 2023 JUN 14 AM 11:10

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment:	Sample Condition Upon Receipt:
Relinquished by: Matt Wagner	Received by: <i>[Signature]</i>
Date/Time: 06/13/2023	Date/Time: 6/14/23 9:54
Relinquished by:	Received by:
Date/Time:	Date/Time:

Controlled Document - Asbestos Bulk R7 9/14/2021

AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.) **(2) W FY**

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

SECTION 00 3143

PERMIT APPLICATION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Permit Application Information
- B. Licenses, Permits, and Related Inspections

1.02 PERMIT APPLICATION INFORMATION

- A. State Building Code Plan Review: The plan review and inspections for this project have been applied for by the Architect. Please contact your inspector prior to construction and occupancy.
- B. State Building Code Energy Review: The energy code review and inspections for this project have been applied for by the Architect. Please contact your inspector prior to construction and occupancy.
- C. Electrical Permit and Inspections: Trade Contractor is responsible for permits and inspections.
- D. Other Applicable inspections: Trade Contractor is responsible for any other applicable project specific permits and inspections.

1.03 LICENSES, PERMITS, AND RELATED INSPECTIONS

- A. The Bidder shall comply with all codes, laws, ordinances, rules and regulations of any public authority having jurisdiction that bears on the performance of its work. All construction, materials and methods shall comply with the State Building Codes, except where plans and specifications establish a higher standard.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

SECTION 00 4116

BID FORM

The Bid Form must be submitted online through the State's [IMPACS Electronic Procurement System](#).

RFB #931700-01

BID FORM for CONSTRUCTION CONTRACT
for
Mount Pleasant Correctional Facility
1200 E. Washington St, Mount Pleasant, Iowa 52641
Project 9317.00

Iowa Department of Administrative Services
Hoover State Office Building, Level 3
1305 East Walnut Street
Des Moines, Iowa 50319-0105

The following information is to be completed and submitted with your bid..

1. Bid Form - Completed and Signed (to be uploaded with bid submission)
2. Non Discrimination Clause Information
3. Contractor Targeted Small Business Enterprise Pre-Bid Contract Information
4. Bid Security – 5% of total Bid amount (to be uploaded with bid submission)

Authorized Representative:

The undersigned Bidder, in response to your Request for Bid for construction of the above project, having examined the Drawings, Specifications, and other Bidding Documents dated September 20, 2023, and Addenda issued and acknowledged below as received and being familiar with all the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, equipment and supplies to perform all work to construct the project in strict accordance with the proposed Contract Documents, within the time and at the prices stated below. Prices are to cover all expenses incurred in performing the work required under the proposed Contract Documents, of which this bid is a part.

Bidder acknowledges receipt of the following Addenda which are a part of the Bidding Documents and for which any effect on cost of the Work is included in the bid amounts indicated:

Number _____

Dated _____

Note that the State of Iowa is exempt from State and Local sales and use taxes (including local option and school option) for this project. Taxes on construction materials shall NOT be included in the bid amounts.

Amounts shall be indicated in both words and figures. In case of discrepancy, the amount indicated in words shall govern.

BID PACKAGES:

BP 01

Description: All material, labor and equipment associated with all work shown on contract documents complete including the plans and specifications, excluding abatement and demolition of the Powerhouse and Appliance Shop doors to be done by owner. Include a \$6,000 allowance for controls coordination and troubleshooting.

Bidder proposes and agrees to perform all work as described in the Construction Documents for the sum of:

Dollars

(\$_____).

Bidder hereby certifies that:

1. This bid is genuine and is not made in the interest of or on behalf of any undisclosed person, firm or corporation;
2. Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid; Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain any advantage over any other bidder or over the Owner.
3. Bidder hereby certifies that the Bidder is registered with the Iowa Labor Commissioner as a Contractor as required by Chapter 91C, Code of Iowa.
4. Bidder agrees to comply with all Federal and State Affirmative Action/Equal Employment Opportunity requirements concerning fair employment and will not discriminate between or among them by reason of race, color, religion, sex, national origin or physical handicap.
5. All construction under this Contract shall conform to the requirements of the *Iowa State Building Code*.
6. Bidder agrees that this bid shall remain valid and shall not be withdrawn for a period of thirty (30) calendar days after the date for receipt of bids.
7. Bidder agrees that if written notice of acceptance of this bid is mailed, emailed, or delivered to the undersigned within thirty (30) days after the date in which bids are due, or at any time thereafter before it is withdrawn, the undersigned will sign and return the Contract Agreement, prepared in accord with the Bidding Documents and this bid as accepted; and will also provide proof of insurance coverage and required surety bonds.
8. Bidder understands that the Owner reserves the right to reject any and all bids, and to waive irregularities or informalities and enter into a contract for the work, as the Owner deems to be in the best interest of the State.
9. Bidder understands that the Owner reserves the right to accept any, or no, Alternate Bid, if requested, and that the Alternate Bids may be considered in any order or combination, and the low Bidder shall be determined on the basis of the sum of the base bid and any Alternate(s) accepted.

Subcontractors:

The Trade Contractor must identify all Subcontractors and Suppliers within 48 hours of the published date and time for which bids must be submitted, in accordance with Iowa Code Section 8A311, as amended by House File 646 in 2011. Subcontractors and suppliers may not be changed without the approval of the Owner. Requests for changing a Subcontractor or supplier must identify the reason for the proposed change, the name of the new Subcontractor or supplier, and the change in the subcontractor or supplier

price as a result of the change. Any reduction in subcontractor or supplier price as a result of the change, if the change is approved by the Owner, shall be deducted from the Trade Contract Price via a deductive Change Order. Any such changes, if approved by the Owner, which result in an increase in the Trade Contract Price shall be borne by the Trade Contractor.

Enforcement of Reciprocal Resident Bidder Preference, per Iowa Code 73A.21.

All bidders shall either check the box next to "Resident Bidder" or check the box next to "Nonresident Bidder" and by doing so and signing thereafter certifies and attests to the same. All information requested must be provided. Seek out the advice of an attorney if you have questions.

"Resident Bidder" means a person or entity authorized to transact business in of the State of Iowa and having a place of business for transacting business within the State of Iowa at which it is conducting and has conducted business for at least three years prior to the date of the first advertisement for the public improvement. Note, however, that if a nonresident bidder's state or foreign country has a more stringent definition of a resident bidder, the more stringent definition is applicable as to bidders from that state or foreign country.

Resident Bidder

Name of Resident Bidder: _____

By: _____
Authorized Agent and Signatory of Resident Bidder

OR:

Nonresident Bidder

Name of Nonresident Bidder: _____

Name of State or Foreign Country of Nonresident Bidder: _____

Particularly identify and describe any preference, labor preference, or any other type of preferential treatment, in effect in the nonresident bidder's state or foreign country at the time of this bid:

NOTICE: Nonresident Bidders domiciled in a state or country with a resident labor force preference shall make and keep, for a period of not less than three years, accurate records of all workers employed on the public improvement. The records shall include each worker's name, address, telephone number when available, social security number, trade classification, and the starting ending time of employment.

By: _____
Authorized Agent and Signatory of Nonresident Bidder

Bid Form shall be signed by an officer of the company with authority to bind in a contract. Notice of acceptance of this bid, or request for additional information by the Department of Administrative Services, may be addressed to the undersigned at the address set forth below:

Legal Name of Firm: _____

Date: _____

Signature of Bidder: _____

Title: _____

Typed Name of Signatory: _____

Email: _____

Business Address:

Telephone Number: _____ Fax Number: _____

Federal Tax Identification Number: _____

Iowa Contractor Registration Number: _____

Bidder Safety Manager Name: _____

For an out-of-state Bidder, Bidder certifies that the Resident Preference given by the State or Foreign Country of Bidder's residence, _____, is _____ %.

END OF SECTION

SECTION 00 4116.01

NON-DISCRIMINATION CLAUSE

This Section is for informational purposes only. All information will be submitted online through the State's [IMPACS Electronic Procurement System](#).

PART 1 - GENERAL

All contractors, subcontractors, vendors and suppliers of goods and services doing business with the State of Iowa and value of said business equals or exceeds \$10,000 annually, agree as stated below.

1.01 NONDISCRIMINATION CLAUSE

- A. The contractor, subcontractor, vendor and supplier of goods and services will not discriminate against an employee or applicant for employment because of race, creed, color, sex, national origin, ancestry, religion, economic status, age, disability, political opinion, or affiliations of an applicant or employee based upon the nature of the job occupation. The contractor, subcontractor, vendor and supplier will develop an Affirmative Action Program to insure that applicants are employed and that employees are treated during employment without regard to their race, creed, color, sex, national origin, ancestry, religion, economic status, age, disability, political opinions or affiliations. Such action shall include, but not be limited to the following:
 - 1. Employment.
 - 2. Upgrading.
 - 3. Demotion or transfer.
 - 4. Recruitment and advertising.
 - 5. Layoff or termination.
 - 6. Rates of pay or other forms of compensation.
 - 7. Selection for training, including apprenticeship.
- B. The contractor, subcontractor, vendor and supplier of goods and services will, in all solicitations or advertisements for employees, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, national origin, ancestry, religion, economic status, age, disability, political opinion or affiliations.
- C. The contractor, subcontractor, vendor and supplier or their collective bargaining representative will send to each labor union or representative or workers with which they have a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or workers' representative of the contractor's commitments under this section.
- D. The contractor, subcontractor, vendor and supplier of goods and services will comply with all published rules, regulations, directives and orders of the State of Iowa Affirmative Action Program Contract Compliance Provisions.
- E. The contractor, subcontractor, vendor and supplier of goods and services will furnish and file compliance reports within such time and upon such forms as provided by the Equal Employment Opportunity Officer, said forms may elicit information as to the policies, procedures, patterns, and practices of each subcontractor as state as the contractor themselves and said contractor, subcontractor, vendor and supplier will permit access to their employment books, records and accounts to the State's Equal Employment Opportunity Officer, for the purpose of investigation to ascertain compliance with this Contract and with rules regulations of the State's Affirmative Action Program.
- F. In the event of the contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations and orders; this Contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further contracts in accordance with procedures authorized by the State of Iowa.

- G. The contractor, subcontractor, vendor and supplier of goods and services will include, or incorporate by reference, the provisions of the nondiscrimination clause in every contract, subcontract or purchase order unless exempted by the rules, regulations or orders of the State's Affirmative Action Program, and will provide in every subcontract or purchase order that said provisions will be binding upon each contractor, subcontractor or seller.
- H. The parties agree to comply with "Compliance with the Law; Nondiscrimination in Employment" of the current Terms and Conditions at the award of this contract. Current Terms and Conditions may be found on the following web site and are, by this reference, made a part of this Agreement. <https://das.iowa.gov/procurement/terms-and-conditions>
- I. We certify and recognize that we are morally and legally committed to nondiscrimination in employment. Any person who applies for employment with our company will not be discriminated against because of race, creed, color, sex, national origin, ancestry, religion, economic status, age or disabilities, unless disabilities are based upon the nature of the job occupation.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

SECTION 00 4116.02

TARGETED SMALL BUSINESS INFORMATION

This Section is for informational purposes only. All information will be submitted online through the State's [IMPACS Electronic Procurement System](#).

PART 1 - GENERAL

1.01 TARGETED SMALL BUSINESS INFORMATION

- A. Subcontractor Targeted Small Business Enterprise Pre-Bid Contact Information, including subcontractor and dollar amount to be subcontracted, is to accompany the Bid submission. Bidders shall comply with all affirmative action/equal opportunity provisions of State and Federal laws. The Owner seeks to provide opportunities for Targeted Small Businesses in accordance with the provisions of Chapter 73 of the Code of Iowa.

- B. [Search the Targeted Small Business Directory](#) for certified State of Iowa Targeted Small Businesses.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
 SUBCONTRACTOR
 TARGETED SMALL BUSINESS ENTERPRISE
 PRE-BID CONTRACT INFORMATION

CONTRACTOR	BID NO.
(to be completed by bidder)	
CONTRACTOR	PAGE #

You are requested to provide the information on this form showing your targeted Small Business enterprises contacts made prior to your bid submission. This information is subject to verification and confirmation. NOTE: The Department of General Services will not regard your acceptance or use of a low quote or bid from a non-targeted Small Business Enterprise on any subcontract item as evidence itself of any lack of good faith effort to solicit targeted Small Business Enterprise subcontractors on this project. However, every effort shall be made to solicit quotes or bids on as many subcontractable items as necessary to evidence affirmative action in contracting.

TABLE OF INFORMATION SHOWING BIDDER'S PRE-BID TARGETED SMALL BUSINESS ENTERPRISE CONTACTS

SUBCONTRACTOR	TSB	DATES CONTACTED	QUOTES RECEIVED		QUOTATION USED IN BID	
			YES/NO	DATES	YES/NO	DOLLAR AMOUNT PROPOSED TO BE SUBCONTRACTED

Total dollar amount proposed to be subcontracted to TSB on this project \$ _____
 List items to be subcontracted. (If more space is needed, use reverse side.)

SECTION 00 4313

BID SECURITY FORMS

PART 1 - GENERAL

1.01 BID SECURITY FORMS

- A. A Bid Bond form will be required on this project. An amended ConsensusDocs 262 is attached for reference following this page. ConsensusDocs bid bond form is not required (other standard forms are acceptable to the State of Iowa).

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION



CONSENSUSDOCS 262
BID BOND
(AMENDED BY STATE OF IOWA)

This document was developed through a collaborative effort of organizations representing a wide cross-section of the design and construction industry. The organizations endorsing this document believe it represents a fair allocation of risk and responsibilities for all project participants.

Endorsing organizations recognize that this document must be reviewed and adapted to meet specific needs and applicable laws. This document has important legal and insurance consequences. You are encouraged to consult legal, insurance and surety advisors before completing or modifying this document. The software includes a notes section indicating where information is to be inserted to complete this document. Further information and endorsing organizations' perspectives are available at www.consensusdocs.org/guidebook.

For Use with ConsensusDOCS 200, Standard Form of Agreement and General Conditions Between Owner and Constructor (Where the Contract Price is a Lump Sum) and ConsensusDOCS 500, Standard Agreement and General Conditions Between Owner and Construction Manager.

The Trade Contractor, _____ (the "Trade Contractor") has submitted a Bid to the Owner, _____, (the "Owner") for the _____ (the "Project") in accordance with the Bidding Documents, including Drawings and Specifications prepared by _____ (the "Design Professional").

IMPORTANT: A vertical line in the margin indicates a change has been made to the original text. Prior to signing, recipients may wish to request from the party producing the document a "redlined" version indicating changes to the original text. Consultation with legal and insurance counsel and careful review of the entire document are strongly encouraged.

By virtue of this Bid Bond (the "Bond"), the Constructor as Principal and _____ as Surety ("Surety"), are bound to the Owner as Obligee in the maximum amount _____, Dollars (\$_____) (the "Bond Sum"). The Constructor and Surety hereby bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein.

1. If the Obligee shall accept the bid of the Constructor, the Constructor shall enter into an Agreement with the Obligee in accordance with the terms of such Bid.
2. Constructor shall procure such bond or bonds as are specified in the Contract Documents for the faithful performance of the Work and for the prompt payment of labor and materials furnished in the performance of the Work.
3. If the Constructor fails to enter such Agreement and give such bonds, the Constructor shall pay to the Obligee the difference between the amount of Constructor's bid and the amount of such agreement the Obligee in good faith executes with another Party to perform the Work covered by Constructor's Bid, not to exceed the Bond Sum stated above.
4. If the Constructor shall fulfill its obligation under Articles 1 through 3, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

This Bond is entered into as of _____ (date)

SURETY: _____ (seal)

BY:

Print Name: _____

Print Title: _____ (Attach Power of Attorney)

Witness:

(Additional signatures, if any, appear on attached page)

Constructor: _____ (seal)

BY:

Print Name: _____

Print Title: _____

Witness:

(Additional signatures, if any, appear on attached page)

IMPORTANT: A vertical line in the margin indicates a change has been made to the original text. Prior to signing, recipients may wish to request from the party producing the document a "redlined" version indicating changes to the original text. Consultation with legal and insurance counsel and careful review of the entire document are strongly encouraged.

SECTION 00 5200

AGREEMENT FORM

PART 1 - GENERAL

1.01 AGREEMENT FORM

- A. The Form of Agreement to be used on this project is a modified ConsensusDocs 802. A sample is attached following this page.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

ConsensusDocs 802

STANDARD FORM OF AGREEMENT BETWEEN OWNER AND TRADE CONTRACTOR

(Where the Construction Manager Is the Owner's Agent)



TABLE OF ARTICLES

1. AGREEMENT
2. GENERAL PROVISIONS
3. TRADE CONTRACTOR'S OBLIGATIONS
4. OWNER'S RESPONSIBILITIES
5. SUBCONTRACTS
6. TRADE CONTRACT TIME
7. TRADE CONTRACT PRICE
8. CHANGES
9. PAYMENT
10. INDEMNITY, INSURANCE, WAIVERS AND BONDS
11. SUSPENSION, NOTICE TO CURE AND TERMINATION OF AGREEMENT
12. DISPUTE MITIGATION AND RESOLUTION
13. MISCELLANEOUS PROVISIONS
14. TRADE CONTRACT DOCUMENTS

This Agreement has important legal and insurance consequences. Consultations with an attorney and with insurance and surety consultants are encouraged with respect to its completion or modification. Notes indicate where information is to be inserted to complete this Agreement.



ARTICLE 1 AGREEMENT

This Trade Contractor Agreement is made effective as of the XX day of Month, Year , by and between the

OWNER

State of Iowa - DAS, Department of Administrative Services ("DAS"). DAS's principal office is located: 109 SE 13th Street, Des Moines, IA 50319-0120.

and the

TRADE CONTRACTOR

Contractor Name

Address

City, State, Zip

for work in connection with the following

PROJECT

XXXX.XX - Project Name

The CONSTRUCTION MANAGER is

Construction Manager Name

Address

City, State, Zip

The DESIGN PROFESSIONAL for the Project is

Designer Name

Address

City, State, Zip

Notice to the Parties shall be given at the above addresses.

ARTICLE 2 GENERAL PROVISIONS

2.1 RELATIONSHIP OF PARTIES The Owner and the Trade Contractor agree to proceed with this Agreement on the basis of mutual trust, good faith and fair dealing and shall cooperate with each other and with the Construction Manager and Design Professional in furthering the Owner's interests. The Trade Contractor shall use its diligent efforts to perform the work in an expeditious manner consistent with the Trade Contract Documents. The Owner and the Trade Contractor will endeavor to promote harmony and cooperation among all Project participants.

2.1.1 The Owner and the Trade Contractor shall perform their obligations with integrity, ensuring at a minimum that

2.1.1.1 conflicts of interest shall be avoided or disclosed promptly to the other Party; and

2.1.1.2 the Trade Contractor and the Owner warrant that they have not and shall not pay nor receive any contingent fees or gratuities to or from the other Party, including its agents, officers and employees, Subcontractors or others for whom they may be liable, to secure preferential



treatment.

2.2 PROJECT ORGANIZATION This Agreement is for the performance of work described herein in connection with the construction of the Project. The Owner also may enter into separate agreements with other trade contractors for other portions of the Project. The Owner has entered or will enter into a Construction Management Agreement with the Construction Manager, and a design agreement with the Design Professional.

2.3 INDEPENDENT CONTRACTOR The Trade Contractor represents that it is an independent contractor and that its performance of the Trade Contract Work it shall act as an independent contractor. Neither Trade Contractor nor any of its agents or employees shall act on behalf of the Owner except as provided in this Agreement or unless authorized in writing by the Owner.

2.4 CONSTRUCTION MANAGER IS OWNER'S AGENT The Construction Manager will represent the Owner as its agent in the administration and management of this Agreement. Any instructions, reviews, approvals, orders or directions given to the Trade Contractor by the Construction Manager will be given on behalf of and as agent for the Owner. The Trade Contractor shall be obligated to respond or perform as if the same were given directly by the Owner. The Trade Contractor shall communicate and provide all requests and concerns regarding the Trade Contract Work to the Construction Manager. The Trade Contractor shall provide copies to the Construction Manager of all notices to the Owner required by and regarding this Agreement.

2.5 CONSTRUCTION MANAGER NOT IN PRIVITY WITH TRADE CONTRACTOR This Agreement shall not give the Trade Contractor any claim or right of action against the Construction Manager. The Trade Contractor and its subcontractors shall not be beneficiaries of any obligations of the Construction Manager. This Agreement shall not create a contractual relationship between any parties except the Owner and the Trade Contractor.

2.5A NO THIRD-PARTY BENEFICIARY There are no third-party beneficiaries of this Agreement.

2.6 DESIGN PROFESSIONAL The Owner, through its Design Professional, shall provide all architectural and engineering design services necessary for the completion of the Work, except the following:

No exceptions

The Trade Contractor shall not be required to provide professional services which constitute the practice of architecture or engineering except as otherwise provided in section 3.15.

2.6.1 The Owner shall obtain from the Design Professional either a license for Trade Contractor and Subcontractors to use the design documents prepared by the Design Professional or ownership of the copyrights for such design documents, and shall defend, indemnify and hold harmless the Trade Contractor against any suits or claims of infringement of any copyrights or licenses arising out of the use of the design documents. To the extent portions of this paragraph are in conflict with SF 396 (codified at Iowa Code Section 537A.5) said portions are void and unenforceable.

2.7 EXTENT OF AGREEMENT This Agreement is solely for the benefit of the Parties, represents the entire integrated agreement between the Parties, and supersedes all prior negotiations, representations and agreements, either written or oral. This Agreement and each and every provision is for the exclusive benefit of the Owner and the Trade Contractor and not for the benefit of any third party except to the extent expressly provided in this Agreement. In the event of conflict between this Agreement and any of the Exhibits or any other documents incorporated into this Agreement, the terms and provisions of this Agreement shall control.

2.8 DEFINITIONS



2.8.1 Agreement means this ConsensusDocs 802 Standard Form of Agreement Between Owner and Trade Contractor (Where the Construction Manager is the Owner's Agent), as modified by the Parties, and Exhibits and Attachments made part of this Agreement upon its execution.

2.8.2 Design Professional means the Architect, Design Professional or Engineer identified in ARTICLE 1 and its consultants, retained by Owner to perform design services for the Project, and licensed in the State in which the Project is located. The use of the term Design Professional in this Agreement is for convenience and is not intended to imply or infer that the individual or entity named in ARTICLE 1 will provide design professional services in a discipline in which it is not licensed.

2.8.3 Construction Manager means the Construction Manager identified in ARTICLE 1 and its authorized representative.

2.8.4 The Construction Schedule is the document initially prepared by and updated by the Construction Manager and approved by the Owner that indicates proposed activity sequences, durations, or milestone dates for such activities as receipt and approval of pertinent information, issuance of the Construction Documents, the preparation and processing of shop drawings and samples, delivery of materials or equipment requiring long-lead-time procurement, Owner's occupancy requirements and estimated dates of Substantial Completion and Final Completion of the Project.

2.8.5 The term Day shall mean calendar day unless otherwise specifically defined.

2.8.6 Final Completion occurs on the date when the Trade Contractor's obligations under this Agreement are complete and accepted by the Owner and final payment becomes due and payable, as established in ARTICLE 6. This date shall be confirmed by a Certificate of Final Completion signed by the Owner and the Trade Contractor.

2.8.7 A Hazardous Material is any substance or material identified now or in the future as toxic or hazardous under any federal, state or local law or regulation, or any other substance or material which may be considered hazardous or otherwise subject to statutory or regulatory requirements governing handling, disposal or clean-up.

2.8.8 A Material Supplier is a person or entity retained by the Trade Contractor to provide material or equipment for the Trade Contract Work. This definition is not intended to, and shall not be interpreted to, expand or modify the definition(s) of materials or material suppliers contained in Iowa Code Chapter 573.

2.8.9 Others means other contractors, material suppliers, and persons at the Worksite who are not employed by the Trade Contractor or Subcontractors.

2.8.10 The term Overhead shall mean a) payroll costs and other compensation of Trade Contractor employees in the Trade Contractor's principal and branch offices; b) general and administrative expenses of the Trade Contractor's principal and branch offices including deductibles paid on any insurance policy and c) the Trade Contractor's capital expenses, including interest on capital used for the Work.

2.8.11 Owner is the person or entity identified in ARTICLE 1 as Owner, and includes the Owner's representative.

2.8.12 The Project, as identified in ARTICLE 1, is the building, facility or other improvements for which the Trade Contractor is to perform the Trade Contract Work.

2.8.13 A Subcontractor is a person or entity retained by the Trade Contractor as an independent contractor to provide the labor, materials, equipment or services necessary to complete a specific



portion of the Work. This definition is not intended to, and shall not be interpreted to, expand or modify the definition(s) of materials or material suppliers contained in Iowa Code Chapter 573.

2.8.14 Per Iowa Code Section 26.13, "substantially completed" means the first date on which any of the following occurs: (1) Completion of the Project (or Trade Contract Work, in the case of the multiple Trade Contractors) or when the Project (or Trade Contract Work in the case of multiple Trade Contractors) has been substantially completed in general accordance with the terms and provisions of the contract. (2) The work on the Project (or Trade Contract Work in the case of multiple Trade Contractors) or on the designated portion is substantially completed in general accordance with the terms of the contract so that the State Iowa can occupy or utilize the Project or designated portion of the Project for its intended purpose. (3) The Project (or Trade Contract Work in the case of multiple Trade Contractors) is certified as having been substantially completed by either of the following: (a) the architect or engineer authorized to make such certification (which is defined in this Agreement as the Design Professional). (b) The authorized contract representative (which is defined in this Agreement as the Owner's Representative). (4) The State of Iowa is occupying or utilizing the Project (or Trade Contract Work in the case of multiple Trade Contractors) for its intended purpose. This subparagraph shall not apply to highway, bridge, or culvert projects.

2.8.15 Terrorism means a violent act, or an act that is dangerous to human life, property or infrastructure, that is committed by an individual or individuals and that appears to be part of an effort to coerce a civilian population or to influence the policy or affect the conduct of any government by coercion. Terrorism includes, but is not limited to, any act certified by the United States government as an act of terrorism pursuant to the Terrorism Risk Insurance Act, as amended.

2.8.16 A Trade Contract Change Order is a written order signed by the Owner and the Trade Contractor after execution of this Agreement, indicating changes in the scope of the Trade Contract Work, the Trade Contract Price or Trade Contract Time, including substitutions proposed by the Trade Contractor and accepted by the Owner. Trade Contract Change Orders shall be executed using the ConsensusDOCS 813 Trade Contract Change Order (CM as Owner's Agent) form document with exhibits attached as necessary.

2.8.17 The Trade Contract Documents consist of this Agreement (as modified), the drawings, specifications, addenda issued prior to execution of this Agreement, approved submittals, information furnished by the Owner under subsection 4.1.3, the bid documents, other documents listed in this Agreement and any modifications issued after execution.

2.8.18 The Trade Contract Price is the amount indicated in section 7.1 of this Agreement.

2.8.19 The Trade Contract Time is the period between the Date of Commencement and Final Completion.

2.8.20 Trade Contract Work means the construction and services provided by the Trade Contractor.

2.8.20.1 Changed Work means work that is different from the original scope of Trade Contract Work; or work that changes the Trade Contract Price or Trade Contract Time.

2.8.20.2 Defective Work is any portion of the Trade Contract Work that is not in conformance with the Trade Contract Documents.

2.8.21 The Trade Contractor is the person or entity identified in ARTICLE 1 and includes the Trade Contractor's Representative.

2.8.22 The term Work means the construction and services necessary or incidental to fulfill the Trade



Contractors' obligations for the Project. The Work may refer to the whole Project or only a part of the Project.

2.8.23 Worksite means the geographical area at the location of the Project as identified in ARTICLE 1 where the Trade Contract Work is to be performed.

ARTICLE 3 TRADE CONTRACTOR'S OBLIGATIONS

3.1 GENERAL RESPONSIBILITIES

3.1.1 RESPONSIBILITIES The Trade Contractor shall provide all of the labor, materials, equipment and services necessary to complete the Trade Contract Work, all of which shall be provided in full accord with or as reasonably inferable from the Trade Contract Documents as being necessary to produce the indicated results.

3.1.2 The Trade Contractor shall be responsible for the supervision and coordination of the Trade Contract Work, including the construction means, methods, techniques, sequences and procedures utilized, unless the Trade Contract Documents give other specific instructions. In such case, the Trade Contractor shall not be liable to the Owner for damages resulting from compliance with such instructions unless the Trade Contractor recognized and failed to timely report to the Owner any error, inconsistency, omission or unsafe practice that it discovered in the specified construction means, methods, techniques, safety, sequences or procedures.

3.1.3 The Trade Contractor shall perform Trade Contract Work only within locations allowed by the Trade Contract Documents, applicable permits and applicable local law.

3.2 COOPERATION WITH WORK OF OWNER AND OTHERS

3.2.1 The Owner may perform work at the Worksite directly or by Others. Any agreements with Others to perform construction or operations related to the Project shall include provisions pertaining to insurance, indemnification, waiver of subrogation, coordination, interference, clean up and safety which are substantively the same as the corresponding provisions of this Agreement.

3.2.2 In the event that the Owner elects to perform work at the Worksite directly or by Others, the Trade Contractor and the Owner shall, with the assistance of the Construction Manager, coordinate the activities of all forces at the Worksite and agree upon fair and reasonable schedules and operational procedures for Worksite activities. The Owner shall require each separate contractor to cooperate with the Trade Contractor and assist with the coordination of activities and the review of construction schedules and operations. The Trade Contract Price and Trade Contract Time shall be equitably adjusted, as mutually agreed by the Parties, for subsequent changes made necessary by the coordination of construction activities, and the Trade Contractor's construction schedule and the Construction Schedule shall be revised accordingly. The Trade Contractor, Owner and Others shall adhere to the revised Construction Schedule until it may subsequently be revised.

3.2.3 With regard to the work of the Owner and Others, the Trade Contractor shall (a) proceed with the Trade Contract Work in a manner which does not hinder, delay or interfere with the work of the Owner or Others or cause the work of the Owner or Others to become defective, (b) afford the Owner or Others reasonable access for introduction and storage of their materials and equipment and performance of their activities, and (c) coordinate the Trade Contractor's construction and operations with theirs as required by this section.

3.2.4 Before proceeding with any portion of the Trade Contract Work affected by the construction or operations of the Owner or Others, the Trade Contractor shall give the Owner and Construction



Manager prompt written notification of any defects the Trade Contractor discovers in their work which will prevent the proper execution of the Trade Contract Work. The Trade Contractor's obligations in this section do not create a responsibility for the work of the Owner or Others, but are for the purpose of facilitating the Trade Contract Work. If the Trade Contractor does not notify the Owner and Construction Manager of patent defects interfering with the performance of the Trade Contract Work, the Trade Contractor acknowledges that the work of the Owner or Others is not defective and is acceptable for the proper execution of the Trade Contract Work. Following receipt of written notice from the Trade Contractor of defects, the Owner, through the Construction Manager, shall promptly inform the Trade Contractor what action, if any, the Trade Contractor shall take with regard to the defects.

3.3 RESPONSIBILITY FOR PERFORMANCE

3.3.1 In order to facilitate its responsibilities for completion of the Work in accordance with and as reasonably inferable from the Trade Contract Documents, prior to commencing the Work the Trade Contractor shall examine and compare the drawings and specifications with information furnished by the Owner pursuant to subsection 4.1.3, relevant field measurements made by the Trade Contractor and any visible conditions at the Worksite affecting the Trade Contract Work.

3.3.2 If in the course of the performance of the obligations in subsection 3.3.1 the Trade Contractor discovers any errors, omissions or inconsistencies in the Contract Documents, the Trade Contractor shall promptly report them to the Owner and Construction Manager. It is recognized, however, that the Trade Contractor is not acting in the capacity of a licensed design professional, and that the Trade Contractor's examination is to facilitate construction and does not create an affirmative responsibility to detect errors, omissions or inconsistencies or to ascertain compliance with applicable laws, building codes or regulations. Following receipt of written notice from the Trade Contractor of defects, the Owner shall promptly inform the Trade Contractor what action, if any, the Trade Contractor shall take with regard to the defects.

3.3.3 The Trade Contractor shall have no liability for errors, omissions or inconsistencies discovered under subsections 3.3.1 and 3.3.2 unless the Trade Contractor fails to report a recognized problem to the Owner and Construction Manager.

3.3.4 The Trade Contractor may be entitled to additional costs or time if there are changes in the scope of the Trade Contract Work that increase the cost of the Work or increase the number of days required to perform the Work, respectively, because of clarifications or instructions arising out of the Trade Contractor's reports described in the three preceding Subsections.

3.4 CONSTRUCTION PERSONNEL AND SUPERVISION

3.4.1 The Trade Contractor shall provide competent supervision for the performance of the Trade Contract Work. Before commencing the Trade Contract Work, Trade Contractor shall notify Owner and Construction Manager in writing of the name and qualifications of its proposed superintendent(s) and project manager so Owner and Construction Manager may review the individual's qualifications. If, for reasonable cause, the Owner or Construction Manager refuses to approve the individual, or withdraws its approval after once giving it, Trade Contractor shall name a different superintendent or project manager for Owner's and Construction Manager's review. Any disapproved superintendent shall not perform in that capacity thereafter at the Worksite.

3.4.2 The Trade Contractor shall be responsible to the Owner for acts or omissions of parties or entities performing portions of the Trade Contract Work for or on behalf of the Trade Contractor or any of its Subcontractors.

3.4.3 The Trade Contractor shall permit only qualified persons to perform the Trade Contract Work. The



Trade Contractor shall enforce safety procedures, strict discipline and good order among persons performing the Trade Contract Work. If the Owner or Construction Manager determines that a particular person does not follow safety procedures, or is unfit or unskilled for the assigned work, the Trade Contractor shall immediately reassign the person on receipt of the Owner's or Construction Manager's written notice to do so.

3.4.4 TRADE CONTRACTOR'S REPRESENTATIVE The Trade Contractor's authorized representative is . The Trade Contractor's representative shall possess full authority to receive instructions from the Owner and to act on those instructions. The Trade Contractor shall notify the Owner and the Construction Manager in writing of a change in the designation of the Trade Contractor's representative. The Trade Contractor's representative is also authorized to bind the Trade Contractor in all matters relating to this Agreement including, without limitation, all matters requiring the Trade Contractor's approval, authorization, or written notice. The Trade Contractor's representative is also authorized to resolve disputes in accordance with Section 12.2 of this Agreement.

3.5 MATERIALS FURNISHED BY THE OWNER OR OTHERS

3.5.1 In the event the Trade Contract Work includes installation of materials or equipment furnished by the Owner or Others, it shall be the responsibility of the Trade Contractor to examine the items so provided and thereupon handle, store and install the items, unless otherwise provided in the Trade Contract Documents, with such skill and care as to provide a satisfactory and proper installation. Loss or damage due to acts or omissions of the Trade Contractor shall be the responsibility of the Trade Contractor and may be deducted from any amounts due or to become due the Trade Contractor. Any defects discovered in such materials or equipment shall be reported at once to the Owner and Construction Manager. Following receipt of written notice from the Trade Contractor of defects, the Owner shall promptly inform the Trade Contractor what action, if any, the Trade Contractor shall take with regard to the defects.

3.6 TESTS AND INSPECTIONS

3.6.1 The Trade Contractor shall schedule all required tests, approvals and inspections of the Trade Contract Work or portions thereof at appropriate times so as not to delay the progress of the Trade Contract Work or other work related to the Project. The Trade Contractor shall give proper notice to the Construction Manager and to all required parties of such tests, approvals and inspections. If feasible, the Owner and Others may timely observe the tests at the normal place of testing. Except as provided in subsection 3.6.3, the Owner shall bear all expenses associated with tests, inspections and approvals required by the Trade Contract Documents, which, unless otherwise agreed to, shall be conducted by an independent testing laboratory or entity retained by the Owner. Unless otherwise required by the Trade Contract Documents, required certificates of testing, approval or inspection shall be secured by the Trade Contractor and promptly delivered to the Owner and Construction Manager.

3.6.2 If the Owner, Construction Manager or appropriate authorities determine that tests, inspections or approvals in addition to those required by the Trade Contract Documents will be necessary, the Trade Contractor shall arrange for the procedures and give timely notice to the Owner, Construction Manager and Others who may observe the procedures. Costs of the additional tests, inspections or approvals are at the Owner's expense except as provided in subsection 3.6.3.

3.6.3 If the procedures described in subsections 3.6.1 and 3.6.2 indicate that portions of the Trade Contract Work fail to comply with the Trade Contract Documents, the Trade Contractor shall be responsible for costs of correction and retesting.

3.7 WARRANTY



3.7.1 The Trade Contract Work shall be executed in accordance with the Trade Contract Documents in a workmanlike manner. The Trade Contractor warrants that all materials and equipment shall be furnished in sufficient quantities to facilitate the proper and expeditious execution of the Trade Contract Work and shall be new unless otherwise specified, of good quality, in conformance with the Trade Contract Documents, and free from defective workmanship and materials. At the Owner's or Construction Manager's request, the Trade Contractor shall furnish satisfactory evidence of the quality and type of materials and equipment furnished. The Trade Contractor further warrants that the Trade Contract Work shall be free from material defects not intrinsic in the design or materials required in the Trade Contract Documents. The Trade Contractor's warranty does not include remedies for defects or damages caused by normal wear and tear during normal usage, use for a purpose for which the Project was not intended, improper or insufficient maintenance, modifications performed by the Owner or Others, or abuse. The Trade Contractor's warranty pursuant to this section shall commence on the Date of Substantial Completion.

3.7.2 The Trade Contractor shall obtain from its Subcontractors and material suppliers any special or extended warranties required by the Trade Contract Documents. All such warranties shall be listed in an attached Exhibit to this Agreement.

3.8 CORRECTION OF TRADE CONTRACT WORK WITHIN ONE YEAR

3.8.1 If, prior to Substantial Completion and within one year after the date of Substantial Completion of the Trade Contract Work, any Defective Work is found, the Owner shall promptly notify the Trade Contractor in writing. Unless the Owner provides written acceptance of the condition, the Trade Contractor shall promptly correct the Defective Work at its own cost and time and bear the expense of additional services required for correction of any Defective Work for which it is responsible. If within the one-year correction period the Owner discovers and does not promptly notify the Trade Contractor or give the Trade Contractor an opportunity to test or correct Defective Work as reasonably requested by the Trade Contractor, the Owner waives the Trade Contractor's obligation to correct that Defective Work as well as the Owner's right to claim a breach of the warranty with respect to that Defective Work.

3.8.2 With respect to any portion of Trade Contract Work first performed after Substantial Completion, the one-year correction period shall be extended by the period of time between Substantial Completion and the actual performance of the later Trade Contract Work. Correction periods shall not be extended by corrective work performed by the Trade Contractor.

3.8.3 If the Trade Contractor fails to correct Defective Work within a reasonable time after receipt of written notice from the Owner prior to final payment, the Owner may correct it in accordance with the Owner's right to carry out the Trade Contract Work in section 11.2. In such case, an appropriate Trade Contract Change Order shall be issued deducting the cost of correcting such deficiencies from payments then or thereafter due the Trade Contractor. If payments then or thereafter due Trade Contractor are not sufficient to cover such amounts, the Trade Contractor shall pay the difference to the Owner.

3.8.4 If after the one-year correction period but before the applicable limitation period the Owner discovers any Defective Work, the Owner shall, unless the Defective Work requires emergency correction, promptly notify the Trade Contractor. If the Trade Contractor elects to correct the Defective Work, it shall provide written notice of such intent within fourteen (14) Days of its receipt of notice from the Owner. The Trade Contractor shall complete the correction of Defective Work within a time frame mutually agreed upon by the Trade Contractor and the Owner. If the Trade Contractor does not elect to correct the Defective Work, the Owner may have the Defective Work corrected by itself or Others and charge the Trade Contractor for the reasonable cost of the correction and other directly related



expenses. Owner shall provide Trade Contractor with an accounting of correction costs it incurs.

3.8.5 If the Trade Contractor's correction or removal of Defective Work causes damage to or destroys other completed or partially completed Work or existing buildings, the Trade Contractor shall be responsible for the cost of correcting the destroyed or damaged property.

3.8.6 The one-year period for correction of Defective Work does not constitute a limitation period with respect to the enforcement of the Trade Contractor's other obligations under the Trade Contract Documents.

3.8.7 Prior to final payment, at the Owner's option and with the Trade Contractor's agreement, the Owner may elect to accept Defective Work rather than require its removal and correction. In such case the Contract Price shall be equitably adjusted for any diminution in the value of the Project caused by such Defective Work. Before the Owner accepts any such change it must be documented in writing with a Change Order signed by both the Trade Contractor and Owner.

3.9 CORRECTION OF COVERED TRADE CONTRACT WORK

3.9.1 On request of the Owner or Construction Manager, Trade Contract Work that has been covered without a requirement that it be inspected prior to being covered may be uncovered for the Owner's or Construction Manager's inspection. The Owner shall pay for the costs of uncovering and replacement if the Work proves to be in conformance with the Trade Contract Documents, or if the defective condition was caused by the Owner or Others. If the uncovered Trade Contract Work proves to be defective, the Trade Contractor shall pay the costs of uncovering and replacement.

3.9.2 If contrary to specific requirements in the Trade Contract Documents or contrary to a specific request from the Owner or Construction Manager, a portion of the Trade Contract Work is covered, the Owner or Construction Manager, by written request, may require the Trade Contractor to uncover the Trade Contract Work for the Owner's or Construction Manager's observation. In this circumstance the Trade Contract Work shall be uncovered and recovered at the Trade Contractor's expense and with no adjustment to the Trade Contract Time. Costs incurred by the Owner as a direct result of the above shall be deducted from the Trade Contract Price.

3.10 SAFETY OF PERSONS AND PROPERTY

3.10.1 SAFETY PRECAUTIONS AND PROGRAMS The Trade Contractor shall have overall responsibility for safety precautions and programs in the performance of the Trade Contract Work. While this section establishes the responsibility for safety between the Owner and Trade Contractor, it does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with the provisions of applicable laws and regulations.

3.10.2 The Trade Contractor shall seek to avoid injury, loss or damage to persons or property by taking reasonable steps to protect:

3.10.2.1 its employees and other persons at the Worksite;

3.10.2.2 materials and equipment stored at on-site or off-site locations for use in the Trade Contract Work; and

3.10.2.3 property located at the site and adjacent to Trade Contract Work areas, whether or not the property is part of the Trade Contract Work.

3.10.3 TRADE CONTRACTOR'S SAFETY REPRESENTATIVE The Trade Contractor's Worksite Safety Representative is who shall act as the Trade Contractor's authorized safety representative with a duty



to prevent accidents in accordance with subsection 3.10.2 If no individual is identified in this section, the authorized safety representative shall be the Trade Contractor's Representative. The Trade Contractor shall report immediately in writing to the Owner and Construction Manager all recordable accidents and injuries occurring at the Worksite. When the Trade Contractor is required to file an accident report with a public authority, the Trade Contractor shall furnish a copy of the report to the Owner and Construction Manager.

3.10.4 The Trade Contractor shall provide the Owner and Construction Manager with copies of all notices required of the Trade Contractor by law or regulation. The Trade Contractor's safety program shall comply with the requirements of governmental and quasi-governmental authorities having jurisdiction.

3.10.5 Damage or loss not insured under property insurance which may arise from the Trade Contract Work, to the extent caused by the negligent acts or omissions of the Trade Contractor, or anyone for whose acts the Trade Contractor may be liable, shall be promptly remedied by the Trade Contractor.

3.10.6 If the Owner or Construction Manager deems any part of the Trade Contract Work or Worksite unsafe, the Owner or Construction Manager, without assuming responsibility for the Trade Contractor's safety program, may require the Trade Contractor to stop performance of the Trade Contract Work or take corrective measures satisfactory to the Owner, or both. If the Trade Contractor does not adopt corrective measures, the Owner may perform them and deduct their cost from the Trade Contract Price. The Trade Contractor agrees to make no claim for damages, for an increase in the Trade Contract Price or for a change in the Trade Contract Time based on the Trade Contractor's compliance with the Owner's or Construction Manager's reasonable request.

3.11 EMERGENCIES

3.11.1 In an emergency, the Trade Contractor shall act in a reasonable manner to prevent personal injury or property damage. Any change in the Trade Contract Price or Trade Contract Time resulting from the actions of the Trade Contractor in an emergency situation shall be determined as provided in ARTICLE 8.

3.12 HAZARDOUS MATERIALS

3.12.1 The Trade Contractor shall not be obligated to commence or continue Trade Contract Work until any Hazardous Material discovered at the Worksite has been removed, rendered or determined to be harmless by the Owner as certified by an independent testing laboratory and approved by the appropriate government agency.

3.12.2 If after the commencement of the Trade Contract Work a Hazardous Material is discovered at the Worksite, the Trade Contractor shall be entitled to immediately stop Trade Contract Work in the affected area. The Trade Contractor shall report the condition to the Owner, the Construction Manager, and, if required, the government agency with jurisdiction.

3.12.3 The Trade Contractor shall not be required to perform any Trade Contract Work relating to or in the area of Hazardous Material without written mutual agreement.

3.12.4 The Owner shall be responsible for retaining an independent testing laboratory to determine the nature of the Hazardous Material encountered and whether the material requires corrective measures or remedial action. Such measures shall be the sole responsibility of the Owner, and shall be performed in a manner minimizing any adverse effects upon the Trade Contract Work. The Trade Contractor shall resume Trade Contract Work in the area affected by any Hazardous Material only upon written agreement between the Parties after the Hazardous Material has been removed or rendered harmless



and only after approval, if necessary, of the governmental agency with jurisdiction.

3.12.5 If the Trade Contractor incurs additional costs or is delayed due to the presence or remediation of Hazardous Material, the Trade Contractor shall be entitled to an equitable adjustment in the Trade Contract Price or the Trade Contract Time.

3.12.6 To the extent not caused by the negligent acts or omissions of the Trade Contractor, its Subcontractors and Sub-subcontractors, and the agents, officers, directors and employees of each of them, the Owner shall defend, indemnify and hold harmless the Trade Contractor, its Subcontractors and Sub-subcontractors, and the agents, officers, directors and employees of each of them, from and against any and all direct claims, damages, losses, costs and expenses, including but not limited to attorney's fees, costs and expenses incurred in connection with any dispute resolution process, to the extent permitted pursuant to section 6.6, arising out of or relating to the performance of the Trade Contract Work in any area affected by Hazardous Material. To the extent portions of this paragraph are in conflict with SF 396 (codified at Iowa Code Section 537A.5) said portions are void and unenforceable.

3.12.7 MATERIALS BROUGHT TO THE WORKSITE

3.12.7.1 Material Safety Data (MSD) sheets as required by law and pertaining to materials or substances used or consumed in the performance of the Trade Contract Work, whether obtained by the Trade Contractor, Subcontractors, the Owner or Others, shall be maintained at the Worksite by the Trade Contractor and made available to the Owner, Construction Manager, Subcontractors and Others.

3.12.7.2 The Trade Contractor shall be responsible for the proper delivery, handling, application, storage, removal and disposal of all materials and substances brought to the Worksite by the Trade Contractor in accordance with the Trade Contract Documents and used or consumed in the performance of the Trade Contract Work.

3.12.7.3 The Trade Contractor shall indemnify and hold harmless the Owner, Construction Manager, their agents, officers, directors and employees, from and against any and all claims, damages, losses, costs and expenses, including but not limited to attorney's fees, costs and expenses incurred in connection with any dispute resolution procedure, arising out of or relating to the delivery, handling, application, storage, removal and disposal of all materials and substances brought to the Worksite by the Trade Contractor in accordance or not in accordance with the Trade Contract Documents. To the extent portions of this paragraph are in conflict with SF 396 (codified at Iowa Code Section 537A.5) said portions are void and unenforceable.

3.12.8 The terms of this section shall survive the completion of the Trade Work or any termination of this Agreement.

3.13 SUBMITTALS

3.13.1 The Trade Contractor shall submit to the Construction Manager, and the Design Professional, for review and approval all shop drawings, samples, product data and similar submittals required by the Trade Contract Documents. Submittals may be submitted in electronic form if required in accordance with ConsensusDocs 200.2 and subsection 4.4.1. The Trade Contractor shall be responsible to the Owner for the accuracy and conformity of its submittals to the Trade Contract Documents. The Trade Contractor shall prepare and deliver its submittals in a manner consistent with the Construction Schedule and in such time and sequence so as not to delay the performance of the Trade Contract Work or the work of the Owner and Others. When the Trade Contractor delivers its submittals the Trade Contractor shall identify in writing for each submittal all changes, deviations or substitutions from the requirements of the Trade Contract Documents. The review and approval of any Trade Contractor



submittal shall not be deemed to authorize changes, deviations or substitutions from the requirements of the Trade Contract Documents unless express written approval is obtained from the Owner specifically authorizing such deviation, substitution or change. To the extent a change, deviation or substitution causes an impact to the Contract Price or Contract Time, such approval shall be promptly memorialized in a Change Order. Further, the Construction Manager and Design Professional shall not make any change, deviation or substitution through the submittal process without specifically identifying and authorizing such deviation to the Trade Contractor. In the event that the Trade Contract Documents do not contain submittal requirements pertaining to the Trade Contract Work, the Trade Contractor agrees upon request to submit in a timely fashion to the Construction Manager and the Design Professional for review and approval any shop drawings, samples, product data, manufacturers' literature or similar submittals as may reasonably be required by the Owner, Construction Manager, or Design Professional.

3.13.2 The Owner shall be responsible for review and approval of submittals with reasonable promptness to avoid causing delay.

3.13.3 The Trade Contractor shall perform all Trade Contract Work strictly in accordance with approved submittals. Approval of shop drawings is not authorization to Trade Contractor to perform Changed Work, unless the procedures of ARTICLE 8 are followed. Approval does not relieve the Trade Contractor from responsibility for Defective Work resulting from errors or omissions of any kind on the approved Shop Drawings.

3.13.4 Record copies of the following, incorporating field changes and selections made during construction, shall be maintained by the Trade Contractor at the Project site and available to the Owner upon request: drawings, specifications, addenda, Trade Contract Change Order and other modifications, and required submittals including product data, samples and shop drawings.

3.13.5 No substitutions shall be made in the Trade Contract Work unless permitted in the Trade Contract Documents and then only after the Trade Contractor obtains approvals required under the Trade Contract Documents for substitutions. All such substitutions shall be promptly memorialized in a Change Order no later than seven (7) Days following approval by the Owner and, if applicable, provide for an adjustment in the Contract Price or Contract Time.

3.13.6 The Trade Contractor shall prepare and submit to the Construction Manager for submission to the Owner

(Check one only)

- final marked up as-built drawings
- updated electronic data, in accordance with ConsensusDocs 200.2 and section 4.4.1
- such documentation as defined by the Parties by attachment to this Agreement,

in general documenting how the various elements of the Trade Contract Work were actually constructed or installed.

3.14 PROFESSIONAL SERVICES

3.14.1 The Trade Contractor may be required to procure professional services in order to carry out its responsibilities for construction means, methods, techniques, sequences and procedures for such services specifically called for by the Contract Documents. The Trade Contractor shall obtain these professional services and any design certifications required from State of Iowa licensed design professionals. All drawings, specifications, calculations, certifications and submittals prepared by such



design professionals shall bear the signature and seal of such design professionals and the Owner and the Design Professional shall be entitled to rely upon the adequacy, accuracy and completeness of such design services. If professional services are specifically required by the Contract Documents, the Owner shall indicate all required performance and design criteria. The Trade Contractor shall not be responsible for the adequacy of such performance and design criteria. The Trade Contractor shall not be required to provide such services in violation of existing laws, rules and regulations in the jurisdiction where the Project is located.

3.15 WORKSITE CONDITIONS

3.15.1 WORKSITE VISIT The Trade Contractor acknowledges that it has visited, or has had the opportunity to visit, the Worksite to visually inspect the general and local conditions which could affect the Trade Contract Work.

3.15.2 CONCEALED OR UNKNOWN SITE CONDITIONS If the conditions at the Worksite are (a) subsurface or other concealed physical conditions which are materially different from those indicated in the Trade Contract Documents, or (b) unusual and unknown physical conditions which are materially different from conditions ordinarily encountered and generally recognized as inherent in Trade Contract Work provided for in the Trade Contract Documents, the Trade Contractor shall stop Trade Contract Work and give immediate written notice of the condition to the Owner, Construction Manager and the Design Professional. The Trade Contractor shall not be required to perform any work relating to the unknown condition without the written mutual agreement of the Parties. Any change in the Contract Price or the Contract Time as a result of the unknown condition shall be determined as provided in this article. The Trade Contractor shall provide the Owner and the Construction Manager with written notice of any claim as a result of unknown conditions within the time period set forth in section 8.4.

3.16 PERMITS AND TAXES

3.16.1 Trade Contractor shall give public authorities all notices required by law and, except for permits and fees which are the responsibility of the Owner pursuant to section 4.2, shall obtain and pay for all necessary permits, licenses and renewals pertaining to the Trade Contract Work. Trade Contractor shall provide to Owner copies of all notices, permits, licenses and renewals required under this Agreement.

3.16.2 Trade Contractor shall pay all applicable taxes legally enacted when bids are received or negotiations concluded for the Trade Contract Work provided by the Trade Contractor.

3.16.3 The Contract Price or Contract Time shall be equitably adjusted by Trade Contract Change Order for additional costs resulting from any changes in laws, ordinances, rules and regulations enacted after the date of this Agreement, including increased taxes.

3.16.3 (Deleted)

3.17 CUTTING, FITTING AND PATCHING

3.17.1 The Trade Contractor shall perform cutting, fitting and patching necessary to coordinate the various parts of the Trade Contract Work and to prepare its Trade Contract Work for the work of the Owner or Others.

3.17.2 Cutting, patching or altering the work of the Owner or Others shall be done with the prior written approval of the Owner. Such approval shall not be unreasonably withheld.

3.18 CLEANING UP

3.18.1 The Trade Contractor shall regularly remove debris and waste materials at the Worksite resulting



from the Trade Contract Work. Prior to discontinuing Trade Contract Work in an area, the Trade Contractor shall clean the area and remove all rubbish and its construction equipment, tools, machinery, waste and surplus materials. The Trade Contractor shall minimize and confine dust and debris resulting from construction activities. At the completion of the Trade Contract Work, the Trade Contractor shall remove from the Worksite all construction equipment, tools, surplus materials, waste materials and debris.

3.18.2 If the Trade Contractor fails to commence compliance with cleanup duties within two (2) business Days after written notification from the Owner or the Construction Manager of noncompliance, the Owner may implement appropriate cleanup measures without further notice and the cost shall be deducted from any amounts due or to become due the Trade Contractor in the next payment period.

3.19 ACCESS TO TRADE CONTRACT WORK The Trade Contractor shall facilitate the access of the Owner, Construction Manager, Design Professional and Others to Trade Contract Work in progress.

3.20 COST MONITORING The Trade Contractor shall provide the Construction Manager with cost monitoring information appropriate for the manner of Trade Contractor's compensation, to enable the Construction Manager to develop and track construction and project budgets, including amounts for work in progress, uncompleted work and proposed changes.

3.21 ROYALTIES, PATENTS AND COPYRIGHTS The Trade Contractor shall pay all royalties and license fees which may be due on the inclusion of any patented or copyrighted materials, methods or systems selected by the Trade Contractor and incorporated in the Trade Contract Work. The Trade Contractor shall defend, indemnify and hold the Owner harmless from all suits or claims for infringement of any patent rights or copyrights arising out of such selection. The Owner agrees to indemnify and hold the Trade Contractor harmless from any suits or claims of infringement of any patent rights or copyrights arising out of any patented or copyrighted materials, methods or systems specified by the Owner, Construction Manager and Design Professional. To the extent portions of this paragraph are in conflict with SF 396 (codified at Iowa Code Section 537A.5) said portions are void and unenforceable.

3.22 CONFIDENTIALITY The Owner shall treat as confidential information all of the Trade Contractor's estimating systems and historical and parameter cost data that may be disclosed to the Owner in connection with the performance of this Agreement if they are specified and marked as confidential and shall mark them. If a document is not marked as "Confidential" it will not be treated as such. Nothing contained herein, however, shall be interpreted in a manner that modifies or is in conflict with the purpose and application of the open records laws contained in the Code of Iowa.

ARTICLE 4 OWNER'S RESPONSIBILITIES

4.1 INFORMATION SERVICES

4.1.1 FULL INFORMATION Any information or services to be provided by the Owner shall be provided in a timely manner so as not to delay the Trade Contract Work.

4.1.2 FINANCIAL INFORMATION Upon the written request of the Trade Contractor, the Owner shall provide the Trade Contractor with evidence of Project financing. If requested in writing, evidence of such financing shall be a condition precedent to the Trade Contractor's commencing or continuing the Trade Contract Work. The Trade Contractor shall be notified by the Owner prior to any material change in Project financing.

4.1.3 WORKSITE INFORMATION Except to the extent that the Trade Contractor knows of any inaccuracy, the Trade Contractor is entitled to rely on Worksite information furnished by the Owner pursuant to this subsection. To the extent the Owner has obtained, or is required elsewhere in the



Trade Contract Documents to obtain, the following Worksite information, the Owner shall provide at the Owner's expense and with reasonable promptness:

4.1.3.1 information describing the physical characteristics of the site, including surveys, site evaluations, legal descriptions, data or drawings depicting existing conditions, subsurface conditions and environmental studies, reports and investigations;

4.1.3.2 tests, inspections and other reports dealing with environmental matters, Hazardous Material and other existing conditions, including structural, mechanical and chemical tests, required by the Trade Contract Documents or by law; and

4.1.3.3 any other information or services requested in writing by the Trade Contractor which are relevant to the Trade Contractor's performance of the Trade Contract Work and under the Owner's control. The information required by subsection 4.1.3 shall be provided in reasonable detail. Legal descriptions shall include easements, title restrictions, boundaries, and zoning restrictions. Worksite descriptions shall include existing buildings and other construction and all other pertinent site conditions. Adjacent property descriptions shall include structures, streets, sidewalks, alleys, and other features relevant to the Trade Contract Work. Utility details shall include available services, lines at the Worksite and adjacent and connection points. The information shall include public and private information, subsurface information, grades, contours, and elevations, drainage data, exact locations and dimensions, and benchmarks that can be used by the Trade Contractor in laying out the Trade Contract Work. The Trade Contractor shall in writing request from the Owner any information identified in Paragraph 4.1.3 that the Trade Contractor believes the Owner has obtained but has not provided to the Trade Contractor.

4.1.3.4 OWNER'S REPRESENTATIVE The Owner's representative is test. The Owner's representative shall have authority to bind the Owner in all matters relating to this Agreement including, without limitation, all matters requiring the Owner's approval, authorization or written notice. If the Owner changes its representative as listed above, the Owner shall notify the Trade Contractor in advance in writing. The Owner's Representative is also authorized to resolve disputes in accordance with Section 12.2 of this Agreement. The Construction Manager, while unauthorized to modify the Agreement or settle a dispute without the Owner's approval, however, does have the requisite authority to act as the Owner's agent throughout the construction of the Project in accordance with the contract between the Owner and the Construction Manager (ConsensusDOCS 801 as modified by the State of Iowa).

4.2 BUILDING PERMIT, FEES AND APPROVALS Except for those permits and fees related to the Trade Contract Work which are the responsibility of the Trade Contractor pursuant to subsection 3.16.1, the Owner shall secure and pay for all other permits, approvals, easements, assessments and fees required for the development, construction, use or occupancy of permanent structures or for permanent changes in existing facilities, including the building permit.

4.3 Deleted

4.4 TRADE CONTRACT DOCUMENTS Unless otherwise specified, Owner shall provide One (1) copies of the Trade Contract Documents to the Trade Contractor without cost. Additional copies will be provided to the Trade Contractor at cost. This paragraph is not intended to be in conflict with Iowa Code Section 26.3 requirement that a sufficient number of copies of the contract documents be made available to bidders without charge (but a deposit not to exceed \$250 per set may be required). If the Trade Contractor was required to make a deposit for a set of Trade Contract Documents for purposes of bidding then the Trade Contractor may elect to have the deposit returned instead of being provided with an additional copy.



4.4.1 DIGITIZED DOCUMENTS If the Owner requires that the Owner, Design Professional, Construction Manager and Trade Contractor exchange documents and data in electronic or digital form, prior to any such exchange, the Owner, Design Professional, Construction Manager and Trade Contractor shall agree on a written protocol governing all exchanges in ConsensusDocs 200.2 or a separate Agreement, which, at a minimum, shall specify: (a) the definition of documents and data to be accepted in electronic or digital form or to be transmitted electronically or digitally; (b) management and coordination responsibilities; (c) necessary equipment, software and services; (d) acceptable formats, transmission methods and verification procedures; (e) methods for maintaining version control; (f) privacy and security requirements; and (g) storage and retrieval requirements. Except as otherwise agreed to by the Parties in writing, the Parties shall each bear their own costs as identified in the protocol. In the absence of a written protocol, use of documents and data in electronic or digital form shall be at the sole risk of the recipient.

4.5 OWNER'S CUTTING AND PATCHING Cutting, patching or altering the Trade Contract Work by the Owner or Others shall be done with the prior written approval of the Trade Contractor, which approval shall not be unreasonably withheld.

4.6 OWNER'S RIGHT TO CLEAN UP In case of a dispute between the Trade Contractor and Others with regard to respective responsibilities for cleaning up at the Worksite, the Owner may implement appropriate cleanup measures after two (2) business Days' notice and allocate the cost among those responsible during the following pay period.

4.7 COST OF CORRECTING DAMAGED OR DESTROYED WORK With regard to damage or loss attributable to the acts or omissions of the Owner or Others and not to the Trade Contractor, the Owner may either (a) promptly remedy the damage or loss or (b) accept the damage or loss. If the Trade Contractor incurs additional costs or is delayed due to such loss or damage, the Trade Contractor shall be entitled to an equitable adjustment in the Trade Contract Price or Trade Contract Time.

ARTICLE 5 SUBCONTRACTS

5.1 SUBCONTRACTORS The Trade Contract Work not performed by the Trade Contractor with its own forces shall be performed by Subcontractors.

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE TRADE CONTRACT WORK

5.2.0 The Trade Contractor must identify all Subcontractors and suppliers within 48 hours of the published date and time for which bids must be submitted, in accordance with Iowa Code Section 8A.311, as amended by House File 646 in 2011. Subcontractors and suppliers may not be changed without the approval of the Owner. Requests for changing a Subcontractor or supplier must identify the reason for the proposed change, the name of the new Subcontractor or supplier, and the change in the subcontractor or supplier price as a result of the change. Any reduction in subcontractor or supplier price as a result of the change, if the change is approved by the Owner, shall be deducted from the Trade Contract Price via a deductive Change Order. Any such changes, if approved by the Owner, which result in an increase in the Trade Contract Price shall be borne by the Trade Contractor.

5.2.1 If the Owner has a reasonable objection to any proposed subcontractor or material supplier, the Owner shall notify the Trade Contractor in writing.

5.2.2 If the Owner has reasonably and promptly objected as provided in subsection 5.2.1, the Trade Contractor shall not contract with the proposed subcontractor or material supplier, and the Trade Contractor shall propose another Subcontractor acceptable to the Owner. To the extent the substitution results in an increase or decrease in the Trade Contract Price or Trade Contract Time, an appropriate



Trade Contract Change Order shall be issued as provided in ARTICLE 8.

5.3 BINDING OF SUBCONTRACTORS The Trade Contractor agrees to bind every Subcontractor (and require every Subcontractor to so bind its subcontractors) to all the provisions of this Agreement and the Trade Contract Documents as they apply to the Subcontractor's portion of the Trade Contract Work.

5.4 Deleted

5.5 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

5.5.1 If this Agreement is terminated, each subcontract agreement shall be assigned by the Trade Contractor to the Owner, subject to the prior rights of any surety, provided that:

5.5.1.1 this Agreement is terminated by the Owner pursuant to sections 11.3 or 11.4; and

5.5.1.2 the Owner accepts such assignment after termination by notifying the Subcontractor and Trade Contractor in writing, and assumes all rights and obligations of the Contractor pursuant to each subcontract agreement.

5.5.2 If the Owner accepts such an assignment, and the Work has been suspended for more than thirty (30) consecutive Days, following termination, if appropriate, the Subcontractor's compensation shall be equitably adjusted as a result of the suspension.

ARTICLE 6 TRADE CONTRACT TIME

6.1 PERFORMANCE OF THE TRADE CONTRACT WORK

6.1.1 DATE OF COMMENCEMENT The Date of Commencement is the date of Owner's written notice to proceed unless otherwise set forth below:

6.1.2 TIME Substantial Completion of the Trade Contract Work shall be achieved in xxx (xx) Days from the Date of Commencement. Unless otherwise specified in the Certificate of Substantial Completion, the Trade Contractor shall achieve Final Completion within 30 Days after the date of Substantial Completion, subject to adjustments as provided for in the Trade Contract Documents.

6.1.3 Time limits stated above are of the essence of this Agreement.

6.1.4 Unless instructed by the Owner in writing, the Trade Contractor shall not knowingly commence the Trade Contract Work before the effective date of insurance to be provided by the Trade Contractor and Owner as required by the Trade Contract Documents.

6.2 CONSTRUCTION SCHEDULE Prior to the commencement of the construction of the Trade Contract Work, the Trade Contractor shall submit a copy of its critical path method (CPM) construction schedule showing the completion of the Trade Contract Work within the allowable number of days identified above. The Trade Contractor shall regularly update its CPM construction schedule for the Trade Contract Work and promptly furnish the Construction Manager on an ongoing basis scheduling information requested by the Construction Manager for the Trade Contract Work. In consultation with the Trade Contractor, the Construction Manager shall incorporate the Trade Contract Work and work of other trade contractors into an overall Construction Schedule for the entire Project. The Trade Contractor shall be bound by the Construction. Nothing in this Trade Contractor Agreement shall relieve the Trade Contractor of any liability for any unexcused failure to comply with its original schedule, the Construction Schedule, or any completion dates. The Construction Manager shall have the right to coordinate the Trade Contractors, including the right, if necessary, to change the time, order and priority in which the various portions of the Trade Contract Work and the other work associated with the Project shall be performed.



6.3 DELAYS AND EXTENSIONS OF TIME

6.3.1 If the Trade Contractor is delayed at any time in the commencement or progress of the Work by any cause beyond the control of the Trade Contractor, the Trade Contractor shall be entitled to an equitable extension of the Trade Contract Time if the Trade Contractor is able to show that the critical path of the Trade Contract Work was delayed by causes beyond the control of the Trade Contractor. Examples of causes beyond the control of the Trade Contractor include, but are not limited to, the following: acts or omissions of the Owner, the Design Professional, Construction Manager or Others; changes in the Work or the sequencing of the Work ordered by the Owner, or arising from decisions of the Owner that impact the time of performance of the Work; transportation delays not reasonably foreseeable; labor disputes not involving the Trade Contractor; general labor disputes impacting the Project but not specifically related to the Worksite; fire; terrorism, epidemics, adverse governmental actions, unavoidable accidents or circumstances; adverse weather conditions not reasonably anticipated; encountering Hazardous Materials; concealed or unknown conditions; delay authorized by the Owner pending dispute resolution; and suspension by the Owner under section 11.1. The Trade Contractor shall submit any requests for equitable extensions of Contract Time in accordance with the provisions of ARTICLE 8.

6.3.2 In addition, if the Trade Contractor is able to show that it incurred additional costs because the critical path of the Trade Contract Work was delayed by acts or omissions of the Owner, the Design Professional, Construction Manager or Others, changes in the Work or the sequencing of the Work ordered by the Owner, or arising from decisions of the Owner that impact the time of performance of the Work, encountering Hazardous Materials, or concealed or unknown conditions, delay authorized by the Owner pending dispute resolution or suspension by the Owner under section 11.1, then the Trade Contractor shall be entitled to an equitable adjustment in the Trade Contract Price subject to section 6.6.

6.3.3 NOTICE OF DELAYS In the event delays to the Trade Contract Work are encountered for any reason, the Trade Contractor shall provide prompt written notice to the Owner and the Construction Manager of the cause of such delays after Trade Contractor first recognizes the delay. The Owner and Trade Contractor agree to undertake reasonable steps to mitigate the effect of such delays.

6.4 NOTICE OF DELAY CLAIMS If the Trade Contractor believes it is due an equitable extension of Trade Contract Time or an equitable adjustment in Trade Contract Price as a result of a delay described in subsection 6.3.1, the Trade Contractor shall give the Owner and the Construction Manager written notice of the claim in accordance with section 8.4. If the Trade Contractor causes delay in the completion of the Trade Contract Work, the Owner shall be entitled to recover its additional costs subject to subsection 6.6. The Owner shall process any such claim against the Trade Contractor in accordance with ARTICLE 8.

6.5 LIQUIDATED DAMAGES

6.5.1 SUBSTANTIAL COMPLETION The Owner and the Trade Contractor agree that this Agreement shall / shall not (indicate one) provide for the imposition of liquidated damages based on the Date of Substantial Completion.

6.5.1.1 The Trade Contractor understands that if the Date of Substantial Completion established by this Agreement, as may be amended by subsequent Trade Change Order, is not attained, the Owner will suffer damages which are difficult to determine and accurately specify. The Trade Contractor agrees that if the Date of Substantial Completion is not attained the Trade Contractor shall pay the Owner Zero Dollars and No Cents (\$0.00) as liquidated damages and not as a penalty for each day that Substantial Completion extends beyond the Date of Substantial Completion. The liquidated damages provided herein shall be in lieu of all liability for any and all



extra costs, losses, expenses, claims, penalties and any other damages of whatsoever nature incurred by the Owner which are occasioned by any delay in achieving the Date of Substantial Completion.

6.5.2 FINAL COMPLETION The Owner and the Trade Contractor agree that this Agreement shall / shall not (indicate one) provide for the imposition of liquidated damages based on the Date of Final Completion.

6.5.2.1 The Trade Contractor understands that if the Date of Final Completion established by this Agreement, as may be amended by subsequent Trade Change Order is not attained, the Owner will suffer damages which are difficult to determine and accurately specify. The Trade Contractor agrees that if the Date of Final Completion is not attained the Trade Contractor shall pay the Owner Zero Dollars and No Cents (\$0.00) as liquidated damages and not as a penalty for each day that Final Completion extends beyond the Date of Final Completion. The liquidated damages provided herein shall be in lieu of all liability for any and all extra costs, losses, expenses, claims, penalties and any other damages of whatsoever nature incurred by the Owner which are occasioned by any delay in achieving the Date of Final Completion.

6.5.3 OTHER LIQUIDATED DAMAGES The Owner and the Trade Contractor may agree upon the imposition of liquidated damages based on other project milestones or performance requirements. Such agreement shall be included as an exhibit to this Agreement.

6.6 LIMITED MUTUAL WAIVER OF CONSEQUENTIAL DAMAGES Except for damages mutually agreed upon by the Parties as liquidated damages in Section 6.5 and excluding losses covered by insurance required by the Trade Contract Documents, the Owner and the Trade Contractor agree to waive all claims against each other for any consequential damages that may arise out of or relate to this Agreement, except for those specific items of damages excluded from this waiver as mutually agreed upon by the Parties and identified below. The Owner agrees to waive damages including but not limited to the Owner's loss of use of the Project, any rental expenses incurred, loss of income, profit or financing related to the Project, as well as the loss of business, loss of financing, principal office overhead and expenses, loss of profits not related to this Project, loss of reputation, or insolvency. The Trade Contractor agrees to waive damages including but not limited to loss of business, loss of financing, principal office overhead and expenses, loss of profits not related to this Project, loss of bonding capacity, loss of reputation, or insolvency. The provisions of this section shall also apply to the termination of this Agreement and shall survive such termination.

6.6.1 The following items of damages are excluded from this mutual waiver: The provisions of this section shall also apply to the termination of this Agreement and shall survive such termination. The Owner and the Trade Contractor shall require similar waivers in contracts with Subcontractors and Others retained for the Project.

ARTICLE 7 TRADE CONTRACT PRICE

7.1 LUMP SUM As full compensation for performance by the Trade Contractor of the Work in conformance with the Contract Documents, the Owner shall pay the Trade Contractor the lump sum price of: XX dollars and XX cents (\$XX.XX) . The lump sum price is hereinafter referred to as the Trade Contract Price, which shall be subject to increase or decrease as provided in article 8.

Lump Sum Price includes Base Bid of \$X.XX and Alternate #XX for {alternate description} for \$X.XX for a total Lump Sum Price of \$X.XX.

7.2 ALLOWANCES

7.2.1 All allowances stated in the Trade Contract Documents shall be included in the Trade Contract Price. The Owner shall select allowance items in a timely manner so as not to delay the Trade Contract



Work.

7.2.2 Allowances shall include the costs of materials, supplies and equipment delivered to the Worksite, less applicable trade discounts and including requisite taxes, unloading and handling at the Worksite, and labor and installation, unless specifically stated otherwise. The Trade Contractor's Overhead and profit for the allowances shall be included in the Trade Contract Price, but not in the allowances. The Trade Contract Price shall be adjusted by Trade Contract Change Order to reflect the actual costs when they are greater than or less than the allowances.

ARTICLE 8 CHANGES

Changes in the Trade Contract Work that are within the general scope of this Agreement shall be accomplished, without invalidating this Agreement, by Trade Contract Change Order, and Trade Contract Interim Directed Change.

8.1 TRADE CHANGE ORDER

8.1.1 The Owner may order or the Trade Contractor may request changes in the Trade Contract Work or the timing or sequencing of the Trade Contract Work that impacts the Trade Contract Price or the Trade Contract Time. All such changes in the Trade Contract Work that affect Trade Contract Time or Trade Contract Price shall in the form of a Trade Contract Change Order. Any such requests for a change in the Trade Contract Price or the Trade Contract Time shall be processed in accordance with this article 8. Trade Contract Change Orders shall be executed on the ConsensusDOCS 813 - Trade Contract Change Order (CM as Owner's Agent) with attachments as necessary.

8.1.2 The Owner, with the assistance of the Construction Manager, and the Trade Contractor shall negotiate in good faith an appropriate adjustment to the Trade Contract Price or the Trade Contract Time and shall conclude these negotiations as expeditiously as possible. Acceptance of the Trade Contract Change Order and any adjustment in the Trade Contract Price or Trade Contract Time shall not be unreasonably withheld.

8.2 TRADE CONTRACT INTERIM DIRECTED CHANGE

8.2.1 The Construction Manager may issue a written Trade Contract Interim Directed Change signed by the Owner directing a change in the Trade Contract Work prior to reaching agreement with the Trade Contractor on the adjustment, if any, in the Trade Contract Price or the Trade Contract Time.

8.2.2 The Owner, with the assistance of the Construction Manager, and the Trade Contractor shall negotiate expeditiously and in good faith for appropriate adjustments, as applicable, to the Trade Contract Price or the Trade Contract Time arising out of a Trade Contract Interim Directed Change. As the Trade Contract Changed Work is performed, the Trade Contractor shall submit its costs for such work with its application for payment beginning with the next application for payment within thirty (30) Days of the issuance of the Trade Contract Interim Directed Change. If there is a dispute as to the cost to the Owner, the Trade Contractor shall continue to perform the Trade Contract Changed Work set forth in the Trade Contract Interim Directed Change and the Owner shall pay the requirements Trade Contractor the Cost of the Work, defined in 8.3.1.3 below upon receipt of an application for payment and the Owner's (and the Architect's and construction manger's) determination that the work has been completed. The Parties reserve their rights as to the disputed amount, subject to the requirements ARTICLE 12.

8.2.3 When the Owner and the Trade Contractor agree upon the adjustment in the Trade Contract Price or the Trade Contract Time, for a change in the Trade Contract Work directed by a Trade Contract Interim Directed Change, such agreement shall be the subject of a Trade Contract Change Order. The



Trade Contract Change Order shall include all outstanding Trade Contract Interim Directed Changes on which the Owner and Trade Contractor have reached agreement on Contract Price or Contract Time issued since the last Trade Contract Change Order.

8.3 DETERMINATION OF COST

8.3.1 An increase or decrease in the Trade Contract Price or the Trade Contract Time resulting from a change in the Trade Contract Work shall be determined by one or more of the following methods:

8.3.1.1 unit prices set forth in this Agreement or as subsequently agreed;

8.3.1.2 a mutually accepted, itemized lump sum;

8.3.1.3 COST OF THE WORK Cost of the Work as defined by this subsection plus 10.0 % for Overhead and 5.0 % for profit. "Cost of the Work" shall include the following costs reasonably incurred to perform a change in the Work

8.3.1.3.1 wages paid for labor in the direct employ of the Constructor in the performance of the Work;

8.3.1.3.2 salaries of the Trade Contractor's employees when stationed at the field office to the extent necessary to complete the applicable Work, employees engaged on the road expediting the production or transportation of material and equipment, and supervisory employees from the principal or branch office performing the functions listed below;

8.3.1.3.3 cost of applicable employee benefits and taxes, including but not limited to, workers' compensation, unemployment compensation, social security, health, welfare, retirement and other fringe benefits as required by law, labor agreements, or paid under the Trade Contractor's standard personnel policy, insofar as such costs are paid to employees of the Trade Contractor who are included in the Cost of the Work in subsections .1 and .2 immediately above;

8.3.1.3.4 reasonable transportation, travel, and hotel expenses of the Trade Contractor's personnel incurred in connection with the Work;

8.3.1.3.5 cost of all materials, supplies, and equipment incorporated in the Work, including costs of inspection and testing if not provided by the Owner, transportation, storage, and handling;

8.3.1.3.6 payments made by the Trade Contractor to Subcontractors for Work performed under this Agreement;

8.3.1.3.7 cost, including transportation and maintenance of all materials, supplies, equipment, temporary facilities, and hand tools not owned by the workers that are used or consumed in the performance of the Work, less salvage value or residual value; and cost less salvage value of such items used, but not consumed that remain the property of the Trade Contractor;

8.3.1.3.8 rental charges of all necessary machinery and equipment, exclusive of hand tools owned by workers, used at the Worksite, whether rented from the Trade Contractor or Others, including installation, repair and replacement, dismantling, removal, maintenance, transportation, and delivery costs. Rental from unrelated third parties shall be reimbursed at actual cost. Rentals from the Trade Contractor or its affiliates, subsidiaries, or related parties shall be reimbursed at the prevailing rates in the locality of the Worksite up to eighty-five percent (85%) of the value of the piece of equipment;

8.3.1.3.9 cost of the premiums for all insurance and surety bonds which the Trade Contractor is



required to procure or deems necessary, and approved by the Owner including any additional premium incurred as a result of any increase in the cost of the Work;

8.3.1.3.10 sales, use, gross receipts or other taxes, tariffs, or duties related to the Work for which the Trade Contractor is liable;

8.3.1.3.11 permits, fees, licenses, tests, and royalties;

8.3.1.3.12 reproduction costs, photographs, facsimile transmissions, long-distance telephone calls, data processing costs and services, postage, express delivery charges, data transmission, telephone service, and computer-related costs at the Worksite to the extent such items are used and consumed in the performance of the Work or are not capable of use after completion of the Work;

8.3.1.3.13 all water, power, and fuel costs necessary for the Work;

8.3.1.3.14 cost of removal of all nonhazardous substances, debris, and waste materials;

8.3.1.3.15 all costs directly incurred to perform a change in the Work which are reasonably inferable from the Contract Documents for the Changed Work;

8.3.1.3.16 DISCOUNTS All discounts for prompt payment shall accrue to the Owner to the extent such payments are made directly by the Owner. To the extent payments are made with funds of the Constructor, all cash discounts shall accrue to the Constructor. All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment, shall be credited to the Cost of the Work;

8.3.1.3.17 COST REPORTING The Trade Contractor shall maintain in conformance with generally accepted accounting principles a complete and current set of records that are prepared or used by the Trade Contractor to calculate the Cost of Work. The Owner and Construction Manager shall be afforded access to the Trade Contractor's records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda and similar data relating to requested payment for Cost of the Work. The Trade Contractor shall preserve all such records for a period of three years after the final payment or longer where required by law;

8.3.1.3.18 COST AND SCHEDULE ESTIMATES The Trade Contractor shall use reasonable skill and judgment in the preparation of a cost estimate or schedule for a change to the Work, but does not warrant or guarantee their accuracy

8.3.1.4 If an increase or decrease cannot be agreed to as set forth in Clauses .1 through .3 above, and the Owner or the Construction Manager issues a Trade Contract Interim Directed Change, the cost of the change in the Trade Contract Work shall be determined by the reasonable actual expense and savings of the performance of the Work resulting from the change. If there is a net increase in the Trade Contract Price, the Trade Contractor's Fee shall be adjusted accordingly. In case of a net decrease in the Trade Contract Price, the Trade Contractor's Fee shall not be adjusted unless ten percent (10%) or more of the Project is deleted. The Trade Contractor shall maintain a documented, itemized accounting evidencing the expenses and savings.

8.3.2 If unit prices are set forth in the Trade Contract Documents or are subsequently agreed to by the Parties, but the character or quantity of such unit items as originally contemplated is so different in a proposed Trade Change Order that the original unit prices will cause substantial inequity to the Owner or the Trade Contractor, such unit prices shall be equitably adjusted.

8.4 CLAIMS FOR ADDITIONAL COST OR TIME Except as provided in subsection 6.3.2 and section 6.4 for



any claim for an increase in the Trade Contract Price or the Trade Contract Time, the Trade Contractor shall give the Owner and the Construction Manager written notice of the claim within fourteen (14) Days after the occurrence giving rise to the claim or within fourteen (14) Days after the Trade Contractor first recognizes (or should have recognized) the condition giving rise to the claim, whichever is later. Except in an emergency, notice shall be given before proceeding with the Trade Contract Work. Thereafter, the Trade Contractor shall submit written documentation of its claim, including appropriate supporting documentation, within twenty-one (21) Days after giving notice, unless the Parties mutually agree upon a period of time. The Owner or Construction Manager shall respond in writing denying or approving the Trade Contractor's claim no later than fourteen (14) Days after receipt of the Trade Contractor's claim. Any change in the Trade Contract Price or the Trade Contract Time resulting from such claim shall be authorized by Trade Contract Change Order.

ARTICLE 9 PAYMENT

9.1 GENERAL PROVISIONS Within fourteen (14) calendar Days from the date of execution of this Agreement, the Trade Contractor shall prepare and submit to the Construction Manager for approval a Schedule of Values apportioned to the various divisions or phases of the Trade Contract Work. Each line item contained in the Schedule of Values shall be assigned a monetary price such that the total of all such items shall equal the Trade Contract Price. The Schedule of Values shall be prepared in such detail and be supported by such documents and proof as may be required by the Construction Manager.

9.2 PROGRESS PAYMENTS

9.2.1 APPLICATIONS The Trade Contractor shall submit to the Construction Manager monthly notarized applications for payment. Trade Contractor's applications for payment shall be itemized and supported by the Trade Contractor's Schedule of Values and any other substantiating data as required by this Trade Contractor Agreement or requested by the Construction Manager or Design Professional. Payment applications may include payment requests on account of properly authorized Trade Contract Change Orders and Interim Directed Changes. The progress payment application shall include Trade Contract Work performed through the preceding calendar month. The Construction Manager will review the application and recommend to the Design professional and the Owner amounts payable by the Owner to the Trade Contractor. The Owner, in accordance with the determination of the Design Professional, shall pay the amount otherwise due on any payment application, less any amounts as set forth below, no later than thirty (30) calendar Days after the payment application, or portion thereof, is approved the Design Professional. The Owner may deduct, from any progress payment, such amounts as may be retained pursuant to subsection 9.2.4 below.

9.2.2 STORED MATERIALS AND EQUIPMENT Unless otherwise provided in the contract documents, applications for payment may include materials and equipment not yet incorporated into the Work but delivered to and suitably stored onsite or offsite including applicable insurance, storage and costs incurred transporting the materials to an offsite storage facility. Approval of payment applications for stored materials and equipment stored offsite shall be conditioned on submission by the Trade Contractor of bills of sale and proof of required insurance, or such other procedures satisfactory to the Owner to establish the proper valuation of the stored materials and equipment, the Owner's title to such materials and equipment, and to otherwise protect the Owner's interests therein, including transportation to the site.

9.2.3 CLAIM WAIVERS

9.2.3.1 PARTIAL CLAIMWAIVERS AND AFFIDAVITS As a prerequisite for payment, the Trade Contractor shall provide, in a form satisfactory to the Owner and the Construction Manager, partial claim waivers in the amount of the application for payment and affidavits from the Trade Contractor, and its Subcontractors, Material Suppliers for the completed Trade Contract Work.



Such waivers shall be effective upon payment. In no event shall the Trade Contractor be required to sign an unconditional waiver of claim, either partial or final, prior to receiving payment or in an amount in excess of what it has been paid.

9.2.4 **RETAINAGE** From each progress payment made to the Trade Contractor has the Owner shall retain FIVE (5) percent of the amount otherwise due after deduction of any amounts as provided in section 9.3 and in no event shall such percentage exceed any applicable statutory requirements of this Agreement. Retainage shall be withheld and administered in accordance with Iowa Code Chapter 572:

9.3 **ADJUSTMENT OF TRADE CONTRACTOR'S PAYMENT APPLICATION** The Owner or the Construction Manager, upon notification of the Design Professional, may reject or adjust a Trade Contractor payment application or nullify a previously approved Trade Contractor payment application, in whole or in part, as may reasonably be necessary to protect the Owner from loss or damage based upon the following, to the extent that the Trade Contractor is responsible therefor under this Trade Contractor Agreement:

9.3.1 the Trade Contractor's repeated failure to perform the Trade Contract Work as required by the Trade Contractor Agreement;

9.3.2 loss or damage arising out of or relating to the Trade Contractor Agreement and caused by the Trade Contractor to the Owner, or to the Construction Manager or others to whom the Owner may be liable;

9.3.3 the Trade Contractor's failure to properly pay for labor, materials, equipment or supplies furnished in connection with the Trade Contract Work;

9.3.4 nonconforming or defective Trade Contract Work which has not been corrected in a timely fashion;

9.3.5 reasonable evidence of delay in performance of the Trade Contract Work such that the work will not be completed within the Trade Contract Time, and that the unpaid balance of the Trade Contract Price is not sufficient to offset any liquidated damages or actual damages that may be sustained by the Owner as a result of the anticipated delay caused by the Trade Contractor;

9.3.6 reasonable evidence demonstrating that the unpaid balance of the Trade Contract Price is insufficient to cover the cost to complete the Trade Contract Work; and

9.3.7 third-party claims involving the Trade Contractor or reasonable evidence demonstrating that third-party claims are likely to be filed unless and until the Trade Contractor furnishes the Owner with adequate security in the form of a surety bond, letter of credit or other collateral or commitment which are sufficient to discharge such claims if established. No later than thirty (30) Days after receipt of an application for payment, the Owner or Construction Manager shall give written notice to the Trade Contractor, disapproving or nullifying it or a portion thereof, specifying the reasons for the disapproval or nullification. When the above reasons for disapproving or nullifying an application for payment are removed, payment will be made for amounts previously withheld.

9.4 **PAYMENT NOT ACCEPTANCE** Payment to the Trade Contractor does not constitute or imply acceptance of any portion of the Trade Contract Work.

9.5 **PAYMENT DELAY** If for any reason not the fault of the Trade Contractor, the Trade Contractor does not receive a progress payment from the Owner sixty (60) calendar Days after the time such payment is due, as defined in Subparagraph 9.2.1, then the Trade Contractor, upon giving within seven (7) calendar Days after written notice to the Owner, and without prejudice to and in addition to any other legal remedies, may stop its Trade Contract Work until payment of the full amount owing to the Trade Contractor has been received. The



Trade Contract Price and Trade Contract Time shall be equitably adjusted by a Trade Contract Change Order to reflect reasonable cost and delay resulting from shutdown, delay and start-up.

9.6 SUBSTANTIAL COMPLETION

9.6.1 The Trade Contractor shall notify the Owner, the Construction Manager and the Design Professional when it considers Substantial Completion of the Trade Contract Work or a designated portion to have been achieved. The Construction Manager and the Design Professional shall promptly conduct an inspection to determine whether the Trade Contract Work or designated portion can be occupied or utilized for its intended use by the Owner without excessive interference in completing any remaining unfinished Trade Contract Work by the Trade Contractor. If the Construction Manager and the Design Professional determine that the Trade Contract Work or designated portion has not reached Substantial Completion, the Design Professional, and the Construction Manager, shall promptly compile a list of items to be completed or corrected so the Owner may occupy or utilize the Trade Contract Work or designated portion for its intended use. The Trade Contractor shall promptly complete all items on the list.

9.6.2 When Substantial Completion of the Trade Contract Work or a designated portion is achieved, the Construction Manager and the Design Professional shall prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion, and the respective responsibilities of the Owner and Trade Contractor for interim items such as security, maintenance, utilities, insurance and damage to the Trade Contract Work. The Owner shall assume all responsibilities for items such as security, maintenance, utilities, and insurance, and damage to the Work. The certificate shall also list the items to be completed or corrected, and establish the time for their completion or correction. The Certificate of Substantial Completion shall be submitted to the Trade Contractor for written acceptance of responsibilities assigned in the Certificate.

9.6.3 Unless otherwise provided in the Certificate of Substantial Completion, warranties required by the Trade Contract Documents shall commence on the date of Substantial Completion of the Trade Contract Work or a designated portion.

9.6.4 Uncompleted items shall be completed by the Trade Contractor by the Final Completion date set forth in the Agreement and/or Construction Schedule. The Trade Contractor may request early release of retainage in accordance with Iowa Code Section 26.13. Payment for completed work and retainage shall be made in accordance with Iowa Code Chapters 26 and 573.

9.7 PARTIAL OCCUPANCY OR USE The Owner may occupy or use completed or partially completed portions of the Trade Contract Work when (a) the portion of the Trade Contract Work is designated in a Certificate of Substantial Completion, (b) appropriate insurer(s) consent to the occupancy or use, and (c) appropriate public authorities authorize the occupancy or use. Such partial occupancy or use shall constitute Substantial Completion of that portion of the Trade Contract Work.

9.8 FINAL PAYMENT

9.8.1 APPLICATION Upon acceptance of the Trade Contract Work by the Construction Manager, and approval by the Design Professional, and upon the Trade Contractor furnishing evidence of fulfillment of the Trade Contractor's obligations in accordance with the Trade Contract Documents, the Trade Contractor shall submit its application for final payment. The Construction Manager will review the Trade Contractor's final payment application and recommend to the Design Professional and the Owner an amount payable by the Owner to the Trade Contractor. The Design Professional shall then recommend an amount to be paid by the Owner. Final payment shall be made in accordance with Iowa Code Chapters 26 and 573.



9.8.2 REQUIREMENTS Along with its application for final payment, the Trade Contractor shall furnish to the Construction Manager:

9.8.2.1 an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Trade Contract Work for which the Owner or its property or the Construction Manager or the Owner's surety might in any way be liable, have been paid or otherwise satisfied;

9.8.2.2 consent of the Trade Contractor's surety to final payment;

9.8.2.3 satisfaction of closeout procedures as may be required by the Trade Contractor Agreement;

9.8.2.4 certification (or other writing indicating) that insurance required by the Trade Contractor Agreement is and will remain effect beyond final payment pursuant to this Trade Contractor Agreement and

9.8.2.5 other data if required by the Owner or Construction Manager, such as receipts, releases, and waivers of liens effective upon payment to the extent and in such form as may be designated by the Owner or Construction Manager. Acceptance of final payment by the Trade Contractor shall constitute a waiver of all claims by the Trade Contractor except those previously made in writing and identified by the Trade Contractor as unsettled at the time of final application for payment.

9.8.3 TIME OF PAYMENT Final payment of the balance of the Trade Contract Price, less any amount retained pursuant to subsection 9.2.4 of this Agreement, and as required by Iowa Code Chapters 26 and 573, which among other things requires that twice the amount of an Iowa Code Chapter 573 subcontractor claim be withheld from final payment, shall be made to the Trade contractor within sixty (60) Days after the Trade Contractor has submitted a complete and accurate application for final payment.

9.8.4 LATE PAYMENT INTEREST Progress payments or final payment due and unpaid under this Trade Contractor Agreement shall bear interest from the date payment is due at the statutory rate prevailing at the place of the Project.

9.9 PAYMENT USE AND VERIFICATION The Trade Contractor is required to pay for all labor, materials and equipment used in the performance of the Trade Contract Work through the most current period applicable to progress payments received. Reasonable evidence, satisfactory to the Construction Manager, may be required to show that all obligations relating to the Trade Contract Work are current before releasing any payment due on the Trade Contract Work. If required by the Construction Manager, before final payment is made for the Trade Contract Work, the Trade Contractor shall submit evidence satisfactory to the Construction Manager that all payrolls, bills for materials and equipment, and all known indebtedness connected with the Trade Contract Work, have been paid or otherwise satisfied as set forth in subsection 9.8.2.

ARTICLE 10 INDEMNITY, INSURANCE, WAIVERS AND BONDS

10.1 INDEMNITY

10.1A To the extent portions of this Article are in conflict with SF 396 (codified at Iowa Code Section 573A.5) said portions are void and unenforceable.

10.1.1 TRADE CONTRACTOR'S INDEMNITY To the fullest extent permitted by law, the Trade Contractor shall indemnify and hold harmless the Owner, the Owner's officers, directors, members,



consultants, agents and employees, from all claims for bodily injury and property damage, other than to the Work itself and other property insured under subsection 10.3.1, including reasonable attorneys' fees, costs and expenses, that may arise from the performance of the Work, but only to the extent caused by the negligent acts or omissions of the Trade Contractor, Subcontractors or anyone employed directly or indirectly by any of them or by anyone for whose acts any of them may be liable. The Trade Contractor shall be entitled to reimbursement of any defense costs paid above the Trade Contractor's percentage of liability for the underlying claim to the extent provided for under subsection 10.1.2.

10.1.2 OWNER'S INDEMNITY To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Trade Contractor, its officers, directors, members, consultants, agents, and employees, from all claims for bodily injury and property damage, other than property insured under subsection 10.3.1, including reasonable attorneys' fees, costs and expenses, that may arise from the performance of work by Owner, Design Professional or Others, but only to the extent caused by the negligent acts or omissions of the Owner, Design Professional or Others. The Owner shall be entitled to reimbursement of any defense costs paid above Owner's percentage of liability for the underlying claim to the extent provided for under subsection 10.1.1.

10.1.3 CONSTRUCTION MANAGER AND DESIGN PROFESSIONAL INDEMNITY The Owner shall cause the Construction Manager and the Design Professional to agree to indemnify and hold harmless the Owner from all claims for bodily injury and property damage, other than to the Work itself and other property insured under section 10.3, that may arise from the Construction Manager's or the Design Professional's services, but only to the extent that such claims result from the negligent acts or omissions of the Construction Manager or the Design Professional, respectively, or anyone for whose acts or omissions the Construction Manager or Design Professional, respectively, is liable. Such provisions shall be in a form no less protective of the Parties than the Construction Manager's Indemnity provided in ConsensusDocs 801 (2011) or the Design Professional's indemnity provided in ConsensusDocs 803 (2011) respectively, and shall be reasonably satisfactory to the Owner and the Trade Contractor.

10.1.4 ADJACENT PROPERTY INDEMNIFICATION To the extent of the limits of Trade Contractor's Commercial General Liability Insurance specified in subsection 10.2.1 or Zero Dollars and No Cents (\$0.00) whichever is more, the Trade Contractor shall indemnify and hold harmless the Owner against any and all liability, claims, demands, damages, losses and expenses, including attorney's fees, in connection with or arising out of any damage or alleged damage to any of Owner's existing adjacent property that may arise from the performance of the Trade Contract Work, but only to the extent of the negligent acts or omissions of the Trade Contractor, Subcontractor or anyone employed directly or indirectly by any of them or by anyone for whose acts any of them may be liable.

10.1.5 NO LIMITATION ON LIABILITY In any and all claims against the Indemnitees by any employee of the Trade Contractor, anyone directly or indirectly employed by the Trade Contractor or anyone for whose acts the Trade Contractor may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Trade Contractor under Workers' Compensation acts, disability benefit acts or other employment benefit acts.

10.2 TRADE CONTRACTOR'S INSURANCE

10.2.1 Prior to the start of the Work, the Trade Contractor shall procure and maintain in force Workers Compensation/Employers' Liability Insurance, Business Automobile Liability Insurance, and Commercial General Liability Insurance (CGL). The CGL policy shall include coverage for liability arising from premises, operations, independent contractors, products-completed operations, personal injury and



advertising injury, contractual liability, and broad form property damage. The Trade Contractor's liability policies, as required in this Subparagraph 10.2.1, shall be written on an occurrence basis with at least the following limits of liability:

10.2.1.1 Workers' Compensation- amount required by the laws of Iowa

10.2.1.2 Employers' Liability Insurance - \$500,000 or an amount required by Iowa law, whichever is greater.

10.2.1.3 Business Automobile Liability Insurance

a. \$1,000,000 Each Accident

10.2.1.4 Commercial General Liability Insurance

a. \$1,000,000 Each Occurrence b. \$2,000,000 General Aggregate c. \$1,000,000 Products/Completed Operations Aggregate d. \$1,000,000 Personal and Advertising Injury Limit

10.2.2 The Trade Contractor Must also carry and maintain Excess or Umbrella Liability coverage for the policies in subsection 10.2.1 in the amounts as listed below:

Trade Contractor Contract Amount: <\$1,000,000 - \$2 Million Umbrella or more \$1,000,000 - \$5,000,000 - \$5 Million Umbrella or more >\$5,000,000 - \$10 Million Umbrella or more

10.2.3 The Trade Contractor shall maintain in effect all insurance coverage required under subsection 10.2.1 with insurance companies lawfully authorized to do business in Iowa. Such insurance companies shall have a minimum A.M. Best Rating of A-VI (Consult instructions and insurance advisor). If the Trade Contractor fails to obtain or maintain any insurance coverage required under this Agreement, the Owner may purchase such coverage and charge the expense to the Trade Contractor, or terminate this Agreement.

10.2.4 To the extent commercially available, the policies of insurance required under Subparagraph 10.2.1 shall contain a provision that the insurance company or its designee must give the Owner written notice transmitted in paper or electronic format: (a) 30 days before coverage is nonrenewed by the insurance company and (b) with 10 business days after cancellation of coverage by the insurance company. The Trade Contractor shall maintain completed operations liability insurance for one year after acceptance of the Contract Documents, whichever is longer. Prior to commencement of services, the Trade Contractor shall furnish the Owner with certificates evidencing the required coverages. In addition, if any insurance policy required under subsection 10.2.1 is not to be immediately replaced without a lapse in coverage when it expires, exhausts its limits, or is to be, cancelled, the Trade Contractor shall give Owner prompt written notice upon actual or constructive knowledge of such condition.

10.2.5 ADDITIONAL LIABILITY COVERAGE

10.2.5.1 The Owner shall / shall not (indicate one) require the Trade Contractor to purchase and maintain liability coverage, primary to the Owner's coverage under subsection 10.3.1.

10.2.5.2 If required by subsection 10.2.5.1, the additional liability coverage required of the Trade Contractor shall be:

1. Additional Insured Owner shall be named as an additional insured on Trade Contractor's Commercial General Liability Insurance specified for operations and completed operations,



but only with respect to liability for bodily injury, property damage or personal and advertising injury to the extent caused by the negligent acts or omissions of Trade Contractor, or those acting on Trade Contractor's behalf, in the performance of Trade Contractor's Work for.

2. OCP Trade Contractor shall provide an Owners' and Contractors' Protective Liability Insurance ("OCP") policy with limits equal to the limits on Commercial General Liability Insurance specified or limits as otherwise required by Owner.

Any documented additional cost in the form of a surcharge associated with procuring the additional liability coverage in accordance with this subsection shall be paid by the Owner directly or the costs may be reimbursed by the Owner to the Trade Contractor by increasing the Trade Contract Price to correspond to the actual cost required to purchase and maintain the additional liability coverage. Prior to commencement of the Work, the Trade Contractor shall obtain and furnish to the Owner a certificate evidencing that the additional liability coverages have been procured.

10.2.6 PROFESSIONAL LIABILITY INSURANCE To the extent the Trade Contractor is required to procure design services under this Agreement, in accordance with section 3.14, the Trade Contractor shall require the designers to obtain professional liability insurance for claims arising from the negligent performance of professional services under this Agreement, with a company reasonably satisfactory to the Owner, including coverage for all professional liability caused by any of the Designer's(s') consultants, written for not less than \$1,000,000 per claim and in the aggregate with the deductible not to exceed \$2,000,000. The deductible shall be paid by the Designer.

10.3 OWNER'S INSURANCE

10.3.1 Deleted.

10.3.2 Deleted.

10.4 PROPERTY INSURANCE

10.4.1 Before the start of Trade Contract Work, the Owner shall obtain and maintain Builder's Risk Policy insurance with minimum coverage limits equal to the full cost of replacement of the Project at the time of loss. This insurance shall also name the Trade Contractor, Subcontractors, Material Suppliers, Construction Manager and Design Professional as insureds. This insurance shall be written as a Builder's Risk Policy or equivalent form to cover all risks of physical loss except those specifically excluded by the policy, and shall insure at least against the perils of fire, lightning, explosion, windstorm, hail, smoke, aircraft and vehicles, riot and civil commotion, theft, vandalism, malicious mischief, debris removal, flood (subject to sublimits), earthquake (subject to sublimits), earth movement, water damage, wind damage, testing if applicable, collapse however caused, and shall include coverage for, material, or equipment stored offsite, onsite or in transit. This policy shall provide for a waiver of subrogation in favor of the Trade Contractor, Subcontractors, Material Suppliers, Construction Manager and Design Professional. This insurance shall remain in effect until the Substantial Completion of the Work, final payment has been made or until no person or entity other than the Owner has an insurable interest in the property to be covered by this insurance, whichever is sooner. Partial occupancy or use of the Work shall not commence until the Owner has secured the consent of the insurance company or companies providing the coverage required in this Subparagraph 10.4.1.

10.4.2 If the Owner does not intend to purchase the property insurance required by this Agreement, including all of the coverages and deductibles described herein, the Owner shall give written notice to the Trade Contractor, the Design Professional and the Construction Manager before the Trade Contract



Work is commenced. The Trade Contractor may then provide insurance to protect its interests and the interests of the Subcontractors, including the coverage of deductibles. The cost of this insurance shall be charged to the Owner in a Change Order. The Owner shall be responsible for all of Trade Contractor's costs reasonably attributed to the Owner's failure or neglect in purchasing or maintaining the coverage described above.

10.4.2.1 The Owner will not obtain insurance to cover the risk of physical loss resulting from Terrorism. The Construction Manager is not required to purchase this type of insurance but may purchase this type of insurance if it chooses. If purchased, the cost of this insurance shall be borne by the Construction manager.

10.4.3 POLICIES The Owner shall provide the Trade Contractor with a copy of all policies including all endorsements upon request.

10.5 PROPERTY INSURANCE LOSS ADJUSTMENT

10.5.1 LOSS ADJUSTMENT Any insured loss shall be adjusted with the Owner and the Trade Contractor and made payable to the Owner as trustee for the insureds, as their interests may appear.

10.5.2 DISTRIBUTION OF PROCEEDS Following the occurrence of an insured loss, monies received will be deposited in a separate account and the trustee shall make distribution in accordance with the agreement of the Parties in interest.

10.6 WAIVERS

10.6.1 PROPERTY DAMAGE The Owner and Trade Contractor waive all claims and other rights they may have against each other for loss of or damage to (a) the Project, (b) all materials, machinery, equipment and other items used in accomplishing the Trade Contract Work or services or to be incorporated into the Project, while the same are in transit, at the Project Site, during erection and otherwise, and (c) all property owned by or in the custody of Owner and its affiliates, however such loss or damage shall occur, to the extent such damage is covered by property insurance. The proceeds of such insurance shall be held by the Owner as trustee.

10.6.2 WAIVER OF SUBROGATION The Owner shall have its insurers waive all rights of subrogation they may have against the Construction Manager, Design Professional, Trade Contractors, and their Subcontractors and Material Suppliers on all policies carried by the Owner on the Project and adjacent properties, including, after final payment, those policies to be provided on the completed Project not intended to insure the Project during construction.

10.6.3 ENDORSEMENT If the policies of insurance referred to in this section require an endorsement to provide for continued coverage where there is a waiver of subrogation, the Owner will cause them to be so endorsed.

10.7 RISK OF LOSS Except to the extent a loss is covered by property insurance, carried by the owner, risk of loss or damage to the Work shall be upon the Trade Contractor until the Date of Final Completion, unless otherwise agreed to by the Parties.

10.8 BONDS Performance and Payment Bonds

are

are not

required of the Trade Contractor that meet the requirements of Iowa Code Chapter 573. A deposit in lieu of a



bond may be acceptable if it meets the requirements of Iowa Code Section 573.4. Such bonds shall be issued by a surety admitted in the State in which the Project is located and must be acceptable to the Owner. The Owner's acceptance shall not be withheld without reasonable cause. The penal sum of the Payment Bond and of the Performance Bond shall each be one hundred percent (100%) of the original Contract Price. Any increase in the Contract Price that exceeds ten percent (10%) in the aggregate shall require a rider to the Bonds increasing penal sums accordingly. Up to such ten percent (10%) amount, the penal sum of the Bond shall remain equal to one hundred percent (100%) of the Contract Price. The Trade Contractor shall endeavor to keep its surety advised of changes potentially impacting the Contract Time and Contract Price, though the Trade Contractor shall require that its surety waives any requirement to be notified of any alteration or extension of time. The Trade Contractor's Payment Bond for the Project, if any, shall be made available by the Owner for review and copying by the Subcontractor. Iowa Code Chapter 573 shall control and take precedence over any conflicting term or condition in this Agreement

ARTICLE 11 SUSPENSION, NOTICE TO CURE AND TERMINATION OF AGREEMENT

11.1 SUSPENSION BY OWNER FOR CONVENIENCE

11.1.1 OWNER SUSPENSION Should the Owner order the Trade Contractor in writing to suspend, delay, or interrupt the performance of the Trade Contract Work for such period of time as may be determined to be appropriate for the convenience of the Owner and not due to any act or omission of the Trade Contractor or any person or entity for whose acts or omissions the Trade Contractor may be liable, then the Trade Contractor shall immediately suspend, delay or interrupt that portion of the Trade Contract Work as ordered by the Owner. The Trade Contract Price and the Trade Contract Time shall be equitably adjusted by Trade Contract Change Order for the cost and delay resulting from any such suspension.

11.1.2 Any action taken by the Owner that is permitted by any other provision of the Trade Contract Documents and that results in a suspension of part or all of the Trade Contract Work does not constitute a suspension of Trade Contract Work under this section.

11.2 NOTICE TO CURE A DEFAULT If the Trade Contractor persistently refuses or fails to supply enough properly skilled workers, proper materials, or equipment to maintain the approved Construction Schedule in accordance with ARTICLE 6, or fails to make prompt payment to its workers, Subcontractors or Material Suppliers; disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction; or is otherwise guilty of a material breach of a provision of this Agreement, the Trade Contractor may be deemed in default. If the Trade Contractor fails within seven (7) business Days after receipt of written notification to commence and continue satisfactory correction of such default with diligence and promptness, then the Owner shall give the Trade Contractor a second notice to correct the default within a three (3) Day period. If the Trade Contractor fails to promptly commence and continue satisfactory correction of the default following receipt of such second notice, the Owner without prejudice to any other rights or remedies may:

11.2.1 supply workers and materials, equipment and other facilities as the Owner or Construction Manager deems necessary for the satisfactory correction of the default, and charge the cost to the Trade Contractor, who shall be liable for the payment of same including reasonable Overhead, profit and attorneys' fees;

11.2.2 contract with Others to perform such part of the Trade Contract Work as the Owner or Construction Manager determines shall provide the most expeditious correction of the default, and charge the cost to the Trade Contractor;

11.2.3 withhold payment due the Trade Contractor in accordance with section 9.3; and

11.2.4 in the event of an emergency affecting the safety of persons or property, immediately commence



and continue satisfactory correction of such default as provided in subsections 11.2.1 and 11.2.2 without first giving written notice to the Trade Contractor, but shall give prompt written notice of such action to the Trade Contractor following commencement of the action.

11.3 OWNER'S RIGHT TO TERMINATE FOR DEFAULT

11.3.1 TERMINATION BY OWNER FOR DEFAULT If, within seven (7) Days of receipt of a notice to cure pursuant to section 11.2, the Trade Contractor fails to commence and satisfactorily continue correction of the default set forth in the notice to cure, the Owner may notify the Trade Contractor that it intends to terminate this Agreement for default absent appropriate corrective action within fourteen additional Days. After the expiration of the additional fourteen (14) Day period, the Owner may terminate this Agreement by written notice absent appropriate corrective action. Termination for default is in addition to any other remedies available to Owner under section 11.2. If the Owner's cost arising out of the Trade Contractor's failure to cure, including the cost of completing the Trade Contract Work and reasonable attorneys' fees, exceeds the unpaid Trade Contract Price, the Trade Contractor shall be liable to the Owner for such excess costs. If the Owner's costs are less than the unpaid Trade Contract Price, the Owner shall pay the difference to the Trade Contractor. In the event the Owner exercises its rights under this section, upon the request of the Trade Contractor the Owner shall furnish to the Trade Contractor a detailed accounting of the cost incurred by the Owner.

11.3.2 USE OF TRADE CONTRACTOR'S MATERIALS, SUPPLIES AND EQUIPMENT If the Owner or Others perform work under this section, the Owner shall have the right to take and use any materials, supplies and equipment belonging to the Trade Contractor and located at the Worksite for the purpose of completing any remaining Trade Contract Work. Immediately upon completion of the Work, any remaining materials, supplies or equipment not consumed or incorporated in the Trade Contract Work shall be returned to the Trade Contractor in substantially the same condition as when they were taken, reasonable wear and tear excepted.

11.3.3 If the Trade Contractor files a petition under the Bankruptcy Code, this Agreement may be terminated for cause at the may be terminated for cause at the Owner.

11.3.3 If the Trade Contractor files a petition under the Bankruptcy Code, this Agreement may be terminated for cause at the may be terminated for cause at the Owner.

11.3.4 The Owner shall make reasonable efforts to mitigate damages arising from Trade Contractor default, and shall promptly invoice the Trade Contractor for all amounts due pursuant to sections 11.2 and 11.3.

11.4 TERMINATION BY OWNER FOR CONVENIENCE

11.4.1 Upon written notice to the Trade Contractor, the Owner may, without cause, terminate this Agreement. The Trade Contractor shall immediately stop the Work, follow the Owner's or Construction Manager's instructions regarding shutdown and termination procedures, and strive to minimize any further costs.

11.4.2 If the Owner terminates this Agreement pursuant to this section, the Trade Contractor shall be paid:

11.4.2.1 for the Work performed to date including Overhead and profit; and

11.4.2.2 for all demobilization costs and costs incurred as a result of the termination but not including Overhead or profit on work not performed;

11.4.2A Upon written notice to the Trade Contractor the Owner has the right to terminate this



Agreement without penalty as a result of the following: 1) the legislature or governor fail to appropriate funds sufficient to allow the Owner to operate as required and fulfill its obligations under this Agreement, 2) funds are de-appropriated or not allocated, 3) the Owner's authorization to operate is withdrawn or there is a material alteration in the programs administered by the owner, or 4) the Owner's duties are substantially modified. If such a termination results then the Trade Contractor shall be paid in the manner set forth in subparagraph 11.4.2. If, however, an appropriation to cover the cost of this Agreement becomes available within sixty (60) days subsequent to termination under this paragraph then the Owner agrees to re-enter into a modified version of this Agreement that accounts for the termination and reinstatement.

11.4.3 If the Owner terminates this Agreement pursuant to sections 11.3 or 11.4, the Trade Contractor shall:

11.4.3 If the Owner terminates this Agreement pursuant to sections 11.3 or 11.4, the Trade Contractor shall:

11.4.3.1 execute and deliver to the Owner all papers and take all action required to assign, transfer and vest in the Owner the rights of the Trade Contractor to all materials, supplies and equipment for which payment has or will be made in accordance with the Trade Contract Documents and all subcontracts, orders and commitments which have been made in accordance with the Trade Contract Documents;

11.4.3.2 exert reasonable effort to reduce to a minimum the Owner's liability for subcontracts, orders and commitments that have not been fulfilled at the time of the termination;

11.4.3.3 cancel any subcontracts, orders and commitments as the Owner or Construction Manager directs; and

11.4.3.4 sell at prices approved by the Owner or Construction Manager any materials, supplies and equipment as the Owner or Construction Manager directs, with all proceeds paid or credited to the Owner.

11.5 TRADE CONTRACTOR'S RIGHT TO TERMINATE

11.5.1 Upon seven (7) Days' written notice to the Owner and Construction Manager, the Trade Contractor may terminate this Agreement if the Trade Contract Work has been stopped for a thirty (30) Day period through no fault of the Trade Contractor for any of the following reasons:

11.5.1.1 under court order or order of other governmental authorities having jurisdiction;

11.5.1.2 as a result of the declaration of a national emergency or other governmental act during which, through no act or fault of the Trade Contractor, materials are not available; or

11.5.1.3 suspension by the Owner for convenience pursuant to section 11.1

11.5.2 In addition, upon seven (7) Days' written notice to the Owner and Construction Manager, the Trade Contractor may terminate the Agreement if the Owner:

11.5.2.1 fails to furnish reasonable evidence pursuant to section 4.1.2 that sufficient funds are available and committed for Project financing, or

11.5.2.2 assigns this Agreement over the Trade Contractor's reasonable objection, or

11.5.2.3 fails to pay the Trade Contractor in accordance with this Agreement and the Trade Contractor has complied with the notice provisions of section 9.5, or



11.5.2.4 otherwise materially breaches this Agreement.

11.5.3 Upon termination by the Trade Contractor in accordance with this section, the Trade Contractor shall be entitled to recover from the Owner payment for all Trade Contract Work executed and for any proven loss, cost or expense in connection with the Trade Contract Work, including all demobilization costs plus reasonable Overhead and profit on work not performed.

11.6 OBLIGATIONS ARISING BEFORE TERMINATION Even after termination pursuant to ARTICLE 11, the provisions of this Agreement still apply to any Trade Contract Work performed, payments made, events occurring, costs charged or incurred or obligations arising before the termination date.

ARTICLE 12 DISPUTE MITIGATION AND RESOLUTION

12.1 WORK CONTINUANCE AND PAYMENT Unless otherwise agreed in writing, the Trade Contractor shall continue the Trade Contract Work and maintain the Construction Schedule during any dispute mitigation or resolution proceedings. If the Trade Contractor continues to perform, the Owner shall continue to make payments in accordance with this Agreement.

12.2 DIRECT DISCUSSIONS If the Parties cannot reach resolution on a matter relating to or arising out of the Agreement, the Parties shall endeavor to reach resolution through good faith direct discussions between the Parties' representatives, who shall possess the necessary authority to resolve such matter and who shall record the date of first discussions. The authorized representative for the Trade Contractor is identified in Paragraph 3.4 of the Agreement. The authorized representative for the Owner is identified in Paragraph 4.2 of the Agreement. The parties' authorized representative are, among other things, authorized to resolve matters of disagreement and disputes between the Parties. If the dispute remains unresolved after fifteen (15) Days from the date of first discussion, the Parties shall submit such matter to the dispute mitigation and dispute resolution procedures selected herein.

12.3 MITIGATION The Parties agree that dispute mitigation procedures provided in this Project. Disputes remaining unresolved after direct discussions shall be directed to the selected mitigation procedure immediately below. The dispute mitigation procedure shall result in nonbinding finding on the matter. This may be introduced as evidence at a subsequent binding adjudication of the matter, as designee on Paragraph 12.5. The Parties agree that the dispute mitigation procedure shall be

(Designate only one.)

Project Neutral

Dispute Review Board

12.3.1 MITIGATION PROCEDURES The Project Neutral/Dispute Review Board shall be mutually selected and appointed by the Parties and shall execute a retainer agreement with the Parties establishing the scope of the Project Neutral/Dispute Review Board's responsibilities. The costs and expenses of the Project Neutral/Dispute Review Board shall be shared equally by the Parties. The Project Neutral/Dispute Review Board shall be available to either Party, upon request, throughout the course of the Project, and shall make regular visits to the Project so as to maintain an up-to-date understanding of the Project progress and issues and to enable the Project Neutral/Dispute Review Board to address matters in dispute between the Parties promptly and knowledgeably. The Project Neutral/Dispute Review Board shall issue nonbinding findings within five (5) business Days of referral of the matter to the Project Neutral, unless good cause is shown.

12.3.2 If the matter remains unresolved following the issuance of the nonbinding finding by the mitigation procedure or if the Project Neutral/Dispute Review Board fails to issue nonbinding findings



within five (5) Days of the referral, the Parties shall submit the matter to the binding dispute resolution procedure designated in section 12.5.

12.4 MEDIATION If direct discussions pursuant to section 12.2 do not result in resolution of the matter and no dispute mitigation procedure is selected under section 12.3, the Parties shall endeavor to resolve the matter by mediation through the current Construction Industry Mediation Rules of the American Arbitration Association, or the Parties may mutually agree to select another set of mediation rules. The administration of the mediation shall be as mutually agreed by the Parties. The mediation shall be convened within thirty (30) business Days of the matter first being discussed and shall conclude within forty-five (45) business Days of the matter first being discussed. Either Party may terminate the mediation at any time after the first session, but the decision to terminate shall be delivered in person by the terminating Party to the non-terminating Party and to the mediator. The costs of the mediation shall be shared equally by the Parties.

12.5 BINDING DISPUTE RESOLUTION If the matter is unresolved after submission of the matter to a mitigation procedure or to mediation, the Parties shall submit the matter to the binding dispute resolution procedure designated herein.

(Designate only one.)

Arbitration using the current Construction Industry Arbitration Rules of the American Arbitration Association

Litigation in either the state or federal court having jurisdiction of the matter in the location of the Project.

12.5.1 The costs of any binding dispute resolution procedures shall be borne by the non-prevailing Party, as determined by the adjudicator of the dispute. However, the costs of binding dispute resolution does not include attorney fees. The Parties are each responsible for paying for their own attorney fees.

12.5.2 VENUE The venue of any binding dispute resolution procedure shall be Des Moines, Iowa.

12.6 MULTIPARTY PROCEEDING All parties necessary to resolve a claim shall be parties to the same dispute resolution proceeding. Appropriate provisions shall be included in all other contracts relating to the Work to provide for the joinder or consolidation of such dispute resolution procedures.

12.7 LIEN RIGHTS The Trade Contractor acknowledges that it has no mechanic's lien rights on this Project because it is a public improvement project.

ARTICLE 13 MISCELLANEOUS PROVISIONS

13.1 ASSIGNMENT Neither the Owner nor the Trade Contractor shall assign their interest in this Agreement without the written consent of the other except as to the assignment of proceeds. The terms and conditions of this Agreement shall be binding upon both Parties, their partners, successors, assigns and legal representatives. Neither Party to this Agreement shall assign the Agreement as a whole without written consent of the other. If either Party attempts to make such an assignment, that Party shall nevertheless remain legally responsible for all obligations under this Agreement, unless otherwise agreed by the other Party.

13.2 GOVERNING LAW This Agreement and all disputes arising there from shall be governed by the Iowa law.

13.3 SEVERABILITY The partial or complete invalidity of any one or more provisions of this Agreement shall not affect the validity or continuing force and effect of any other provision.



13.4 NO WAIVER OF PERFORMANCE The failure of either Party to insist, in any one or more instances, on the performance of any of the terms, covenants or conditions of this Agreement, or to exercise any of its rights, shall not be construed as a waiver or relinquishment of such term, covenant, condition or right with respect to further performance or any other term, covenant, condition or right.

13.5 TITLES AND GROUPINGS The titles given to the articles of this Agreement are for ease of reference only and shall not be relied upon or cited for any other purpose. The grouping of the articles in this Agreement and of the Owner's specifications under the various headings is solely for the purpose of convenient organization and in no event shall the grouping of provisions, the use of sections or the use of headings be construed to limit or alter the meaning of any provisions.

13.6 ASSISTANCE OF COUNSEL AND INTERPRETATION The Parties agree that they had the opportunity to obtain the assistance of counsel in reviewing the Agreement terms prior to execution. This Agreement shall be construed neither against nor in favor of either Party, but shall be construed in a neutral manner.

13.7 RIGHTS AND REMEDIES The Parties' rights, liabilities, responsibilities and remedies with respect to this Agreement, whether in contract, tort, negligence or otherwise, shall be exclusively those expressly set forth in this Agreement.

13.8 ADDITIONAL PROVISIONS (Insert here other provisions, if any, that pertain to this Agreement See Below.)

13.9 COMPLIANCE WITH LAW AND REGULATIONS The Trade Contractor shall comply with all applicable federal, state, and local laws, rules, ordinances, regulations and orders when performing services and/or performing work under this Agreement, including without limitation, all laws applicable to the prevention of discrimination in employment and the use of targeted small businesses as subcontractors or suppliers. The Trade Contractor declares that it has complied with all federal, state and local laws regarding business permits and licenses that may be required to provide the services and work required by this Agreement. The Trade Contractor further acknowledges that if this Project is a recipient of Federal financial assistance that it may be subject to requirements of Federal Acts and Executive Orders as mandated by Federal agencies having authority and jurisdiction to enforce and ensure compliance with such laws and regulations including, but not necessarily limited to, the Davis Bacon Act and other Federal Acts and Executive Orders.

13.10 EMPLOYMENT PRACTICES: It is the intent of the Iowa Department of Administrative Services to assure equal employment opportunity in all contract work as required by law. Vendors, are required to take affirmative action to ensure that applicants employed or seeking employment with them are treated equally as required by law. Vendors shall not illegally discriminate against any employee. During the course of the Project, the Vendor may be required to show compliance with the EEO and Affirmative Action requirements. Noncompliance with the provisions set forth at the time of contract award may result in termination or suspension of the Agreement in whole or in part. All vendors and service providers working under the terms of this Agreement are prohibited from engaging in discriminatory employment practices forbidden by Iowa law. Vendors shall complete and submit the Nondiscrimination Clause form for the Owner's approval.

13.11 RECIPROCAL BIDDER PREFERENCE In accordance with Iowa Code Section 73A.21, as amended in 2011 by HF 648, if the Trade Contractor is not a resident bidder of Iowa, as defined by law, then the Trade Contractor must specifically identify in writing with its bid any and all preferences or preferential treatment (including preferences related to labor) enforced by the state or foreign country in which the Trade Contractor is a resident. If the low bid Trade Contractor is not a resident bidder of Iowa and the Trade Contractor's foreign State of residence enforces such a preference then the Owner shall reciprocally enforce the preference in favor of a resident bidder of Iowa. Failure on the part of the Trade Contractor to completely and accurately abide by this legal requirement may, among other things, result in civil penalties and void this Agreement. The Trade Contractor should contact its attorney regarding this legal requirement if the Trade



Contractor has questions regarding its meaning or application.

13.12 LABOR RELATIONS The Trade Contractor shall comply with all Iowa and Federal labor laws. In accordance with Executive Order Number 69, issued by the Governor of Iowa on or about January 14, 2011, no project labor agreement (also known as a PLA), or similar, will be used on this Project. Iowa is a right to work state. No consultant, contractor, or employee shall be obligated to contract with or join any labor organization as a condition of performing work on this Project.

ARTICLE 14 TRADE CONTRACT DOCUMENTS

14.1 The Trade Contract Documents in existence at the time of execution of this Agreement are as follows:

RFBXXXXXXXXX Bid Package X

14.2 INTERPRETATION OF TRADE CONTRACT DOCUMENTS

14.2.1 The drawings and specifications are complementary. If Trade Contract Work is shown only on one but not on the other, the Trade Contractor shall perform the Trade Contract Work as though fully described on both consistent with the Trade Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

14.2.2 In case of conflicts between the drawings and specifications, the specifications shall govern. In any case of omissions or errors in figures, drawings or specifications, the Trade Contractor shall immediately submit the matter to the Owner for clarification. The Owner's clarifications are final and binding on all Parties, subject to an equitable adjustment in Trade Contract Time or Price pursuant to ARTICLE 6 and ARTICLE 7 or dispute resolution in accordance with ARTICLE 12.

14.2.3 Where figures are given, they shall be preferred to scaled dimensions.

14.2.4 Any terms that have well-known technical or trade meanings, unless otherwise specifically defined in this Agreement, shall be interpreted in accordance with their well-known meanings. This Agreement entered into as of the date entered in ARTICLE 1.

14.2.5 PRECEDENCE In case of any inconsistency, conflict or ambiguity among the Trade Contract Documents, the documents shall govern in the following order: (a) Trade Contract Change Orders and written amendments to this Agreement; (b) this Agreement; (c) subject to subsection 14.2.2 the drawings, specifications and addenda issued prior to the execution of this Agreement; (d) approved submittals; (e) information furnished by the Owner pursuant to subsection 4.1.3; (f) other documents listed in this Agreement. Among all the Trade Contract Documents, the term or provision that is most specific or includes the latest date shall control. Information identified in one Trade Contract Document and not identified in another shall not be considered to be a conflict or inconsistency.

This Agreement entered into as of the date entered in ARTICLE 1.

OWNER State of Iowa, Department of Administrative Services



Trade Contractor: *Contractor Name*

By: _____

(Authorized Representative)

Name:

Title:

Date:

Owner: State of Iowa - DAS

By: _____

(Authorized Representative)

Name:

Title:

Date:

END OF DOCUMENT.

DRAFT



SECTION 00 6000

PERFORMANCE AND PAYMENT BOND

PART 1 - GENERAL

1.01 PERFORMANCE AND PAYMENT BOND

- A. Performance and payment bonds to be used on this project, ConsensusDocs 260 and 261 are attached for reference following this page. ConsensusDocs performance and payment bonds are not required (other standard forms are acceptable to the State of Iowa).

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION



CONSENSUSDOCS 260 PERFORMANCE BOND

This document was developed through a collaborative effort of organizations representing a wide cross-section of the design and construction industry. The organizations endorsing this document believe it represents a fair allocation of risk and responsibilities for all project participants.

Endorsing organizations recognize that this document must be reviewed and adapted to meet specific needs and applicable laws. This document has important legal and insurance consequences. You are encouraged to consult legal, insurance and surety advisors before completing or modifying this document. The software includes a notes section indicating where information is to be inserted to complete this document. Further information and endorsing organizations' perspectives are available at www.consensusdocs.org/guidebook.

For Use with ConsensusDOCS 200, Standard Form of Agreement and General Conditions Between Owner and Constructor (Where the Contract Price is a Lump Sum) and ConsensusDOCS 500, Standard Agreement and General Conditions Between Owner and Construction Manager.

The Owner, _____, (the "Owner") and the Constructor, _____, (the "Constructor") have entered into a Contract (the "Contract") dated _____ for _____ (the "Project"). The Contract is incorporated by reference into this Performance Bond (the "Bond").

By virtue of this Bond, the Constructor as Principal and _____ as Surety ("Surety"), are bound to the Owner as Obligee in the maximum amount of _____ Dollars (\$ _____) (the "Bond Sum"). The Constructor and Surety hereby bind themselves, their heirs, executors,

IMPORTANT: A vertical line in the margin indicates a change has been made to the original text. Prior to signing, recipients may wish to request from the party producing the document a "redlined" version indicating changes to the original text. Consultation with legal and insurance counsel and careful review of the entire document are strongly encouraged.

administrators, successors and assigns, jointly and severally, as provided herein.

1. GENERAL CONDITIONS It is the condition of this Bond that if the Constructor performs its Contract obligations (the "Work"), the Surety's obligations under this Bond are null and void. Otherwise the Surety's obligations shall remain in full force and effect. The Surety waives any requirement to be notified of alterations or extensions of time made by the Owner in the Contract. The Owner may not invoke the provisions of this Bond unless the Owner has performed its obligations pursuant to the Contract. Upon making demand on this Bond, the Owner shall make the Contract Balance (the total amount payable by the Owner to the Constructor pursuant to the Contract less amounts properly paid by the Owner to the Constructor) available to the Surety for completion of the Work.

2. SURETY OBLIGATIONS If the Constructor is in default pursuant to the Contract and the Owner has declared the Constructor in default, the Surety promptly may remedy the default or shall:

- a. Complete the Work, with the consent of the Owner, through the Constructor or otherwise;
- b. Arrange for the completion of the Work by a Constructor acceptable to the Owner and secured by performance and payment bonds equivalent to those for the Contract issued by a qualified surety. The Surety shall make available as the Work progresses sufficient funds to pay the cost of completion of the Work less the Contract Balance up to the Bond Sum; or
- c. Waive its right to complete the Work and reimburse the Owner the amount of its reasonable costs, not to exceed the Bond Sum, to complete the Work less the Contract Balance.

3. DISPUTE RESOLUTION All disputes pursuant to this Bond shall be instituted in any court of competent jurisdiction in the location in which the Project is located and shall be commenced within two years after default of the Constructor or Substantial Completion of the Work, whichever occurs first. If this provision is prohibited by law, the minimum period of limitation available to sureties in the jurisdiction shall be applicable.

This Bond is entered into as of _____.

SURETY _____ (seal)

By:

Print Name: _____

Print Title: _____

(Attach Power of Attorney)

Witness:

CONSTRUCTOR _____ (seal)

By:

Print Name: _____

Print Title: _____

Witness:

(Additional signatures, if any, appear on attached page)

IMPORTANT: A vertical line in the margin indicates a change has been made to the original text. Prior to signing, recipients may wish to request from the party producing the document a "redlined" version indicating changes to the original text. Consultation with legal and insurance counsel and careful review of the entire document are strongly encouraged.



CONSENSUSDOCS 261 PAYMENT BOND

This document was developed through a collaborative effort of organizations representing a wide cross-section of the design and construction industry. The organizations endorsing this document believe it represents a fair allocation of risk and responsibilities for all project participants.

Endorsing organizations recognize that this document must be reviewed and adapted to meet specific needs and applicable laws. This document has important legal and insurance consequences. You are encouraged to consult legal, insurance and surety advisors before completing or modifying this document. The software includes a notes section indicating where information is to be inserted to complete this document. Further information and endorsing organizations' perspectives are available at www.consensusdocs.org/guidebook.

For Use with ConsensusDOCS 200, Standard Form of Agreement and General Conditions Between Owner and Constructor (Where the Contract Price is a Lump Sum) and ConsensusDOCS 500, Standard Agreement and General Conditions Between Owner and Construction Manager.

The Owner, _____, (the "Owner ")
and the Constructor, _____,
(the "Constructor") have entered into a Contract (the "Contract") dated _____ for
_____ (the "Project"). The Contract is
incorporated by reference into this Payment Bond (the "Bond").

By virtue of this Bond, the Constructor as Principal and _____ as
Surety ("Surety"), are bound to the Owner as Obligee in the maximum amount of
_____ Dollars (\$ _____) (the
"Bond Sum"). The Constructor and Surety hereby bind themselves, their heirs, executors,

IMPORTANT: A vertical line in the margin indicates a change has been made to the original text. Prior to signing, recipients may wish to request from the party producing the document a "redlined" version indicating changes to the original text. Consultation with legal and insurance counsel and careful review of the entire document are strongly encouraged.

administrators, successors and assigns, jointly and severally, as provided herein.

1. GENERAL CONDITIONS It is the condition of this Bond that if the Constructor promptly makes payment of all sums for all labor, materials, and equipment furnished for use in the performance of the work required by the Contract, the Surety's obligations pursuant to this Bond are null and void. Otherwise the Surety's obligations shall remain in full force and effect. The Surety waives any requirement to be notified of alterations or extensions of time made by the Owner in the Contract.

2. SURETY OBLIGATION Every Claimant who has not been paid in full before the expiration of a period of ninety (90) Days after such Claimant provided or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, may have a right of action on this Bond. The Surety's obligation to the Claimant(s) shall not exceed the Bond Sum.

3. LIMITATION OF ACTION No suit or action shall be commenced on this Bond by any Claimant:

- a. Unless Claimant, other than one having a direct Contract with the Constructor, shall have given written notice to the Constructor, the Owner and the Surety within ninety (90) Days after the Claimant provided or performed the last of the work or labor, or furnished the last of the materials for which the claim is made, stating with substantial accuracy the amount claimed and the name of the Party to whom the materials were furnished, or for whom the work or labor was provided or performed. Such notice shall be served by any means which provides written third party verification of delivery to the Constructor at any place it maintains an office or conducts business, or served in any manner in which legal process may be served in the state in which the Project is located.
- b. After the expiration of one (1) year from the date on which the Claimant last performed labor or furnished materials or equipment on the Project. If this provision is prohibited by law, the minimum period of limitation available to sureties in the jurisdiction shall be applicable.
- c. Other than in any court of competent jurisdiction in the location in which the Project is located.

4. CLAIMANT A Claimant is defined as an individual or entity having a direct contract with the Constructor or having a contract with a subcontractor having a direct contract with the Constructor to furnish labor, materials or equipment for use in the performance of the Contract.

This Bond is entered into as of _____.

SURETY _____ (seal)

By:

Print Name: _____

Print Title: _____

(Attach Power of Attorney)

Witness:

CONSTRUCTOR _____ (seal)

By:

Print Name: _____

IMPORTANT: A vertical line in the margin indicates a change has been made to the original text. Prior to signing, recipients may wish to request from the party producing the document a "redlined" version indicating changes to the original text. Consultation with legal and insurance counsel and careful review of the entire document are strongly encouraged.

Print Title: _____

Witness:

(Additional signatures, if any, appear on attached page)

SECTION 01 1200

CONTRACT SUMMARY

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Project Information
- B. Project Summary
- C. Bid Scope Summary
- D. Work Hour Restrictions
- E. Access to Site
- F. Coordination with Occupants
- G. Rules for Construction Workers
- H. Bid Package Instructions

1.02 PROJECT INFORMATION

- A. Facility Name/Location: Mount Pleasant Correctional Facility, 1200 E Washington, Mount Pleasant, IA 52641
- B. DAS Project #: 9317.00
- C. Owner: State of Iowa, Department of Administrative Services, Hoover State Office Building, Level 3, 1305 East Walnut Street, Des Moines, IA 50319
- D. Owner's Representative: James Trower, Iowa Department of Administrative Services, 109 SE 13th Street, Des Moines, IA 50319
- E. Construction Manager: Adam Douglas, McGough Construction, 217 E 2nd St, Suite 120, Des Moines, IA 50309

1.03 PROJECT SUMMARY

- A. The project includes the replacement of 25 doors at Mount Pleasant Correctional Facility at 1200 E Washington St, Mount Pleasant, IA 54621. Target date to provide substantial completion is October 7, 2024.

1.04 BID SCOPE SUMMARY

- A. Scope Applicable to All Bid Packages:
 - 1. The Contractor's Work includes all labor, supervision, materials, equipment, services, supplies, tools, facilities, transportation, hoisting, storage, receiving, licenses, inspections, certifications, overhead, profit, or other items required or reasonably inferable to properly and timely perform and complete all work and services to be performed by the Contractor pursuant to this Agreement. Unless specifically stated otherwise, incidental work required to accomplish the work of this Bid Package shall be included the bid. This would include, but not be limited to, temporary facilities, protection of the work, security of equipment, materials, and work in progress, etc. Contractor's Work shall be performed in accordance with the Drawings, Specification Divisions 00 and 01, and Specification sections applicable to each Contractor's scope.
 - 2. Contractor is responsible for all labor and equipment to unload, account for all material delivered, stock, and delivery for this scope of work. Storage and delivery of materials and equipment at the Site shall be permitted only to the extent approved in advance by the Construction Manager, and if anything so stored obstructs the progress of any portion of the work, it shall be promptly removed or relocated by the Contractor without reimbursement.
 - 3. On site supervision by Prime Contractor at all times work by that contractor or their subcontractors/suppliers is taking place.

4. Provide all temporary facilities required for this scope of work including trailer, trailer power, telephone, secured storage, temporary power for work, temporary and task lighting for work, etc. as determined necessary by Contractor. Coordinate location of trailers, material storage and utility lines with Construction Manager. Limited space is available, and permission to bring any such facility or excess materials on to the site shall be approved by the Construction Manager.
5. Contractor shall provide all equipment and tools for Contractor's own cleanup. Clean up shall be done at end of every shift or more frequently if required for the Contractor to perform their work, for other Contractors to perform their work, as required by the Owner's operations, and at the discretion of the Construction Manager.
6. All turf, landscaping, and subgrade disturbances caused by equipment traffic or other activities related to the Contractor's scope shall be repaired or restored to proper conditions by the Contractor.
7. Protect adjacent existing building elements from damage from Scope of work. Repair existing building elements damaged during Contractor's Scope of work.

1.05 WORK HOUR RESTRICTIONS

- A. Work hours are from 06:00 AM to 4:00 PM, Monday through Thursday **or** Tuesday through Friday unless arrangements are made in advance.

1.06 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas noted on Drawings.
- B. Provide access to and from site as required by law and Owner:
 1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
 2. Do not obstruct roadways, sidewalks, or other public ways without permission of Owner and permit if required.
- C. Facility will be occupied at all times during duration of work. Contractor personnel shall conduct themselves in an agreeable manner at all times. Failure to do so may result in removal from the work site.

1.07 OWNER OCCUPANCY

- A. Owner intends to occupy the Project upon throughout construction
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

1.08 RULES FOR CONSTRUCTION WORKERS

- A. The staff of the State of Iowa has a responsibility to protect the public by providing a secure environment. All work site rules must be followed to the letter, at all times.
- B. All construction workers must have a background check completed prior to entering the campus to perform work.
- C. Hot Work Permit Processes and Fire Watch, when necessary, will be adhered to for this project.
- D. All State properties are tobacco free. No smoking will be permitted or tolerated on campus unless in designated areas.
- E. You are permitted access only to the work site and no other area of the institution.
- F. No drugs, alcohol, or firearms are allowed on the work site.
- G. Do not leave money, drugs, alcohol, or firearms in your personal vehicle.
- H. Company and personal vehicles are to be parked and locked in designated or authorized area of the work.
- I. Secure all tools at the end of the day.
- J. Maintain control of all tools, supplies, and debris at all times during the work.

- K. Never leave keys in any vehicle. If a security officer finds keys in a vehicle, they are under orders to turn them in to a security supervisor.
- L. Do not give anything to residents or take anything from residents; if they offer, inform your supervisor.
- M. Secure all tools at the end of each day. Never leave tools unattended. All tools shall be checked in at the beginning of the day and checked out at the end of the day. If security officers find loose tools, they are under orders to turn them in to their supervisor.
- N. All delivery vehicles must go directly to the job site. Extra time should be anticipated for all deliveries. Provide 24-hour notice to the facility of deliveries.
- O. During an emergency, follow the instructions of the security staff.
- P. Contractor shall wear clothing of a different color, pattern, fashion, etc. as to distinguish themselves from inmates.
- Q. A correctional facility is a somewhat unstable environment and poses certain potential hazards to individuals living, working and visiting within its confines. As a result, compliance with facility policies and procedures, as well as the directives of facility staff is essential. Individuals working inside the facility agree to follow all known policies and procedures, agree to follow the directives of facility staff, and acknowledge responsibility to seek assistance of facility staff if questions or questionable circumstances arise. Individuals working inside the facility also must follow these guidelines:
 - 1. Workers must be suitably attired. They will be properly attired as would be expected in a public meeting place. Workers will wear shoes and will not wear miniskirts, shorts, muscle shirts, see-through clothing, halter-tops or clothing made of lycra or spandex material. Split skirts of appropriate length are allowed. Blue chambray shirts are not allowed to be worn with blue jeans. No clothing shall be worn with obscene or lewd slogans, pictures, or words, and similar apparel. All female workers are required to wear a bra and underwear.
 - 2. Workers will be required to clear a metal detector scan or other scanning device prior to admittance. Any person who is unable to clear the metal detector scan may be pat searched. All other items such as coats shall be searched electronically and may be manually searched as well. Entrance may be denied if the worker is not willing to submit to a search.
 - 3. Workers will be required to bring a list of tools they will be taking inside the facility. These tools will be inventoried going into the facility and again when the worker is leaving the facility. All tools will be accounted for throughout the day.
 - 4. For security and safety purposes workers must be escorted by a staff member.
 - 5. Cell phones, weapons, and cameras/camcorders are not allowed inside the facility. The foreman will be allowed to have one cell phone.
 - 6. Wallets, purses, and billfolds are not allowed inside the facility.
 - 7. Tobacco products are not allowed inside the facility.
 - 8. All unauthorized items shall be locked in vehicles or secured in the lockers.

1.09 BID PACKAGE INSTRUCTIONS

- A. **Bid Package #01 – Door Replacement Complete:** Trade Contractor shall include all of the following, but not limited to, as part of the contract:
 - 1. All work on contract documents complete including the plans and specifications; material and labor including all freight, unloading, and installation for a complete scope, excluding the abatement and demolition of the Powerhouse and Appliance Shop doors, to be done by owner.
 - 2. Contractor to include \$6,000 allowance for coordination and troubleshooting with Secured State. See electrical drawings for contact information. Allowance will be used at the CM's and owner's discretion. Documentation, as requested, will be required. If requested documentation is not provided, no payment will be approved.
 - 3. Contractor is responsible for installing temporary partitions, including plywood doors with hardware. Hardware to include hinges, handle, spring closer and hinged hasp for use

with owner provided padlock. Work to be coordinated with abatement demo so all openings are enclosed at the end of each work day.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

SECTION 01 2500

SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Substitution Procedures
- B. Request for Substitution form

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.01 SUBSTITUTION PROCEDURES

- A. Where the Bidding Documents stipulate a specific product be provided by naming one or more manufacturer and model, a substitute product will be considered when written request is received by the date and time identified in Section 00 1113 NOTICE TO BIDDERS. Substitution requests will be considered for all products, even if the specification does not include a statement such as “or equal,” “equal to,” “equivalent to,” or “basis of design,” unless noted otherwise.
- B. References in the Bidding Documents to brand or trade names are intended to illustrate the general characteristics of the item and not to limit competition unless noted otherwise.
- C. The written request shall be on the “Request for Substitution” form included in the Project Manual. If no such form is included, the request shall be provided on the letterhead of the company making the request.
- D. Substitution requests received after the specified date will be viewed in the context of a Change Order to the Contract, and consideration will only be given in the event a product becomes unavailable or not practical due to no fault of the Contractor, or the substitution is substantially to the Owner’s advantage (equal product for less cost or higher quality product at no change in Contract Sum).
- E. Document each substitution request with complete data substantiating compliance of the proposed substitution with the Bidding Documents. Each request shall identify the specified product for which the substitution is requested, and shall clearly describe the product for which approval is requested. The burden shall be on the requester to demonstrate the proposed substitute product’s suitability for use in the Work and its equivalency or superiority in function, appearance, quality, and performance with the product named in the Bidding Documents.
- F. A description of any changes to the Bidding Documents that the proposed substitution will require shall be included with the request. The requester shall affirm that dimensions shown on the Drawings will not be affected by the substitute product, and that it will have no adverse effect on other trades, the construction schedule, or specified warranty requirements. The request for use of a substitute product shall be signed by an authorized representative of the firm submitting the request, who shall state that the firm will pay for any changes to the building design, including Design Professional’s design, detailing, and construction cost caused by the requested substitution if the substitution is approved for use in the Work.
- G. All such substitute products approved for use in the Work during the established period of time before receipt of Bids will be identified in a subsequent Addendum to the Bidding Documents.

3.02 REQUEST FOR SUBSTITUTION FORM

- A. A Request for Substitution Form is attached following this page.
- B. Substitution requests shall be emailed to the Issuing Officer at the email address provided in Instructions to Bidders Section 1.04.

END OF SECTION

SUBSTITUTION REQUEST FORM

Project: _____ Substitution Request Number: _____

From: _____
To: _____ Date: _____

A/E Project Number: _____
Re: _____

Specification Title: _____ Description: _____
Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
Manufacturer: _____ Address: _____ Phone: _____
Trade Name: _____ Model No.: _____

History: New product 2-5 years old 5-10 yrs old More than 10 years old

Differences between proposed substitution and specified product: _____

Point-by-point comparative data prepared by contractor and attached - REQUIRED BY A/E

Reason for not providing specified item: _____

Similar Installation:

Project: _____ Architect: _____
Address: _____ Owner: _____
_____ Date Installed: _____

Proposed substitution affects other parts of Work: No Yes; explain _____

Supporting Data Attached: Drawings Product Data Samples Tests Reports _____

SUBSTITUTION REQUEST FORM

(Continued)

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

Telephone: _____

Attachments: _____

A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01 3300.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01 3300.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: _____

Date: _____

Additional Comments: Contractor Subcontractor Supplier Manufacturer A/E _____

SECTION 01 2600

CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Change procedures

1.02 CHANGE PROCEDURES

- A. The Design Professional will advise of minor changes in the work not involving an adjustment to Contract Sum/Price or contract time as authorized.
- B. The Construction Manager may issue a Proposal Request that includes a detailed description of a proposed change with supplementary or revised drawings and specifications and a change in contract time for executing the change as provided by the Design Professional. The Trade Contractor will prepare and submit an estimate within 7 calendar days. Estimates shall be provided for the project at no cost, regardless of acceptance or rejection of proposal.
- C. The Trade Contractor may propose changes by submitting a Request for Information to the Construction Manager, describing the proposed change and its full effect on the work. Include a statement describing the reason for the change, and the effect on the Contract Sum/Price and contract time with full documentation and a statement describing the effect on work by separate or other contractors. Document any requested substitutions in accordance with the specifications. Construction Manager will forward the Request for Information on to the Design Professional for their official response.
- D. Stipulated Sum/Price Change Order: Based on executed Change Order and contractor's fixed price quotation.
- E. Unit Price Change Order: The change order will be executed on a fixed unit price basis for pre-determined unit prices and quantities. Changes in contract price or contract time will be computed as specified for time and material change orders.
- F. Time and Material Change Order: The change order will be executed on a not to exceed basis. Design professional and Construction Manager will determine the not to exceed estimated cost based on contractor's proposal for hourly rates and material costs. Maintain detailed records of work done on time and material basis. Time and Material tickets must be submitted daily to the Construction Manager for verification. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the work. Submit itemized account and supporting data after completion of change. A final deductive change order will be issued to reconcile final cost to the initial change order.
- G. Change Order Forms: CONSENSUSDOC Forms provided by Owner.
- H. Execution of Change Orders: The Construction Manager will issue change orders for signature of parties as provided in the Conditions of the Contract.
- I. With respect to pricing change orders, the percentage mark-up for overhead and profit is subject to the following limits:
 - 1. Fifteen (15) percent maximum for work directly performed by employees of the Constructor, Subcontractor or Sub-subcontractor.
 - 2. Five (5) percent maximum for work performed or passed through by a Subcontractor and passed through to the Owner by the Constructor.
 - 3. Five (5) percent maximum Subcontractor's mark-up for Work performed by a Sub-Subcontractor and passed through to the Owner by the Subcontractor and Constructor.
 - 4. The maximum allowable mark-up shall be twenty-five (25) percent passed through to the Owner by the Constructor under any circumstances. Overhead and profit shall be shown separately for the Constructor and each Subcontractor of any tier performing the Change Order Work.
- J. Contractor and subcontractor agree to provide and require all suppliers to provide, a detailed breakdown of labor, labor burden, materials, installation, rental, and fuel costs.

- K. Please refer to Article 8 of **CONSENSUDOCS 802- STANDARD FORM OR AGREEMENT BETWEEN OWNER AND TRADE CONTRACTOR** for additional Change Procedures.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

SECTION 01 2900

PAYMENT PROCEDURES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Schedule of values
- B. Application for payment

1.02 SCHEDULE OF VALUES

- A. Coordination: Trade Contractor will coordinate preparation of the Schedule of Values with preparation of the Construction Manager's Construction Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including Application for Payment forms with Continuation Sheets, Submittals Schedule, and Construction Manager's Construction Schedule.
 - 2. Submit original Schedule of Values in Procore within 14 days after date of Owner-Trade Contractor Agreement. Schedule of Values must be approved by Owner prior to submission for first application for payment.
- B. Format: Utilize the Table of Contents of this project manual. Identify each line item with number and title of the major specification section. Each major specification section should be further itemized by materials cost, labor cost and subcontractor cost for each building separately for the base bid and all accepted alternates. Identify site mobilization, bonds and insurance.
 - 1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - b. Name and address of Owner, Trade Contractor, Construction Manager and Design Team.
 - c. DAS Project Number.
 - d. Date of Submittal.
 - 2. Revise the Schedule of Values to list approved Change Orders with each Application for Payment.

1.03 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications for payments as certified by the Design Professional and paid for by Owner.
 - 1. Application for Payment at time of Substantial Completion and final Application for Payment involve additional requirements.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement. Progress payments shall be submitted to the Construction Manager. Any request for payment for work completed prior to June 30th of any year needs to be submitted by July 15th of the same calendar year.
- C. Payment Application Forms: Use AIA form G702 and G703 as the form for the Application for Payment or an equivalent approved by the owner.
- D. Include lien waiver forms required by the owner when applicable.
- E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of the Trade Contractor. Construction Manager will return incomplete applications without action.
 - 1. Include amounts of Change Orders issued before last day of construction period covered by application.
- F. Waivers of Mechanic's Lien: If requested by Owner with each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment when applicable.

1. Owner reserves the right to designate which entities involved in the Work must submit waivers.
2. Submit waivers of lien on forms, executed in a manner acceptable to Owner.
- G. Initial Application for Payment: Administrative actions and submittals that must precede submittal of first Application for Payment include the following:
 1. Schedule of Values
 2. Certificates of insurance and insurance policies.
 3. Lists of vendors and any subcontractors.
- H. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for the portion of the Work claimed as substantially complete.
 1. Include documentation supporting the claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- I. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
 1. Evidence of completion of Project closeout requirements.
 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 3. Updated final statement, accounting for final changes to the Contract Sum.
 4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
 5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
 6. AIA Document G707, "Consent of Surety to Final Payment."
 7. Letter of Notification to all sub-contractors and suppliers of application for release of retainage.
 8. Evidence that claims have been settled.
- J. Payments will be made to the extent of the value of the work performed in the previous month less a retainage amount of 5% of the value of the work performed. Upon substantial completion for the entire work, a sum sufficient to decrease the total retained to 5% of the contract sum, plus such other retainage as the engineer shall determine for all incomplete work and unsettled claims will be authorized.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

SECTION 01 3100

PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Coordination
- B. Pre-construction meeting
- C. Progress meetings
- D. Coordination Meetings
- E. Requests for Interpretation (RFIs)
- F. Background Checks
- G. Utility Locates/Ground Penetrations

1.02 COORDINATION

- A. Coordinate scheduling, submittals, and work of the various sections of the project manual to ensure efficient and orderly sequence of installation of interdependent construction elements.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Administrative procedures: The Trade Contractor will coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Trade Contractor's Construction Schedule.
 - 2. Provide updated information for Construction Manager's Construction Schedule.
 - 3. Preparation of Schedule of Values.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Pre-installation conferences.
 - 7. Project closeout activities
- C. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. Coordinate space requirements, supports, and installation of mechanical and electrical work, which are indicated diagrammatically on drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- E. In finished areas except as otherwise indicated conceal pipes and wiring within the construction. Coordinate locations of piping with finish elements.
- F. Coordinate completion and cleanup of work of separate sections in preparation for Substantial Completion.
- G. After owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of owner's activities.
- H. During construction coordinate use of site and facilities through Construction Manager.
- I. Comply with Construction Manager and Owner's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.

- J. Make the following types of submittal to Architect through the Construction Manager via Procore:
1. Request for Information/Interpretation.
 2. Request for substitution.
 3. Shop drawings, product data, and samples.
 4. Test and inspection reports.
 5. Design data.
 6. Manufacturer's instructions and field reports.
 7. Applications for payment and change order requests.
 8. Progress schedules.
 9. Coordination drawings.
 10. Correction punch list and final correction punch list for substantial completion
 11. Closeout submittals

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.01 PRE-CONSTRUCTION MEETING

- A. The Construction Manager and Owner will schedule a meeting after Notice of Award.
- B. Required: Design Professional, Owner, Construction Manager, Trade Contractor and any Sub Contractors.
- C. Agenda:
 1. Execution of Owner-Contractor Agreement.
 2. Submission of executed bonds and insurance certificates.
 3. Distribution of Contract Documents.
 4. Submission of list of subcontractors, list of products, schedule of values, and progress schedule.
 5. Designation of personnel representing the parties in Contract.
 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, change orders, RFIs and contract closeout procedures
 7. Tentative construction schedule.
 8. Critical work sequencing and long-lead items.
 9. Procedures for testing and inspecting.
 10. Preparation of Record Documents.
 11. Safety Procedures.
 12. Owner's requirements.
 13. Security and housekeeping procedures.
 14. Background Checks.
 15. Responsibility for temporary facilities and controls.
 16. Construction waste management.
 17. Logistics (use of premise, parking, work restrictions, maintain egress, etc.)
- D. The Construction Manager is to record minutes and distribute copies within two days after meeting to participants, with one copy to owner, participants, and those affected by decisions made.

3.02 PROGRESS MEETINGS

- A. The Construction Manager shall schedule and administer meetings throughout progress of the work at bi-weekly intervals.
- B. The Construction Manager is to make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings, record minutes and distribute copies within two days to those affected by decisions made.
- C. Attendees may include: Project superintendent, major subcontractors and suppliers, Owner, Construction Manager, Architect/Engineer, as appropriate to agenda topics for each meeting.

All participants at the conference call shall be familiar with the Project and authorized to conclude matters relating to the Work.

D. Agenda:

1. Review minutes of previous meetings.
2. Review the Construction Manager's Construction Schedule.
3. Field observations, problems, and decisions.
4. Identification of problems that impede planned progress.
5. Review of submittals schedule and status of submittals.
6. Review of RFI's.
7. Review of off-site fabrication and delivery schedules.
8. Corrective measures to regain projected schedules.
9. Planned progress during succeeding work period.
10. Coordination of projected progress.
11. Maintenance of quality and work standards.
12. Effect of proposed changes on progress schedule and coordination.
13. Other business relating to work.
14. Access, temporary facilities and controls, housekeeping and progress cleaning.
15. Safety.
16. Status of proposal requests, pending changes, official Change Orders.

E. Minutes:

1. Following the meeting, the meeting minutes will be published in Procore by the Construction Manager for all parties.

3.03 COORDINATION MEETINGS

- A. Coordination meetings will be held at the discretion of the construction manager.

3.04 REQUESTS FOR INTERPRETATION (RFIs)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, prepare and submit an RFI in Procore.
1. RFIs shall originate with Trade Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in the Work.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
1. Specification Section number and title and related paragraphs, as appropriate.
 2. Drawing number and detail references, as appropriate.
 3. Field dimensions and conditions, as appropriate.
 4. Trade Contractor's suggested solution(s). If Trade Contractor's solution(s) impact the Contract Time or the Contract Sum, Trade Contractor shall state impact in the RFI.
 5. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
- C. Design Professional's Action: Design Professional will review each RFI, determine action required, and return it. Allow seven (7) working days for Design Professional's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day. The following RFIs will be returned without action:
1. Requests for approval of submittals.
 2. Requests for approval of substitutions.
 3. Requests for coordination information already indicated in the Contract Documents.
 4. Requests for adjustments in the Contract Time or the Contract Sum.
 5. Requests for interpretation of Design Professional's actions on submittals.
 6. Incomplete RFIs or RFIs with numerous errors.
 7. Design Professional's action may include a request for additional information, in which case Design Professional's time for response will start again.

- D. Design Professional's action on RFIs that may result in a change to the Contract Time or the Contract Sum/Price.
 - 1. If Trade Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Construction Manager in writing within ten (10) days of receipt of the RFI response.
- E. On receipt of Design Professional's response in Procore, review the response and notify Design Professional within seven (7) days if Trade Contractor disagrees with response.

3.05 BACKGROUND CHECKS

- A. Background checks must be performed on all on site employees, including sub-contractors.
- B. The Contractor hereby explicitly authorized the Iowa DAS to conduct criminal history and/or other background investigation(s) of the Contractor, its officers, supervisory personnel, employees, and other staff retained by the Contractor or their sub-contractors for the performance of the contract.
- C. A state of Iowa record check request form will be provided at the pre-construction meeting. Information required may include:
 - 1. Last Name
 - 2. First Name
 - 3. Middle Name
 - 4. Date of Birth
 - 5. State Driver's License or State ID #
 - 6. Social Security #

3.06 UTILITY LOCATES/GROUND PENETRATIONS

- A. Call Iowa One Call at 800-292-8989 to request a locate
 - 1. Requests must be least five (5) working days prior to ground penetration.

END OF SECTION

SECTION 01 3100.01

WEB BASED CONSTRUCTION MANAGEMENT

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Owner and Contractor shall utilize **Procore Technologies, Inc. Procore** system for electronic submittal of all data and documents (unless specified otherwise by the owner's representative) throughout the duration of the Contract. **Procore** is a web-based electronic media site that is hosted by **Procore Technologies, Inc.**, utilizing their **Procore** web solution. **Procore** will be made available to all contractors' project personnel, subcontractor personnel, suppliers, consultants and the Designer of Record. The joint use of this system is to facilitate; electronic exchange of information, automation of key processes, and overall management of the contract. **Procore** shall be the primary means of project information submission and management. When required by the Owners representative, paper documents will also be provided. In the event of discrepancy between the electronic version and paper documents, the paper documents will govern. **Procore** is a registered trademark of **Procore Technologies, Inc.**

1.02 USER ACCESS LIMITATIONS

- A. The Owner's Representative/Construction Manager will control the Contractor's access to **Procore** by allowing access and assigning user profiles to accepted Contractor personnel. User profiles will define levels of access into the system, determine assigned function-based authorizations (determines what can be seen) and user privileges (determines what they can do). Sub-contractors and suppliers will be given access to **Procore** through the Contractor. Entry of information exchanged and transferred between the Contractor and its sub-contractors and suppliers on **Procore** shall be the responsibility of the Contractor.
1. Joint Ownership of Data: Data entered in a collaborative mode (entered with the intent to share as determined by permissions and workflows within the **Procore** system) by the Owner's Representative and the Contractor will be jointly owned.

1.03 AUTOMATED SYSTEM NOTIFICATION AND AUDIT LOG TRACKING

- A. Review comments made (or lack thereof) by the Owner on Contractor submitted documentation shall not relieve the Contractor from compliance with requirements of the Contract Documents. The Contractor is responsible for managing, tracking, and documenting the Work to comply with the requirements of the Contract Documents. Owner's acceptance via automated system notifications or audit logs extends only to the face value of the submitted documentation and does not constitute validation of the Contractor's submitted information.

1.04 SUBMITTALS

- A. See Section 01 3300 SUBMITTAL PROCEDURES:
- B. Preconstruction Submittals
1. List of Contractor's key **Procore** personnel. Include descriptions of key personnel's roles and responsibilities for this project. Contractor should also identify their organization's administrator on the list.

1.05 COMPUTER REQUIREMENTS

- A. The Contractor shall use computer hardware and software that meets the requirements of the **Procore** system as recommended by **Procore Technologies, Inc.** to access and utilize

Procure. As recommendations are modified by **Procure**, the Contractor will upgrade their system(s) to meet the recommendations or better. Upgrading of the Contractor's computer systems will not be justification for a cost or time modification to the Contract. The contractor will ensure that connectivity to the **Procure** system (whether at the home office or job site) is accomplished through DSL, cable, T-1 or wireless communications systems. The minimum bandwidth requirement for using the system is 128kb/s. It is recommended a faster connection be used when uploading pictures and files into the system. **Procure** supports the current and prior two major versions of Chrome, Firefox, Internet Explorer, and Safari.

- B. The Contractor shall be responsible for the validity of their information placed in **Procure** and for the abilities of their personnel. Accepted users shall be knowledgeable in the use of computers, including Internet Browsers, email programs, cad drawing applications, and Adobe Portable Document Format (PDF) document distribution program. The Contractor shall utilize the existing forms in **Procure** to the maximum extent possible. If a form does not exist in **Procure** the Contractor must include a form of their own or provided by the Owner representative as an attachment to a submittal. Adobe PDF documents will be created through electronic conversion rather than optically scanned whenever possible. The Contractor is responsible for the training of their personnel in the use of **Procure** (outside what is provided by the owner) and the other programs indicated above as needed.
- C. User Access Administration: Provide a list of Contractor's key **Procure** personnel for the Owner's Representative acceptance. Contractor is responsible for adding and removing users from the system. The Owners Representative reserves the right to perform a security check on all potential users. The Contractor will be allowed to add additional personnel and sub-contractors to **Procure**.

1.06 CONNECTIVITY PROBLEMS

- A. **Procure** is a web-based environment and therefore subject to the inherent speed and connectivity problems of the Internet. The Contractor is responsible for its own connectivity to the Internet. **Procure** response time is dependent on the Contractor's equipment, including processor speed, Internet access speed, etc. and current traffic on the Internet. The Owner will not be liable for any delays associated from the usage of **Procure** including, but not limited to: slow response time, down time periods, connectivity problems, or loss of information. The contractor will ensure that connectivity to the **Procure** system (whether at the home office or job site) is accomplished through DSL, cable, T-1 or wireless communications systems. The minimum bandwidth requirement for using the system is 128kb/s. It is recommended a faster connection be used when uploading pictures and files into the system. Under no circumstances shall the usage of the **Procure** be grounds for a time extension or cost adjustment to the contract.

1.07 TRAINING

- A. The Construction Manager shall provide the necessary training to the Prime Contractor.

PART 2 - PRODUCTS

2.01 DESCRIPTION

- A. **Procure** project management application (no equal) Provided by Procure Technologies, Inc. www.Procure.com

PART 3 - EXECUTION

3.01 PROCORE UTILIZATION

- A. **Procore** shall be utilized in connection with submittal preparation and information management required by Sections:
1. PROJECT MANAGEMENT AND COORDINATION
 2. CONSTRUCTION PROGRESS DOCUMENTATION
 3. SUBMITTAL PROCEDURES
 4. QUALITY REQUIREMENTS
 5. Other Division One sections.
 6. Requirements of this section are in addition to requirements of all other sections of the specifications.
- B. Design Document Submittals
1. All design drawings and specifications shall be submitted as cad .dwg files or PDF attachments to the **Procore** submittal work flow process and form.
- C. Shop Drawings
1. Shop drawing and design data documents shall be submitted as cad .dwg files or PDF attachments to the **Procore** submittal work flow process and form. Examples of shop drawings include, but are not limited to:
 2. Standard manufacturer installation drawings.
 3. Drawings prepared to illustrate portions of the work designed or developed by the Contractor.
 4. Steel fabrication, piece, and erection drawings.
- D. Product Data
1. Product catalog data and manufacturer's instructions shall be submitted as
 2. PDF attachments to the **Procore** submittal work flow process and form. Examples of product data include, but are not limited to:
 3. Manufacturer's printed literature.
 4. Preprinted product specification data and installation instructions.
- E. Samples
1. Sample submittals shall be physically submitted as specified in Section 01 3300 SUBMITTAL PROCEDURES. Contractor shall enter submittal data information into **Procore** with a copy of the submittal form(s) attached to the sample. Examples of samples include, but are not limited to:
 2. Product finishes and color selection samples.
 3. Product finishes and color verification samples.
 4. Finish/color boards.
 5. Physical samples of materials.
- F. Administrative Submittals
1. All correspondence and pre-construction submittals shall be submitted using **Procore**. Examples of administrative submittals include, but are not limited to:
 2. Digging permits and notices for excavation.
 3. List of product substitutions
 4. List of contact personnel.
 5. Notices for roadway interruption, work outside regular hours, and utility cut overs.
 6. Requests for Information (RFI).
 7. Construction progress Schedules and associated reports and updates.
 - a. Each schedule submittal specified in CONSTRUCTION PROGRESS DOCUMENTATION shall be submitted as a native backed-up file (.PRX or .STX) of the scheduling program being used. The schedule will also be posted as a PDF

file in the format.

8. Plans for safety, demolition, environmental protection, and similar activities.
9. Quality Control Plan(s), Testing Plan and Log, Quality Control Reports, Production Reports, Quality Control Specialist Reports, Preparatory Phase Checklist, Initial Phase Checklist, Field Test reports, Summary reports, Rework Items List, etc.
10. Meeting minutes for quality control meetings, progress meetings, pre-installation meetings, etc.
11. Any general correspondence submitted.

G. Compliance Submittals

1. Test reports, certificates, and manufacture field report submittals shall be submitted on **Procore** as PDF attachments. Examples of compliance submittals include, but are not limited to:
 - a. Field test reports.
 - b. Quality Control certifications.
 - c. Manufacturer's documentation and certifications for quality of products and materials provided.

H. Record and Closeout Submittals

1. Operation and maintenance data and closeout submittals shall be submitted on **Procore** as PDF documents during the approval and review stage as specified, with actual set of documents submitted for final. Examples of record submittals include, but are not limited to:
 - a. Operation and Maintenance Manuals: Final documents shall be submitted as specified.
 - b. As-built Drawings: Final documents shall be submitted as specified.
 - c. Extra Materials, Spare Stock, etc.: Submittal forms shall indicate when actual materials are submitted.

I. Financial Submittals

1. Schedule of Value, Pay Applications and Change Request Proposals shall be submitted on **Procore**. Supporting material for Pay Applications and Change Requests shall be submitted on **Procore** as PDF attachments. Examples of compliance submittals include, but are not limited to:
 - a. Contractors Schedule of Values
 - b. Contractors Monthly Progress Payment Requests
 - c. Contract Change proposals requested by the project owner

END OF SECTION

SECTION 01 3200

CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Construction Progress Schedule
- B. Construction Manager's Construction Schedule
- C. Submittal Schedule
- D. Daily Construction Reports
- E. Progress Photographs

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.01 CONSTRUCTION MANAGER'S MASTER CONSTRUCTION SCHEDULE

- A. Upon award of package, Contractor agrees to accept and meet or improve upon the schedule proposed in section **00 3113 PRELIMINARY SCHEDULE** with intermediate handoffs. Each package contractor will be required to participate in schedule coordination meetings with the Construction Manager.
- B. If the bid package contractor does not meet the handoff milestones in the master construction schedule, the bid package contractor shall take measures to increase work forces, increase work hours, initiate revisions to means and methods of construction, and/or other similar measures as required to make up lost time and complete the work in accordance with the construction schedule and remain consistent with project progress and overall construction schedule. Such measures shall be at no additional cost to the Owner. The Construction Manager shall have sole discretion on decisions to accelerate work.
- C. Updating the master construction schedule – Contractors are required to attend and participate in schedule coordination update meetings with the Construction Manager. This will be an opportunity for contractors to further define their scheduled scope of work in conjunction with other trades on site.
- D. Acceptance of revised master construction schedule – After an updated master construction schedule has been issued via Procore, Contractors will have 48 hours to dispute the new schedule. All contractors will be held to the last fully accepted master construction schedule.

3.02 CONSTRUCTION PROGRESS SCHEDULE

- A. Submit preliminary outline to the Construction Manager no later than 48 hours prior to the pre-construction meeting for coordination with Owner's requirements.
- B. Submit revised progress schedule with each application for payment.
- C. Schedules will be electronically submitted through Procore.
- D. Distribute copies of reviewed schedules to project site file, subcontractors, suppliers, and other concerned parties.
- E. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.
- F. Submit computer generated horizontal bar chart with separate line for each major portion of work or operation, identifying the first day of each week.
- G. Show complete sequence of construction activity, identifying work of separate stages and other

logically grouped activities. Indicate early and late start, early and late finish, float dates, and duration.

- H. Indicate estimated percentage of completion for each item of work at each submission.
- I. Participate in joint review and evaluation of schedule with Construction Manager.
- J. Revisions to schedules:
 - 1. Indicate progress of each activity to date of submittal and projected completion date of each activity.
 - 2. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
 - 3. Prepare narrative report to define problem areas, anticipate delays, and impact on schedule. Report corrective action taken, or proposed, and its effect including effect of changes on schedules of separate contractors.

3.03 **SUBMITTAL SCHEDULE**

- A. Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, re-submittal, ordering, manufacturing, fabrications, and delivery when establishing dates.
 - 1. Coordinate submittal schedule with list of subcontractors, the schedule of values, and construction schedule.
 - 2. Submit concurrently with first complete submittal of contractor's construction schedule.

3.04 **DAILY CONSTRUCTION REPORTS**

- A. Daily Construction Reports: Submitted at weekly intervals.
 - 1. Daily Construction Reports will be submitted to Construction Manager.
- B. Prepare a daily construction report recording the following information concerning events at project site:
 - 1. Count of personnel at Project site
 - 2. Equipment at Project site
 - 3. Material Deliveries
 - 4. High and low temperatures and general weather conditions, including presence of rain or snow
 - 5. Accidents
 - 6. Meetings and significant decisions
 - 7. Unusual events
 - 8. Stoppages, delays, shortages, and losses
 - 9. Meter readings and similar recordings
 - 10. Emergency procedures
 - 11. Orders and requests of authorities having jurisdiction
 - 12. Change orders received and implemented
 - 13. Services connected and disconnected
 - 14. Equipment or system tests and startups
 - 15. Partial completions and occupancies
 - 16. Substantial completions authorized

3.05 **PROGRESS PHOTOGRAPHS**

- A. Progress photographs will be electronically submitted through Procore.
- B. Preconstruction Photographs: Before starting construction, take photographs of project site and surrounding properties, including existing items to remain during construction, from different

vantage points, as directed by Construction manager.

1. Take additional photographs as required to record existing damage to site, structure, equipment, or finishes.
- C. Periodic Construction Photographs: Take photographs at regular intervals. Select vantage points to show status of construction and progress since last photographs were taken.
- D. Field Completion Construction Photographs: Take photographs after date of Substantial Completion for submission as project record documents. Construction manager will inform of desired vantage points.

END OF SECTION

SECTION 01 3300

SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Submittals for Review
- B. Submittals for Information
- C. Submittal Procedures
- D. Samples

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.01 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
 - 1. Product Data
 - 2. Shop Drawings
 - 3. Samples for Selection
 - 4. Samples for Verification
- B. Submit to Construction Manager to forward to Architect for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- C. Samples will be reviewed only for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record document purposes.

3.02 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
 - 1. Design data.
 - 2. Certificates.
 - 3. Test reports.
 - 4. Inspection reports.
 - 5. Manufacturer's instructions.
 - 6. Manufacturer's field reports.
 - 7. Other types indicated.
- B. Submit for Construction Manager, Architect, and Owner's knowledge. No action will be taken.

3.03 SUBMITTAL PROCEDURES

- A. Submittals will be electronically submitted through Procore. Contractor will be invited to join web based program after issue of Notice of Intent to award.
- B. Shop Drawing Procedures:
 - 1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting the Contract Documents and coordinating related Work.
 - 2. Do not reproduce the Contract Documents to create shop drawings.

3. Generic, non-project specific information submitted as shop drawings do not meet the requirements for shop drawings.
- C. Transmit each submittal with a copy of approved submittal form.
- D. Sequentially number the submittal form. Revise submittals with original number and a sequential numeric suffix.
- E. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- F. Apply Contractor's stamp, signed or initialed certifying that review, approval, 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. Schedule submittals to expedite the project and coordinate submission of related items.
- H. For each submittal review, allow 15 days excluding delivery time to and from the contractor.
- I. Identify variations from the Contract Documents and product or system limitations that may be detrimental to successful performance of the completed work.
- J. When revised for resubmission, identify all changes made since previous submission.
- K. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- L. Submittals not requested will not be recognized or processed.

3.04 **SAMPLES**

- A. Submit to Construction Manager to forward to Architect/Engineer for review for limited purpose for checking conformance with information given and design concept expressed in the Contract Documents.
- B. Samples for selection as specified in product sections:
 1. Submit to Construction Manager to forward to Architect/Engineer for aesthetic, color, or finish selections.
 2. Submit samples of finishes from full range of manufacturer's standard colors, textures, and patterns to Construction Manager to forward to Architect/Engineer for selection.
- C. Submit samples to illustrate functional and aesthetic characteristics of products, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- D. Include identification on each sample, with full project information.
- E. Submit number of samples specified in individual specification sections.
- F. Photograph of submitted samples, along with transmittal sheet, shall be uploaded as a submittal in Procore.

END OF SECTION

SECTION 01 4000

QUALITY REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. References
- B. Quality assurance and control of installation
- C. Tolerances
- D. Defect Assessment
- E. Inspection and testing laboratory services
- F. Manufacturer's field services and reports

1.02 REFERENCES

- A. Conform to reference standard in effect at date of contract.
- B. When required by contract documents, obtain copies of standards.
- C. Should specified reference standards conflict with contract documents request clarification from engineer before proceeding.
- D. 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.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.01 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 manufacturer's instructions, including each step in sequence.
- C. Should manufacturer's instructions conflict with contract documents, request clarification from the engineer prior to 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. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stress, vibration, physical distortion, or disfiguration.

3.02 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with contract documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

3.03 DEFECT ASSESSMENT

- A. Replace work or portions of work not conforming to specified requirements.

- B. If, in the option of the Owner, it is not practical to remove and replace the work, Architect will direct an appropriate remedy or recommend adjusted payment.

3.04 INSPECTION AND TESTING

- A. Owner shall include and pay for all required special inspections and testing required by IBC Section 1705, if applicable. This does not include inspections and testing required by other specification sections in this Project Manual. Copies of all testing and inspection reports shall be submitted to the Construction Manager and Design Professional by the testing and inspection agency.
- B. Testing Agency Duties:
 - 1. Provide qualified personnel at site. Cooperate with Architect, Construction Manager, and contractor in performance of services.
 - 2. Perform specified sampling and testing of products in accordance with specified standards.
 - 3. Ascertain compliance of materials and mixes with requirements of contract documents.
 - 4. Immediately notify the Construction Manager and contractor of observed irregularities or non-conformance of work or products.
 - 5. Perform additional testing and inspections required by the Owner
- C. Limits on Testing Agency/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirement of contract documents.
 - 2. Agency may not approve or accept any portion of the work.
 - 3. Agency may not assume any duties of the contractor.
 - 4. Agency has no authority to stop the work.
- D. Contractor responsibilities:
 - 1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
 - 2. Cooperate with laboratory personnel, and provide access to the work and to manufacturer's facilities.
 - 3. Provide incidental labor and facilities:
 - a. To provide access to work to be tested/inspected.
 - b. To obtain and handle samples at the site or at source of products to be tested/inspected.
 - c. To facilitate test/inspections.
 - d. To provide storage and curing of test samples.
 - 4. Notify Construction Manager and laboratory 24 hours prior to expected time for operations requiring testing/inspection.
- E. Re-testing required because of non-conformance to specified requirements shall be performed by the same testing agency on instruction by Architect/Construction Manager.
- F. Re-testing required because of non-conformance to specified requirements shall be paid for by the Contractor.

3.05 MANUFACTURER'S FIELD SERVICES AND REPORTS

- A. 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 as applicable and to initiate instructions when necessary.
- B. Individuals are to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to the manufacturers' written instructions.
- C. Submit report in duplicate within 30 days of observation to Construction Manager for review.

END OF SECTION

SECTION 01 5000

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Temporary Utilities
- B. Temporary Sanitary Facilities
- C. Telephone Service
- D. Removal of Utilities, Facilities, and Controls
- E. Temporary Facilities
- F. Equipment
- G. Vehicular Access and Parking
- H. Traffic Regulation
- I. Barriers
- J. Enclosures and Fencing
- K. Waste Removal

1.02 TEMPORARY UTILITIES

- A. Owner will provide the following:
 - 1. Electrical Power, consisting of connection to existing facilities.
 - 2. Water Supply, consisting of connection to existing facilities.
- B. The Contractor shall pay for installation, maintenance, and removal of temporary utilities. Temporary utilities shall not disrupt the Facility's need for continuous service.

1.03 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. Maintain daily in clean and sanitary condition.

1.04 TELEPHONE SERVICE

- A. Provide, maintain, and pay for telephone service to field or use a cellular telephone.

1.05 REMOVAL OF UTILITIES, FACILITIES AND CONTROLS

- A. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

PART 2 - PRODUCTS

2.01 TEMPORARY FACILITIES

- A. Field Offices: Coordinate with Construction Manager and Owner if applicable.

2.02 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated, with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.01 VEHICULAR ACCESS AND PARKING

- A. Use designated existing on-site roads for construction traffic.
- B. Parking is as directed by Owner.
- C. When site space is not adequate, provide additional off-site parking.
- D. Use of designated existing on-site streets and driveways used for construction traffic is permitted. Track vehicles not allowed on paved areas.
- E. Use of designated areas of existing parking facilities used by construction personnel as permitted.
- F. Do not allow heavy vehicles or construction equipment in parking areas.
- G. Provide and maintain access to fire hydrants, free of obstructions.
- H. Provide means of removing mud from vehicle wheels before entering streets.

3.02 TRAFFIC REGULATION

- A. Flag Persons: Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.
- B. Flares and lights: Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.
- C. Haul Routes:
 1. Consult with authority having jurisdiction, establish public thoroughfares to be used for haul routes and site access.
- D. Removal:
 1. Remove equipment and devices when no longer required.
 2. Repair damage caused by demolition.

3.03 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for Owner's use of site and to protect existing facilities and adjacent properties from damage during construction operations.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way.
- C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

3.04 ENCLOSURES AND FENCING

- A. Provide temporary enclosure and fences as necessary to protect the public and secure the site.
- B. Provide security and facilities to protect work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.

3.05 WASTE REMOVAL

- A. Except for items or materials to be salvaged, recycled or otherwise reused, remove waste materials from project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Waste Disposal Facilities: Provide waste collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction.

END OF SECTION

SECTION 01 6000

PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. General product requirements
- B. Product options
- C. Maintenance materials
- D. Transportation and handling
- E. Storage and protections

PART 2 - PRODUCTS

2.01 GENERAL PRODUCT REQUIREMENTS

- A. Provide new products unless specifically required or permitted by the contract documents.
- B. Do not use products having any of the following characteristics:
 - 1. Made using or containing CFC's or HCFC's
 - 2. Made of wood from newly cut old growth timber.
- C. Where all other criteria are met, contractor shall give preference to products that:
 - 1. If used on interior, have lower emissions
 - 2. If wet-applied, have lower VOC content
 - 3. Are extracted, harvested, and/or manufactured closer to the location of the project
 - 4. Have longer documented life span under normal used
 - 5. Result in less construction waste
 - 6. Are made of vegetable materials that are rapidly renewable

2.02 PRODUCT OPTIONS

- 1. Products specified by reference standards or by description only: Use of any product meeting those standards or description.
- 2. Products specified by naming one or more manufacturers, with or without a provision for substitutions: Use a product of one of the manufacturers named and meeting specifications or submit a request for substitution for any manufacturer not named by the date specified in this project manual. Substitution requests shall be emailed to the Issuing Officer at the email address provided in Instructions to Bidders Section 1.04.

2.03 MAINTENANCE MATERIALS

- 1. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- 2. Deliver to project site; obtain receipt prior to final payment.

PART 3 - EXECUTION

3.01 TRANSPORTATION AND HANDLING

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.

- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.02 STORAGE AND PROTECTIONS

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to the product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- G. Comply with manufacturers' warranty conditions, if any.
- H. Cover product subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- I. Prevent contact with material that may cause corrosion, discoloration, or staining.
- J. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- K. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION

SECTION 01 7300

EXECUTION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures
- B. Alteration project procedures
- C. Cutting and patching
- D. Cleaning and protection
- E. Adjusting

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.01 EXAMINATION, PREPARATION, AND GENERAL INSTALLATION PROCEDURES

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misproduction.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to cutting: Examine existing conditions prior to commencing work; include elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.
- G. Clean substrate surfaces prior to applying next material or substance.
- H. Seal cracks or openings of substrate prior to applying next material or substance.
- I. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.
- J. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- K. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- L. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- M. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- N. Make neat transitions between different surfaces, maintaining texture and appearance.

3.02 ALTERATION PROJECT PROCEDURES

- A. Materials: As specified in product sections match existing products and work for patching and extending work.
- B. Employ skilled and experienced installer to perform alteration work.
- C. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity.
- D. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished work.
- E. Remove, cut and patch work in a manner to minimize damage and to provide a means of restoring products and finished to original condition.

- F. Remove debris and abandoned items from area and from concealed spaces.
- G. Refinish visible existing surfaces to remain in renovated rooms and spaces to specified condition for each material with a neat transition to adjacent finishes.
- H. Where new work abuts or aligns with existing, perform a smooth and even transition. Patched work to match existing adjacent work in texture and appearance.
- I. When finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line of division and make recommendation to the Construction Manager. Prior to cutting get the Owner's approval.
- J. Where change of plane of ¼ inch or more occurs, submit recommendation for providing smooth transition to the Construction Manager for review.

3.03 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching.
- B. Submit written request in advance of cutting or altering elements which affect:
 1. Structural integrity of element.
 2. Integrity of weather-exposed or moisture-resistant elements.
 3. Efficiency, maintenance, or safety of element.
 4. Visual qualities of sight exposed elements.
 5. Work of owner or separate contractor.
- C. Execute cutting, fitting, and patching to complete work, and to:
 1. Fit the several parts together, to integrate with other work.
 2. Uncover work to install or correct ill-timed work.
 3. Remove and replace defective and non-conforming work.
 4. Remove samples of installed work for testing.
 5. Provide openings in elements of work for penetrations of mechanical and electrical work.
- D. Execute work by methods to avoid damage to other work and which will provide proper surfaces to receive patching and finishing.
- E. Cut rigid materials using masonry saw or core drill.
- F. Cut masonry and concrete materials using masonry saw or core drill.
- G. Restore work with new products in accordance with requirements of Contract Documents.
- H. Fit work tight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.
- I. Maintain integrity of wall, ceiling or floor construction; completely seal voids.
- J. Refinish surfaces to match adjacent finishes. Refinish to nearest intersection for continuous surfaces. Refinish entire unit for continuous surfaces for an assembly.
- K. Identify hazardous substances or conditions exposed during the work to the engineer for decision or remedy.

3.04 CLEANING AND PROTECTION

- A. Progress cleaning
 1. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
 2. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.
- B. Protection of installed work
 1. Protect installed work from damage by construction operations.
 2. Provide special protection where specified in individual specification sections.
 3. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
 4. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.
 5. Prohibit traffic from landscaped areas.

3.05 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

END OF SECTION

SECTION 01 7700

CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Inspections
- B. Substantial Completion
- C. Project Record Documents
- D. Warranties
- E. Operations and Maintenance Manuals
- F. Operations and Maintenance Data for Materials and Finishes
- G. Operations and Maintenance Data for Equipment and Systems
- H. Training
- I. Final Completion
- J. Maintenance

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.01 INSPECTIONS

- A. Ensure all state inspections have been completed by the authority having jurisdiction.
- B. Upload documentation of all test/inspections to Procore.
- C. Submit a written request for inspection of Substantial Completion. On receipt of request, The Design Professional will either proceed with inspection or notify contractor of unfulfilled requirements. The Design Professional will prepare the Certificate of Substantial Completion after inspection or will notify contractor of items, either on contractor's list or additional items identified by architect that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re inspection when the work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for Final Completion.

3.02 SUBSTANTIAL COMPLETION

- A. A substantial completion checklist is attached for reference following this specification section.
- B. Make submittals that are required by governing or other authorities.
 - 1. Provide copies to the Construction Manager through upload to Procore.
- C. Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Submit written certification that contract documents have been reviewed, work has been inspected, and that work is completed in accordance with contract documents and ready for review
 - 2. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the work has not been completed.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Make final changeover of permanent locks and deliver key to the owner. Advise owner's personnel of changeover in security provisions.
 - 5. Complete startup testing of systems.
 - 6. Submit test/adjust, balance records.
 - 7. Terminate and remove temporary facilities from project site, along with mockups, construction tools, and similar elements.

8. Advise owner of changeover in heat and other utilities.
9. Submit changeover information related to owner's occupancy, use, operation, and maintenance.
10. Complete final cleaning requirements, including touch up painting.
11. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

3.03 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the work:
 1. Drawings
 2. Specifications
 3. Addenda
 4. Change orders and other modifications to the contract
 5. Reviewed shop drawings, product data, and samples
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 1. Manufacturer's name and product model and number.
 2. Product substitutions or alterations utilized.
 3. Changes made by Addenda and modifications.
- F. Record Drawings:
 1. Measured depths of foundations in relation to finish first floor datum.
 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the work.
 4. Field changes of dimension and detail.
 5. Details not on original contract drawings.
- G. Record Drawings shall be uploaded to Procore in pdf format.

3.04 WARRANTIES

- A. Submit written warranties for designated portions of the work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Submit properly executed warranties in Procore prior to Final Completion.
- C. Verify that documents are in proper form, contain full information, and are notarized.
- D. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- E. Include warranties in operation and maintenance manuals.
- F. Items of work delayed beyond date of Substantial Completion, provide updated submittal after acceptance by Owner, listing date of acceptance as start of warranty period

3.05 OPERATIONS AND MAINTENANCE MANUALS

- A. Format: Submit operations and maintenance manuals in the following format:
 1. Portable Document Format (PDF) electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Owner and upload to Procore.
 - a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.

2. Assemble with data arranged in the same sequence as, and identified by the specification sections. Where systems involve more than one specification section, provide separate index for each system.
 3. Include project directory listing title and address of project, names, addresses, and telephone numbers of Architect, Consultants, Contractor and subcontractors, with names of responsible parties.
 4. Include Table of Contents listing every item separated by index and specification section.
- B. Source Data: For each product or system, list names, addresses, and telephone numbers of subcontractors and suppliers, including local source of supplies and replacement parts.
 - C. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
 - D. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use project record documents as maintenance drawings.
 - E. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

3.06 OPERATIONS AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

- A. For each product, applied material, and finish:
 1. Product data, with catalog number, size, composition, and color and texture designations.
 2. Information for re-ordering custom manufactured products.
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture protection and weather-exposed products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- D. Additional information as specified in individual product specification sections.
- E. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specified products.

3.07 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS

- A. For each item of equipment and each system:
 1. Description of unit or system, and component parts
 2. Identify function, normal operating characteristics, and limiting conditions
 3. Include performance curves, with engineering data and tests
 4. Complete nomenclature and model number of replacement parts.
- B. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specified products.
- C. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; typed.
- D. Include color coded wiring diagrams as installed.
- E. Operating procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- F. Maintenance requirements: Include routine procedure and guide for preventative maintenance and troubleshooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- G. Provide servicing and lubrication schedule and list of lubricants required.
- H. Include manufacturer's printed operation and maintenance instructions.
- I. Include sequence of operation by controls manufacturer.

- J. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- K. Provide control diagrams by controls manufacturer as installed.
- L. Provide contractor's coordination drawings, with color coded piping diagrams as installed.
- M. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- N. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- O. Include test and balancing reports.
- P. Additional requirements: As specified in individual specification sections.

3.08 TRAINING

- A. Demonstrate operations of systems, subsystems, and equipment.
- B. Train in operation and maintenance of systems, subsystems, and equipment
- C. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.
- D. Submit written agenda to Construction Manager for approval prior to scheduling training.
- E. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.

3.09 FINAL COMPLETION

- A. A final completion checklist is attached for reference following this specification section.
- B. Before requesting final inspection for determining date of Final Completion, complete the following:
 - 1. Complete punch list items.
 - 2. Prepare and submit project record documents, operation and maintenance manuals, damage or settlement surveys, and similar final record information.
 - 3. Deliver tools, spare parts, extra materials, and similar items to location designated by owner. Label with manufacturer's name and model number where applicable.
 - 4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
 - 5. All trailers, construction signs, unused, broken or demolition materials have been removed from the site and the premises returned to the original condition in the opinion of the Owner and Design Professional.
 - 6. Submit a final Application for Payment (retainage).
- C. Upon receipt of final payment complete final completion certificate in Procore.

END OF SECTION

Substantial Completion Project Checklist

Date: _____

DAS Project Number: _____

Project Title: _____

Location: _____

Contractor: _____

In order to process the 99% payment (100% pay app less closeout and retainage) on a Capital Project, the Department of Administrative Services needs the following information. Please complete this form and obtain the necessary documents.

Have all state inspections been completed and documentation uploaded to Procore?

(Including but not limited to the following inspections)

- Boiler Inspection Yes No N/A
- Water Heater Inspection Yes No N/A
- Energy Code Inspection Yes No N/A
- Building Code Inspection Yes No N/A
- Electrical Inspection Yes No N/A
- Elevator Inspection Yes No N/A
- Other: _____ Yes No N/A

Occupancy Permit if applicable

Test and Balance has been performed

Certificate of Substantial Completion in Procore (Consensus Docs 814)

Are there any disputes with the above mentioned vendor which need resolution?

Yes (provide description below) No

Can payment (less closeout and retainage) be released? Yes No

Final Completion Project Checklist

Date: _____

DAS Project Number: _____

Project Title: _____

Location: _____

Contractor: _____

In order to process the 100% payment and Retainage payment on a Capital Project, the Department of Administrative Services needs the following information. Please complete this form and obtain the necessary documents.

Have all Warranties been received? Yes No

Have the Operations and Maintenance Manuals been received? Yes No

Who is in possession of the O & M Manuals? _____

Has all training been completed? Yes No

Have all as-built drawings been scanned and uploaded into Procore? Yes No

Have electronic drawing/specification files been transferred to DAS? Yes No

Have all Test & Balance reports been received? Yes No

Have all punchlist items been corrected? Yes No

573 Notification (*To be obtained from the general contractor*): Copy of general contractor's notification of application for retainage to all subcontractors and suppliers. General contractor must follow IAC 26 section 23.13.2.

AIA Form G706 – Contractor's Affidavit of Payment of Debts and Claims

AIA Form G706A – Contractor's Affidavit of Release of Liens

AIA Form G707 – Consent of Surety Company to Final Payment

Certificate of Final Completion in Procore (Consensus Docs 815)

Are there any disputes with the above mentioned vendor which need resolution?

Yes (provide description below) No

Can 100% payment and retainage payment be released? Yes No

**SECTION 02 4119
SELECTIVE STRUCTURE DEMOLITION**

PART 1 GENERAL

1.1 SUMMARY

- A. Related Documents:
 - 1. Drawings and general provisions of the Contract apply to this Section.
 - 2. Review these documents for coordination with additional requirements and information that apply to work under this Section.
- B. Section Includes: Selective demolition as follows:
 - 1. Remove architectural, structural, plumbing, fire protection, mechanical and electrical materials and equipment as indicated or required for new construction.
 - 2. Fire sprinkler and domestic water mains shall remain in operation.
 - 3. Refer to Article 3.05 Schedules for special requirements for selected items.
 - 4. Remove materials from site, and dispose of legally.
 - 5. Disconnect, remove, cap and identify utilities for later reconnection.
- C. Related Sections:
 - 1. Division 01 Section "Submittal Procedures."
 - 2. Division 01 Section "Construction Waste Management".

1.2 SUBMITTALS

- A. Submit under provisions of Division 01 Section "Submittal Procedures."
- B. Shop Drawings: Indicate removal sequence and location of salvageable items.
- C. Project Record Documents: Accurately record locations of capped utilities.

1.3 QUALITY ASSURANCE

- A. Regulatory Requirements:
 - 1. Comply with requirements of applicable codes, rules and regulations.
 - 2. Obtain required permits from State Fire Marshal.
 - 3. Do not close or obstruct roadways or sidewalks without permits.
 - 4. Maintain building and room egress and access at all times. Do not reduce required egress width to exits.
 - 5. Minimize interference with corridors, exits, sidewalks, roadways and public thoroughfares.
 - 6. Comply with applicable procedures if hazardous or contaminated materials are discovered or suspected.

1.4 PROJECT CONDITIONS

- A. Protect adjacent work to remain, and items to be turned over to Davis County, from damage.
- B. Existing Conditions:
 - 1. If lead, asbestos or other hazardous materials are found or suspected, immediately stop work in the suspected area and advise the Owner and Architect. Do not recommence work in the area until advised by the Owner that the area has been cleared for work.
- C. Owner will occupy adjacent areas during the course of the Work. Work under this Section shall not affect Owner's operation of adjacent areas.

1.5 SEQUENCING

- A. Submit schedule indicating proposed sequence of operations for selective demolition work to Owner for review prior to start of work. Include coordination for shutoff, capping, and continuation of utility services, and details for dust and noise control.
 - 1. Provide detailed sequence of demolition and removal work to ensure uninterrupted progress of Owner's operations.
 - 2. Coordinate the scheduling of work of Section with the work of other sections.

PART 2 NOT USED

PART 3 EXECUTION

3.1 EXAMINATION

- A. Inspect and verify the existing conditions and become familiar with the extent of the Work.
- B. Examine the site to determine proper access within the limitations of the Contract. Conduct operations so as not to interfere with adjacent roads, driveways, walks, buildings, corridors, means of access and egress, and work areas.

3.2 PREPARATION

- A. Interfaces With Other Work: Coordinate extent of selective demolition work with limits of existing work to remain, and with demolition and modification requirements shown on the Drawings.
- B. Protection:
 - 1. Protect existing materials, appurtenances and equipment which are not to be demolished. Existing materials, appurtenances and equipment, building exterior and interior, and landscaping altered or damaged during demolition work shall be repaired or replaced by the Subcontractor to match existing undisturbed conditions at no additional cost to the Owner.
 - 2. Prevent movement of structure; provide bracing and shoring as required.
 - 3. Provide proper and permanent support to adjacent structure for all piping, conduits and cables to remain.
 - 4. Provide and maintain temporary weather protection during interval between demolition and removal of existing construction on exterior surfaces and installation of new construction to ensure that no water leakage or damage, or wind damage occurs to structure or interior areas of existing building.
 - 5. Provide and maintain temporary barriers and security devices at doorways.
 - 6. Use periodic light water mist, temporary enclosures, and other suitable methods to limit dust and dirt. Comply with applicable environmental protection regulations.
 - 7. Provide and maintain temporary partitions to prevent spread of dust, odors and noise to permit continued Owner occupancy.
 - 8. Maintain path of travel for debris removal dust free and clean at all times.
 - 9. Maintain ventilation system dust free at all times.
 - 10. Cover and protect windows and walls that are adjacent to areas to be demolished.
 - 11. Protect smoke alarms and fire sprinklers from dust intrusion.
 - 12. Existing elevator may not be used for debris removal
 - 13. Maintain parking areas, driveways, exterior walkways, exit paths, and landscaping in a clean, undisturbed condition. Any debris caused by selective demolition work shall be removed each day.

- C. Field verify the exact location of existing concealed utilities. Use caution if working in or about concealed or exposed utilities.
 - 1. Disconnect, remove, and cap designated utility lines within demolition areas. Mark locations of disconnected utilities. Identify utilities and indicate capping locations on Project Record Documents.

3.3 EXECUTION

- A. Minimize interference with adjacent occupied building areas, materials and equipment.
- B. Remove items in an orderly and careful manner.
 - 1. Remove only as much material as is required for new construction work to be conveniently performed.
 - 2. Cut surfaces so as to minimize the amount of new surfaces required to match existing. Make cuts plumb, true, level and straight, or as otherwise required to provide proper surfaces to receive new work and repairs.
 - 3. Cut asphalt and concrete by power saw in neat, sharp straight lines. Repair broken edges or as directed by the Owner.
- C. Remove miscellaneous abandoned appurtenances that will be exposed to view, unless indicated otherwise.
- D. Investigate and measure the nature and extent of unanticipated items that conflict with intended function or design. Submit written report with accurate detailed information to the Owner and Architect. While awaiting instructions from the Owner, rearrange selective demolition schedule as necessary to continue overall job progress without delay.
- E. Eliminate dust. Install dust barriers as required to keep dust out of corridors and adjacent areas. Use walkoff mats designed to remove dust at the corridor side of doors to rooms where demolition work is being done.
 - 1. Activities which generate silica dust, such as concrete saw cutting, jackhammering, chipping, or abrasive blasting, shall incorporate engineering controls to eliminate visible emissions.
 - 2. Do not use silica sand or other substances containing more than 1 per cent crystalline silica as abrasive blasting material
 - 3. Use concrete and masonry saws that provide water to the blade.
 - 4. Prevent human exposure to dust using methods such as removing dust with water, high efficiency particulate air (HEPA) filters, and wet sweeping. Do not use compressed air or dry sweeping.
- F. Stop work and notify the Owner immediately if structure or other items to remain appear to be endangered. Do not resume work until directed by the Owner.
- G. Do not disrupt service to existing fire sprinkler lines. If disruption becomes necessary, coordinate with the Owner..
- H. Remove, store and protect materials to be re-installed or retained so as to prevent damage.
- I. Remove and promptly dispose of vermin infested materials.

3.4 DISPOSAL AND CLEANUP

- A. Material removed under this Contract which is not to be salvaged or reused in the Project shall become the property of the Contractor and shall be promptly removed from the job site. Do not store or permit debris to accumulate at the site.
- B. Unless indicated otherwise, remove demolished material from site in a timely manner. Dispose of materials legally off site. Do not burn or bury materials on site.
- C. Upon completion, clean the entire area of demolition residue satisfactory for the continuation of the Work. Remove temporary work.

- D. All metal scrap to be turned over to owner. G
- E. Grout debris can be disposed of onsite. Coordinate with owner.

3.5 SCHEDULES

- A. Remove the following materials from the site and dispose of legally.
 - 1. Demolition materials.

END OF SECTION

**SECTION 04 2000
UNIT MASONRY**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Concrete block.
- B. Ceramic glazed face brick.
- C. Mortar and grout.
- D. Reinforcement and anchorage.

1.2 RELATED REQUIREMENTS

- A. Section 03 1000 - Concrete Forming and Accessories: Dovetail slots for masonry anchors.
- B. Section 03 2000 - Concrete Reinforcing: Reinforcing steel for grouted masonry.
- C. Section 03 3000 - Cast-in-Place Concrete: Installation of dovetail slots for masonry anchors.
- D. Section 04 0511 - Masonry Mortaring and Grouting.

1.3 REFERENCE STANDARDS

- A. ASTM C90 - Standard Specification for Loadbearing Concrete Masonry Units 2016a.
- B. ASTM C91/C91M - Standard Specification for Masonry Cement 2018.
- C. ASTM C126 - Standard Specification for Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units 2019.
- D. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar 2018.
- E. ASTM C150/C150M - Standard Specification for Portland Cement 2020.
- F. ASTM C207 - Standard Specification for Hydrated Lime for Masonry Purposes 2018.
- G. ASTM C270 - Standard Specification for Mortar for Unit Masonry 2019.
- H. ASTM C404 - Standard Specification for Aggregates for Masonry Grout 2018.
- I. ASTM C476 - Standard Specification for Grout for Masonry 2020.
- J. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures 2016.

1.4 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data for masonry units, mortar, and masonry accessories.

1.5 QUALITY ASSURANCE

- A. Comply with provisions of TMS 402/602, except where exceeded by requirements of Contract Documents.

PART 2 PRODUCTS

2.1 MORTAR AND GROUT MATERIALS

- A. Masonry Cement: ASTM C91/C91M, Type N.
- B. Portland Cement: ASTM C150/C150M, Type I; color as required to produce approved color sample.
 - 1. Not more than 0.60 percent alkali.
- C. Hydrated Lime: ASTM C207, Type S.
- D. Mortar Aggregate: ASTM C144.

- E. Grout Aggregate: ASTM C404.
- F. Water: Clean and potable.

2.2 MORTAR AND GROUT MIXING

- A. Mortar for Unit Masonry: ASTM C270, using the Proportion Specification.
 - 1. Interior, loadbearing masonry: Type N.
 - 2. Interior, non-loadbearing masonry: Type O.
- B. Grout: ASTM C476; consistency required to fill completely volumes indicated for grouting; fine grout for spaces with smallest horizontal dimension of 2 inches or less; coarse grout for spaces with smallest horizontal dimension greater than 2 inches.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive masonry.
- B. Verify that related items provided under other sections are properly sized and located.

3.2 PREPARATION

- A. Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.

3.3 COLD AND HOT WEATHER REQUIREMENTS

- A. Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.

3.4 COURSING

- A. Establish lines, levels, and coursing indicated. Protect from displacement.
- B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.
- C. Concrete Masonry Units:
 - 1. Bond: Running.

3.5 PLACING AND BONDING

- A. Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.

3.6 CLEANING

- A. Remove excess mortar and mortar droppings.
- B. Clean soiled surfaces with cleaning solution.

END OF SECTION

**SECTION 06 1000
ROUGH CARPENTRY**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Nonstructural dimension lumber framing.
- B. Sheathing.

1.2 REFERENCE STANDARDS

- A. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware 2016a.
- B. AWC (WFCM) - Wood Frame Construction Manual for One- and Two-Family Dwellings 2018, with Errata (2019).
- C. PS 1 - Structural Plywood 2019.
- D. PS 2 - Performance Standard for Wood Structural Panels 2018.
- E. PS 20 - American Softwood Lumber Standard 2021.

PART 2 PRODUCTS

2.1 GENERAL REQUIREMENTS

- A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
 - 1. If no species is specified, provide species graded by the agency specified; if no grading agency is specified, provide lumber graded by grading agency meeting the specified requirements.
 - 2. Grading Agency: Grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee at www.alsc.org, and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.

2.2 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

- A. Stud Framing (2 by 2 through 2 by 6):
 - 1. Grade: No. 2.
- B. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
 - 1. Lumber: S4S, No. 2 or Standard Grade.
 - 2. Boards: Standard or No. 3.

2.3 CONSTRUCTION PANELS

- A. Wall Sheathing: PS 2 type.
 - 1. Bond Classification: Exterior.
 - 2. Grade: Structural I Sheathing.
 - 3. Span Rating: 24.
 - 4. Performance Category: 5/16 PERF CAT.
 - 5. Edge Profile: Square edge.
- B. Wall Sheathing: Plywood, PS 1, Grade C-D, Exposure I.

2.4 ACCESSORIES

- A. Fasteners and Anchors:
 - 1. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.

PART 3 EXECUTION

3.1 INSTALLATION - GENERAL

- A. Select material sizes to minimize waste.
- B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.

3.2 FRAMING INSTALLATION

- A. Set structural members level, plumb, and true to line. Discard pieces with defects that would lower required strength or result in unacceptable appearance of exposed members.
- B. Make provisions for temporary construction loads, and provide temporary bracing sufficient to maintain structure in true alignment and safe condition until completion of erection and installation of permanent bracing.
- C. Install structural members full length without splices unless otherwise specifically detailed.
- D. Comply with member sizes, spacing, and configurations indicated, and fastener size and spacing indicated, but not less than required by applicable codes and AWC (WFCM) Wood Frame Construction Manual.
- E. Construct double joist headers at floor and ceiling openings and under wall stud partitions that are parallel to floor joists; use metal joist hangers unless otherwise detailed.
- F. Frame wall openings with two or more studs at each jamb; support headers on cripple studs.

3.3 BLOCKING, NAILERS, AND SUPPORTS

- A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.

3.4 INSTALLATION OF CONSTRUCTION PANELS

- A. Wall Sheathing: Secure with long dimension perpendicular to wall studs, with ends over firm bearing and staggered, using nails, screws, or staples.

END OF SECTION

**SECTION 07 9200
JOINT SEALANTS**

PART 1 - GENERAL

1.1 DESCRIPTION:

- A. This section covers interior and exterior sealant and their application, wherever required for complete installation of building materials or systems.
- B. Masonry Control and Expansion Joint: Section 042000, UNIT MASONRY.

1.2 QUALITY ASSURANCE:

- A. Installer Qualifications: An experienced installer with a minimum of three (3) years' experience and who has specialized in installing joint sealants similar in material, design, and extent to those indicated for this Project and whose work has resulted in joint-sealant installations with a record of successful in-service performance. Submit qualification.
- B. Source Limitations: Obtain each type of joint sealant through one (1) source from a single manufacturer.

1.3 CERTIFICATION:

- A. Contractor is to submit to the Construction Manager written certification that joints are of the proper size and design, that the materials supplied are compatible with adjacent materials and backing, that the materials will properly perform to provide permanent watertight, airtight or vapor tight seals (as applicable), and that materials supplied meet specified performance requirements.

1.4 SUBMITTALS:

- A. Submit in accordance with Section 013300, SUBMITTALS.
- B. Contractor certification.
- C. Manufacturer's installation instructions for each product used.
- D. Cured samples of exposed sealants for each color.
- E. Manufacturer's Literature and Data:
 - 1. Primers
 - 2. Sealing compound, each type, including compatibility when different sealants are in contact with each other.
- F. Manufacturer warranty.

1.5 PROJECT CONDITIONS:

- A. Environmental Limitations:
 - 1. Do not proceed with installation of joint sealants under following conditions:
 - a. When ambient and substrate temperature conditions are outside limits permitted by joint sealant manufacturer or are below 4.4 degrees C (40 degrees F).
 - b. When joint substrates are wet.
- B. Joint-Width Conditions:
 - 1. Do not proceed with installation of joint sealants where joint widths are less than those allowed by joint sealant manufacturer for applications indicated.
- C. Joint-Substrate Conditions:
 - 1. Do not proceed with installation of joint sealants until contaminants capable of interfering with adhesion are removed from joint substrates.

1.6 DELIVERY, HANDLING, AND STORAGE:

- A. Deliver materials in manufacturers' original unopened containers, with brand names, date of manufacture, shelf life, and material designation clearly marked thereon.
- B. Carefully handle and store to prevent inclusion of foreign materials.
- C. Do not subject to sustained temperatures exceeding 32 degrees C (90 degrees F) or less than 5 degrees C (40 degrees F).

1.7 DEFINITIONS:

- A. Definitions of terms in accordance with ASTM C717 and as specified.
- B. Backing Rod: A type of sealant backing.
- C. Bond Breakers: A type of sealant backing.
- D. Filler: A sealant backing used behind a back-up rod.

1.8 WARRANTY:

- A. Construction Warranty: Comply with FAR clause 52.246-21 "Warranty of Construction".
- B. Manufacturer Warranty: Manufacturer shall warranty their sealant for a minimum of five (5) years from the date of installation and final acceptance by the client. Submit manufacturer warranty.

1.9 APPLICABLE PUBLICATIONS:

- A. Publications listed below form a part of this specification to extent referenced. Publications are referenced in text by basic designation only.
- B. ASTM International (ASTM):
 - 1. Elastomeric Cellular Preformed Gasket and Sealing Material
 - 2. Mineral Fiber Block and Board Thermal Insulation
 - 3. Standard Terminology of Building Seals and Sealants
 - 4. Test Method for Low-Temperature Flexibility of Latex Sealants after Artificial Weathering
 - 5. Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants
 - 6. Use of Sealants in Acoustical Applications.
 - 7. Elastomeric Joint Sealants.
 - 8. Laboratories Engaged in Testing of Building Sealants
 - 9. Standard Guide for Use of Joint Sealants.
 - 10. Test Method for Staining of Porous Substrate by Joint Sealants
 - 11. Cylindrical Sealant Backing for Use with Cold Liquid Applied Sealants
 - 12. Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints
 - 13. Test Methods for Cone Penetration of Lubricating Grease
 - 14. Specification for Flexible Cellular Materials—Sponge or Expanded Rubber
 - 15. Surface Burning Characteristics of Building Materials
- C. Sealant, Waterproofing and Restoration Institute (SWRI).
- D. The Professionals' Guide
- E. Environmental Protection Agency (EPA):
 - 1. National Volatile Organic Compound Emission Standards for Consumer and Commercial Products

PART 2 - PRODUCTS

2.1 SEALANTS:

- A. Exterior Sealants:
 - 1. Vertical surfaces, provide non-staining ASTM C920, Type S or M, Grade NS, Class 25, Use NT.
 - 2. Horizontal surfaces, provide ASTM C920, Type S or M, Grade P, Class 25, Use T.
 - 3. Provide location(s) of exterior sealant as follows:
 - a. Joints formed where frames and subsills of windows, doors, louvers, and vents adjoin masonry, or metal frames. Provide sealant at exterior surfaces of exterior wall Penetrations.
 - b. Metal to metal.
 - c. Masonry to masonry or stone.
 - d. Masonry expansion and control joints.
 - e. Wood to masonry.
 - f. Masonry joints where shelf angles occur.
 - g. Voids where items penetrate exterior walls.
 - h. Metal reglets, where flashing is inserted into masonry joints, and where flashing is penetrated by coping dowels.
- B. Interior Sealants:
 - 1. VOC Content of Interior Sealants: Sealants and sealant primers used inside the weatherproofing system are to comply with the following limits for VOC content when calculated according to 40 CFR 59, (EPA Method 24):
 - a. Architectural Sealants: 250 g/L.
 - b. Sealant Primers for Nonporous Substrates: 250 g/L.
 - c. Sealant Primers for Porous Substrates: 775 g/L.
 - 2. Vertical and Horizontal Surfaces: ASTM C920, Type S or M, Grade NS, Class 25, Use NT.
 - 3. Detention areas (any applications inside secure perimeter): two-part, nonsag, tamper resistant elastomeric polyurethane joint sealant
 - a. Applicable Standards: Meets Federal Specification TT-S-00227E, Type II, Class B and ASTM C-920, Type M, Grade NS, Class 12.5, Use T1, M, O
 - b. Pecora Dynaflex or similar
 - 4. Provide location(s) of interior sealant as follows:
 - a. Typical narrow joint 6 mm, (1/4 inch) or less at walls and adjacent components.
 - b. Perimeter of doors, windows, access panels which adjoin concrete or masonry surfaces.
 - c. Interior surfaces of exterior wall penetrations.
 - d. Joints at masonry walls and columns, piers, concrete walls or exterior walls.
 - e. Exposed isolation joints at top of full height walls.
 - f. Joints formed between tile floors and tile base cove; joints between tile and dissimilar materials; joints occurring where substrates change.

2.2 COLOR:

- A. Sealants used with exposed masonry are to match color of mortar joints.
- B. Sealants used with unpainted concrete are to match color of adjacent concrete.
- C. Color of sealants for other locations to be light gray or aluminum, unless otherwise indicated in construction documents.

2.3 JOINT SEALANT BACKING:

- A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

- B. Cylindrical Sealant Backings: ASTM C1330, of type indicated below and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance:
 - 1. Type C: Closed-cell material with a surface skin.
- C. Elastomeric Tubing Sealant Backings: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D1056 or synthetic rubber (ASTM C509), nonabsorbent to water and gas, and capable of remaining resilient at temperatures down to minus 32 degrees C (minus 26 degrees F). Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depth, and otherwise contribute to optimum sealant performance.
- D. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

2.4 FILLER:

- A. Mineral fiberboard: ASTM C612, Class 1.
- B. Thickness same as joint width.
- C. Depth to fill void completely behind back-up rod.

2.5 PRIMER:

- A. As recommended by manufacturer of caulking or sealant material.
- B. Stain free type.

2.6 CLEANERS-NON POROUS SURFACES:

- A. Chemical cleaners compatible with sealant and acceptable to manufacturer of sealants and sealant backing material. Cleaners to be free of oily residues and other substances capable of staining or harming joint substrates and adjacent non-porous surfaces and formulated to promote adhesion of sealant and substrates.

PART 3 - EXECUTION

3.1 INSPECTION:

- A. Inspect substrate surface for bond breaker contamination and unsound materials at adherent faces of sealant.
- B. Coordinate for repair and resolution of unsound substrate materials.
- C. Inspect for uniform joint widths and that dimensions are within tolerance established by sealant manufacturer.

3.2 PREPARATIONS:

- A. Prepare joints in accordance with manufacturer's instructions and SWRI (The Professionals' Guide).
- B. Clean surfaces of joint to receive caulking or sealants leaving joint dry to the touch, free from frost, moisture, grease, oil, wax, lacquer paint, or other foreign matter that would tend to destroy or impair adhesion.
 - 1. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants.
 - 2. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air. Porous joint surfaces include but are not

limited to the following:

- a. Concrete.
 - b. Masonry.
3. Remove laitance and form-release agents from concrete.
 4. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.
Nonporous surfaces include but are not limited to the following:
 - a. Metal.
 - b. Glass.
- C. Do not cut or damage joint edges.
- D. Apply non-staining masking tape to face of surfaces adjacent to joints before applying primers, caulking, or sealing compounds.
1. Do not leave gaps between ends of sealant backings.
 2. Do not stretch, twist, puncture, or tear sealant backings.
 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- E. Apply primer to sides of joints wherever required by compound manufacturer's printed instructions or as indicated by pre-construction joint sealant substrate test.
1. Apply primer prior to installation of back-up rod or bond breaker tape.
 2. Use brush or other approved means that will reach all parts of joints. Avoid application to or spillage onto adjacent substrate surfaces.

3.3 BACKING INSTALLATION:

- A. Install backing material, to form joints enclosed on three sides as required for specified depth of sealant.
- B. Where deep joints occur, install filler to fill space behind the backing rod and position the rod at proper depth.
- C. Cut fillers installed by others to proper depth for installation of backing rod and sealants.
- D. Install backing rod, without puncturing the material, to a uniform depth, within plus or minus 3 mm (1/8 inch) for sealant depths specified.
- E. Where space for backing rod does not exist, install bond breaker tape strip at bottom (or back) of joint so sealant bonds only to two opposing surfaces.

3.4 SEALANT DEPTHS AND GEOMETRY:

- A. At widths up to 6 mm (1/4 inch), sealant depth equal to width.
- B. At widths over 6 mm (1/4 inch), sealant depth 1/2 of width up to 13 mm (1/2 inch) maximum depth at center of joint with sealant thickness at center of joint approximately 1/2 of depth at adhesion surface.

3.5 INSTALLATION:

- A. General:
 1. Apply sealants and caulking only when ambient temperature is between
 2. 5 degrees C and 38 degrees C (40 degrees and 100 degrees F).
 3. Do not install polysulfide base sealants where sealant may be exposed to fumes from bituminous materials, or where water vapor in continuous contact with cementitious materials may be present.
 4. Do not install sealant type listed by manufacture as not suitable for use in locations specified.

5. Apply caulking and sealing compound in accordance with manufacturer's printed instructions.
 6. Avoid dropping or smearing compound on adjacent surfaces.
 7. Fill joints solidly with compound and finish compound smooth.
 8. Tool exposed joints to form smooth and uniform beds, with slightly concave surface conforming to joint configuration per Figure 5A in ASTM C1193 unless shown or specified otherwise in construction documents. Remove masking tape immediately after tooling of sealant and before sealant face starts to "skin" over. Remove any excess sealant from adjacent surfaces of joint, leaving the working in a clean finished condition.
 9. Finish paving or floor joints flush unless joint is otherwise detailed.
 10. Apply compounds with nozzle size to fit joint width.
 11. Test sealants for compatibility with each other and substrate. Use only compatible sealant. Submit test reports.
 12. Replace sealant which is damaged during construction process.
- B. For application of sealants, follow requirements of ASTM C1193 unless specified otherwise. Take all necessary steps to prevent three-sided adhesion of sealants.
- C. Interior Sealants:
1. Apply a 6 mm (1/4 inch) minimum bead of sealant each side of runners (tracks), including those used at partition intersections with dissimilar wall construction.
 2. Openings: Apply a 6 mm (1/4 inch) bead of sealant around all cutouts to seal openings of electrical boxes, ducts, pipes and similar penetrations. To seal electrical boxes, seal sides and backs.
 3. Control Joints: Before control joints are installed, apply sealant in back of control joint to reduce flanking path for sound through control joint.

3.6 CLEANING:

- A. Fresh compound accidentally smeared on adjoining surfaces: Scrape off immediately and rub clean with a solvent as recommended by manufacturer of the adjacent material or if not otherwise indicated by the caulking or sealant manufacturer.
- B. Leave adjacent surfaces in a clean and unstained condition.

END OF SECTION

**SECTION 08 1113
DOORS AND FRAMES**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Work under this section comprises of furnishing hollow metal doors and frames as scheduled.
 - 1. Flush Steel Doors.
 - 2. Steel frames.

1.2 RELATED SECTIONS

- A. Related documents, drawings and general provisions of contract, including General and Supplementary Conditions and Division 1 specification sections apply to this section. The latest published edition of each reference applies.
 - 1. Section 087100 - Door Hardware
 - 2. Section 099000 - Painting and Coating

1.3 REFERENCES

- A. The intent of this document is that all hollow metal and its application will comply or exceed the standards identified below. The latest published edition of each reference applies.
 - 1. DHI- Door and Hardware Industry
 - a. DHI A 115.IG - Installation Guide for Doors and Hardware.
 - 2. ANSI/BHMA A 156.115 - Hardware Preparations in Standard Steel Doors and Frames.
 - 3. ANSI/BHMA A156.7 - Hinge Template Dimensions.
 - 4. ANSI- American National Standards Institute
 - a. ANSI A250.3 Test Procedure and Acceptance Criteria for Factory Applied Finish Coatings for Steel Doors and Frames
 - b. ANSI A 250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames, and Frame Anchors
 - c. ANSI A250.6-2003 Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames
 - d. ANSI A 250.8 - SDI-100 Specifications for Standard Steel Doors and Frames
 - e. ANSI A 250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames
 - f. ANSI A 250.11 - Recommended Erection Instructions for Steel Frames
 - g. ANSI A 250.13 Testing and Rating of Severe Windstorm Resistant Components for Swing Door Assemblies for Protection of Building Envelopes
 - 5. ASTM A568-2011 Standard Specification for Steel Sheet, Carbon, and High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled, General Requirements for
 - 6. ASTM A591 Standard Specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Weight
 - 7. ASTM A653-2011 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
 - 8. ASTM A924-2010 Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process
 - 9. ASTM A1008/A1008M-2012 Standard Specification for Steel Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability

10. ASTM E 152 - Standard Methods of Fire Tests of Door Assemblies
11. NAAMM/HMMA – Hollow Metal Manufacturers Association
 - a. HMMA 805-12 – Recommended Selection and Usage Guide for Hollow Metal Doors and Frames
12. SDI - Steel Door Institute
 - a. SDI-105 – Recommended Erection Instructions for Steel Frames
 - b. SDI-107 – Hardware on Steel Doors (Reinforcement - Application)
 - c. SDI-111 - Recommended Details for Standard Steel Doors, Frames, Accessories, and Related Components
 - d. SDI-117 - Manufacturing Tolerances Standard Steel Doors and Frames
 - e. SDI-118 – Basic Fire Door Requirements
13. ANSI-ICC A117.1 – Accessible and Usable Building and Facilities.
14. UL - Building Materials Directory; Underwriters Laboratories Inc.
15. WH - Certification Listings; Warnock Hersey International Inc.

1.4 SUBMITTALS

- A. Submit to comply with provisions of Section 013300 Submittal Procedures.
- B. Product Data: Manufacturer's standard details and catalog data indicating compliance with referenced standards, and manufacturer's installation instructions.
- C. Shop Drawings: Provide a schedule of doors and frames using same reference numbers for details and door openings as those on the contract documents. Shop drawings should include the following information Indicate frame configuration, anchor types and spacing, location of cutouts for hardware, reinforcement, to ensure doors and frames are properly prepared and coordinated to receive hardware.
 1. Elevations of each door type.
 2. Details for door core
 3. Details of doors, including vertical- and horizontal-edge details and metal thicknesses. Locations of cutouts for glass and louvers.
 4. Frame details for each frame type, including dimensioned profiles and metal thicknesses.
 5. Mounting locations for hardware
 6. Thickness of reinforcement/preparations for hardware
 7. Details of anchorages, joints, field splices, and connections.
 8. Details of accessories.
 9. Details of moldings, removable stops, and glazing.
 10. Fire ratings
 11. Finish
- D. Closeout Submittals to comply with Section 017700 Closeout Submittals procedures; furnish copies of manufacturer's warranty information and maintenance instructions.

1.5 QUALITY ASSURANCE

- A. Select a qualified hollow metal distributor, who is a direct account of the manufacturer of the products furnished.
- B. Manufacturer Qualifications: Certified Member of the Steel Door Institute in good standing.
- C. Installer: Minimum five years documented experience installing products specified this Section.
- D. Certificates:
 1. Manufacturer's certification that products comply with referenced standards.
 2. All Hollow Metal must be provided by an SDI Certified Manufacture.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Packing and Shipping
 - 1. Do not use non-vented plastic or canvas shelters to prevent rust or damage.
 - 2. Should wrappers become wet, remove immediately
- B. Delivery and Site Acceptance
 - 1. The supplier shall deliver all materials to the project site; direct factory shipments are not allowed unless agreed upon beforehand. Supplier shall coordinate delivery times and schedules with the contractor.
 - 2. Deliver doors cardboard wrapped or crated to provide protection during transit and job site storage. Provide additional protection to prevent damage to any factory-finished doors. Mark all doors and frames with architects opening numbers as shown on the contract documents and shop drawings on the center hinge preparation location.
 - 3. Upon delivery, check in doors and frames jointly with supplier. Inspect doors and frames upon delivery for damage, correct quantities or shortages. Minor damages may be repaired provided refinished items are equal in all respects to new work and acceptable to the architect. Otherwise, remove and replace damaged goods as directed. Note shortages and replace immediately.
- C. Storage and Protection
 - 1. Handle, store and protect products in accordance with the manufacturers printed instructions and ANSI/SDI A250.8, A250.10, and NAAMM/HMMA 840.
 - 2. Store doors vertically in a dry area, under a proper vented cover. Protect doors from adverse weather elements.
 - 3. Store frames in an upright position with heads uppermost under cover. Place on 4 inch (102 mm) high wood sills to prevent rust and damage. Store assembled frames five units maximum in a stack with 2-inch (51 mm) space between frames to promote air circulation.

1.7 COORDINATION

- A. Coordinate Work with other directly affected sections involving manufacture or fabrication of internal cutouts and reinforcement for door hardware, electric devices and recessed items.
- B. Coordinate Work with frame opening construction, door and hardware installation.
- C. Sequence installation to accommodate required door hardware.
- D. Verify field dimensions for factory assembled frames prior to fabrication.

1.8 WARRANTY

- A. Comply with Section 017700 Closeout Submittals
- B. All doors and frames shall be warranted in writing by the manufacturer against defects in materials and workmanship for a period of one (1) year commencing on the date of manufacture.

PART 1 PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design - MESKER a dormakaba Brand
- B. Acceptable Manufacturers: any SDI certified manufacturer.
- C. Provide all steel doors and frames from a single SDI certified manufacturer or designer pre-approved equal.

2.2 DOORS

- A. General: Construct exterior/interior doors to the following designs and gages:

1. Exterior Doors: Zinc-Iron Alloy-Coated galvanized steel, ASTM A 653, A40 minimum:
 - a. Thickness:
 - 1) 16 gage
 - b. Close tops of exterior swing-out doors to eliminate moisture penetration. Galvanized steel top caps are permitted.
 2. Interior Doors: Cold-rolled steel, ASTM A 1008/A 1008M:
 - a. Thickness:
 - 1) 16 gage
 3. Prime Finish Doors: Clean, phosphatize and factory prime painted doors indicated on Door Schedule as HM.
 4. Glass moldings and stops:
 - a. Fabricate from 20 gage minimum steel:
 - b. Install trim into the door as a four-sided welded assembly with mitered, reinforced and welded corners.
 - c. Trim: identical on both sides of the door.
 - d. Labeled and non-labeled doors: use the same trim.
 - e. Channeling requirements:
 - (a) Cutouts larger than 36" in height require 18 gage perimeter channelings in the cutout of the door prior to installation of the lite kit or louver.
 5. Hardware Reinforcements:
 - a. Hinge reinforcements for full mortise hinges: minimum 7 gage.
 - b. Lock reinforcements : minimum 16 gage.
 - c. Closer reinforcements: minimum 14 gage steel.
 - d. Projection welded hinge and lock reinforcements to the edge of the door.
 - e. Provided adequate reinforcements for other hardware as required.
- B. Full Flush Doors:
1. Basis of Design: Mesker N Series.
 - a. Performance:
 - 1) Physical performance: 1 million cycles per ANSI A250.4.
 - 2) Thermal performance (gasketed).
 - (a) Polystyrene core.
 2. Door Thickness: 1-3/4 inches.
 - a. Polystyrene Core: Full 1-3/4 inches thick rigid polystyrene, adhered to inside of door faces and polystyrene core with waterproof adhesive for bond strength and rust prevention.
 3. Vertical edge seams: Provide doors with continuous vertical mechanical inter-locking joints at lock and hinge edges. Finish edges as follows:
 - a. Filled Vertical Edges (S): Continuous vertical mechanical interlocking joints with tack welds every 8 inches. Putty or filler applied to the edge seam and ground smooth.
 - b. Welded Vertical Edges (NVS): Continuous vertical weld and pressed smooth with no putty or filler.
 4. Bevel lock door edges 1/8 inch (3 mm) in 2 inches (50 mm). Square edges on hinge and/or lock stiles are acceptable.
 5. Reinforce top and bottom of doors with galvanized 16 gage minimum, welded to both panels.
 6. Fire Rating: Supply door units bearing Labels for fire ratings indicated in Door Schedule for the locations indicated.

2.3 DOOR FRAMES

- A. General: Construct exterior/interior metal door frames to the following designs and gages;
 - 1. Exterior Frames: Zinc-Iron Alloy-Coated galvanized steel, ASTM A 653, A40 minimum:
 - a. Thickness:
 - 1) 16 gage.
 - 2. Electrical Requirements: Coordinate all electrical requirements for doors and frames. Make provisions for installation of electrical items so that wiring can be readily removed and replaced.
 - a. Provide cutouts and reinforcements required for metal door frame to accept electric components.
 - b. Provide cutouts and reinforcements required to accept security system components.
 - c. Coordinate with Section 087100 for electrified hardware items.
- B. Flush Steel Frames:
 - 1. Basis of Design: Mesker F-Series.
 - a. Performance:
 - 1) Physical performance: 1 million cycles per ANSI A250.4
 - 2. Construction: Factory-welded three-sided frames.
 - a. Face welded: Weld miter joints between head and jamb faces completely along their length either internally or externally. The remaining elements of the frame profile (soffit, stop and rabbets) are not welded. Grind and finish face joints smooth.
 - 3. Profile:
 - a. Face:
 - 1) 2 Inches face dimension and types and throat dimensions indicated on the Door Schedule.
 - b. Stops:
 - 1) Standard 5/8-inch-high stops
 - 4. Provide following reinforcement and accessories:
 - a. Preparation for 4-1/2 inches high, standard weight, or heavy weight, full mortise hinges; with plaster guard. Minimum 7-gauge steel.
 - b. Hinge Preparation for 5-inch-high, universal standard weight, or heavy weight, full mortise hinges; with plaster guard. Minimum 7-gauge steel.
 - c. Preparation for continuous hinge reinforcement. Minimum 14-gauge steel.
 - d. Strike preparation (single doors) for 4-7/8-inch universal strike; with plaster guard. Minimum 16-gauge steel.
 - e. Closer preparation minimum 14-gauge steel.
 - f. Silencers. Prepare frames to receive inserted type door silencers, 3 per strike jamb on single doors.
 - 5. Finish: Factory prime finish in accordance with ANSI A 250.10.

2.4 ACCESSORIES

- A. Anchors: Manufacturer's standard framing anchors, specified in manufacturer's printed installation instructions for project conditions.
- B. Astragals for pairs of doors: Manufacturer's standard for labeled and non-labeled openings.
- C. Silencers: Resilient rubber, Inserted type, three per strike jamb for single openings. Stick-on silencers shall not be permitted except on hollow metal framing systems.
- D. Glazing: Specified in Section 088000.

2.5 FABRICATION

- A. Steel Frames:

1. Fabricate steel door and frame units to be rigid, neat in appearance, and free from defects, warp, or buckle. Where practical, fit and assemble units in manufacturer's plant. Clearly identify work that cannot be permanently factory assembled before shipment, to assure proper assembly at Project site. Comply with ANSI/SDI 100 requirements.
 - a. Clearances shall comply with the requirements of NFPA 80 Chapter 5.
 2. Three-piece knock-down frames: Head and jamb intersecting corners die-cut, mitered at 45 degrees, with locking tabs for rigid connection when assembled.
 3. Factory-welded frames: Head and jamb intersecting corners mitered at 45 degrees, with back welded joints ground smooth.
 - a. Continuous face weld the joint between the head and jamb faces along their length either internally or externally. Grind, prime paint, and finish smooth face joints with no visible face seams.
 - b. Externally weld, grind, prime paint, and finish smooth face joints at meeting mullions or between mullions and other frame members per a current copy of ANSI/SDI A250.8.
 4. Provide temporary steel spreaders (welded to the jambs at each rabbet of door openings) on welded frames during shipment. Remove temporary steel spreaders prior to installation of the frame.
- B. Tolerances shall comply with SDI-117 "Manufacturing Tolerances Standard Steel Doors and Frames."
- C. Fabricate concealed stiffeners, reinforcement, edge channels, louvers, and moldings from either cold- or hot-rolled steel sheet.
- D. Unless otherwise indicated, provide exposed fasteners with countersunk flat or oval heads for exposed screws and bolts.
- E. Prepare doors and frames to receive mortised and concealed hardware per final door hardware schedule and templates provided by hardware supplier. Comply with applicable requirements of SDI-107 and ANSI-A115 Series specifications for door and frame preparation for hardware.
- F. Reinforce doors and frames to receive surface-applied hardware. Drilling and tapping for surface-applied hardware may be done at Project site. Provide internal reinforcements for all doors to receive door closers and exit devices where scheduled.
- G. Locate hardware as indicated on Shop Drawings or, if not indicated, per the Door and Hardware Institute's (DHI) "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
- H. Exposed door and frame surfaces to be cleaned and treated then coated with rust inhibitive primer. Water-based primer and color paint finishes to be free of Hazardous Air Pollutants (HAPS) and Volatile Organic Compounds (VOVS). Paint to comply with ANSI A250.3 and A250.10.

2.6 FINISHES

- A. Chemical Treatment: Treat steel surfaces to promote paint adhesion.
- B. Factory Prime Finish: Meet requirements of ANSI A 250.10.

PART 1 EXECUTION

3.1 EXAMINATION

- A. Verify that project conditions are acceptable before beginning installation of frames.
 1. Verify that completed openings to receive knock-down wrap-around frames are of correct size and thickness.

2. Verify that completed concrete or masonry openings to receive butt type frames are of correct size.
- B. Do not begin installation until conditions have been properly prepared.
- C. Correct unacceptable conditions before proceeding with installation.

3.2 INSTALLATION

- A. Install doors and frames in accordance with manufacturer's printed installation instructions and with Steel Door Institute's recommended erection instructions for steel frames SDI A250.11 and NAAMM/HMMA 840.
- B. Comply with provisions of SDI-105, "Recommended Erection Instructions for Steel Door Frames," unless otherwise indicated. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set.
 1. Except for frames located in existing concrete, masonry, or gypsum board assembly construction, place frames before constructing enclosing walls and ceilings.
 2. In masonry construction, install at least 3 wall anchors per jamb adjacent to hinge location on hinge jamb and at corresponding heights on strike jamb. Acceptable anchors include masonry wire anchors and masonry T-shaped anchors. Use additional anchors as required for height per manufacturers' installation instructions.
 3. At existing concrete or masonry construction, install at least 3 completed opening anchors per jamb adjacent to hinge location on hinge jamb and at corresponding heights on strike jamb. Set frames and secure to adjacent construction with bolts and masonry anchorage devices. Use additional anchors as required for height per manufacturers' installation instructions.
 4. In metal-stud partitions, install at least 3 wall anchors per jamb at hinge and strike levels. In steel-stud partitions, attach wall anchors to studs with screws. Secure Sill Anchors to floor. Use additional anchors as required for height per manufacturers' installation instructions.
 5. Drywall series frames are designed for installation in interior applications after construction of wood or metal stud and drywall applications. Drywall series frames are provided with adjustable jamb lock anchors for secure installation. Install frames per manufacturers' installation instructions. Adjust anchors and secure sill and baseboard anchors as provided.
- C. Remove temporary steel spreaders prior to installation of frames.
- D. Set frames accurately in position; plumb, align and brace until permanent anchors are set. After wall construction is complete, remove temporary wood spreaders.
 1. Field splice only at approved locations indicated on the shop drawings.
 2. Weld, grind, and finish as required to conceal evidence of splicing on exposed faces.
- E. Provide full height 3/8 inch (9.5 mm) to 1-1/2 inch (38 mm) thick strip of polystyrene foam blocking at frames requiring grouting. Apply the strip to the back of the frame to facilitate field drilling or tapping.
- F. Glaze and seal window frames in accordance with HMMA-820 TN03.
- G. Apply hardware in accordance with hardware manufacturers' instructions and Section 087100 of these Specifications. Install hardware with only factory-provided fasteners. Install silencers. Adjust door installation to provide 1/8" at head and 1/8" at strike and hinge jamb with door undercut to meet fire ratings and floor conditions to achieve maximum operational effectiveness and appearance.

3.3 ADJUST AND CLEAN

- A. Adjust doors for proper operation, free from binding or other defects.

- B. Clean and restore soiled surfaces. Remove scraps and debris and leave site in a clean condition.
- C. Prime Coat Touch-Up: Immediately after erection, sand smooth rusted or damaged areas of prime coat, and apply touch-up of compatible air-drying primer.
- D. Properly clean and apply paint to doors and frames in accordance with HMMA-840 TN01 and ANSI A250.8 appendix B along with Manufactures recommended surface preparation for painting.

3.4 PROTECTION

- A. Protect installed products and finished surfaces from damage during construction.

END OF SECTION

SECTION 08 3463
DETENTION SECURITY HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes detention security hollow metal [bullet resistant] products as scheduled in the contract drawings and as specified herein.

1.2 PRODUCTS PROVIDED UNDER THIS SECTION

- A. Detention security hollow metal doors as indicated in the door schedule. Doors shall be swinging type or sliding type and shall be provided in the types and sizes scheduled in the contract drawings and as specified herein.
- B. Detention security hollow metal frames with as indicated in the door schedule. Frames shall be provided in the types and sizes scheduled in the contract drawings and as specified herein.
- C. Detention security hollow metal frame infill panels with as indicated in the door schedule. Panels shall be provided in the types and sizes scheduled in the contract drawings and as specified herein.

1.3 RELATED SECTIONS

- A. Section 087100.....Door Hardware
- B. Section 088853.....Security Glazing
- C. Section 099123.....Interior Painting

1.4 REFERENCES

- A. ASTM A 1008 / A 1008M-16, Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability
- B. ASTM A 1011 / A 1011M-15, Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability
- C. ASTM A 653/A 653M-15e1, Specification for Steel Sheet, Zinc-coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot Dipped Process, (Commercial Steel)
- D. ASTM A 666-15, Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate and Flat Bar
- E. ASTM C 143 / C 143M-15a, Standard Test Method for Slump of Hydraulic Cement Concrete
- F. ANSI A 250.10 – 2011, Standard Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames
- G. ASTM F 1450-12a (2004), Standard Test Methods for Hollow Metal Swinging Door Assemblies for Detention and Correctional Facilities.
- H. ASTM F 1592-12, Standard Test Methods for Detention Hollow Metal Vision Systems
- I. ANSI / NAAMM HMMA 801-12, Glossary of Terms for Hollow Metal Doors and Frames
- J. NAAMM HMMA 803-08, Steel Tables
- K. NAAMM HMMA 820-08, Hollow Metal Frames
- L. HMMA-820 TN01-03, Grouting Hollow Metal Frames
- M. NAAMM HMMA 840-07, Installation and Storage of Hollow Metal Doors and Frames
- N. NAAMM HMMA 850-00, Fire-Rated Hollow Metal Doors and Frames, Second Edition
- O. ANSI / NAAMM HMMA 866-12, Guide Specifications for Stainless Steel Hollow Metal Doors and Frames
- P. ANSI / NFPA 80-2016, Fire Doors and Windows

- Q. ANSI / NFPA 105-2016, Recommended Practice for the Installation of Smoke Control Door Assemblies
- R. ANSI / NFPA 252-2017, Standard Methods of Fire Tests of Door Assemblies
- S. ANSI / NFPA 257-2017, Methods for Fire Test of Window Assemblies
- T. ANSI / UL 9-2009, Fire Test of Window Assemblies, 7th Edition
- U. ANSI / UL 10B-2008, Fire Test of Door Assemblies, 9th Edition
- V. ANSI / UL 10C-2016, Standard for Positive Pressure Fire Tests of Door Assemblies, 1st Edition
- W. UL 1784-2015, Air Leakage Tests of Door Assemblies, 3rd Edition.
- X. UL 752-05, 11th Edition, Bullet Resisting Equipment

1.5 TESTING AND PERFORMANCE

- A. Performance grades for each opening shall be as indicated on the contract documents. Performance test requirements for each opening shall be as indicated for individual grade number designations shown in the tables in ASTM F 1450 and ASTM F 1592. Test procedures shall be performed on door and frame designs as described in Sections A, B, C, D and E.
- B. Door Assembly Impact Test
 - 1. Two 3 ft. x 7 ft. (914 mm x 2134 mm) doors of each Grade to be tested shall be constructed in accordance with Section 2.01, each with 100 square inch (645.2 cm²) vision panel, 4 in. x 25 in. (102 mm x 635 mm) clear opening positioned generally as shown in ASTM F 1450, Figure 1. Doors shall have a maximum weight for Grades 1 and 2 of 230 lbs and for grades 3 and 4 of 190 lbs. Two accompanying frames shall be constructed in accordance with Section 2.03. One door and frame assembly shall be equipped with hardware in accordance with ASTM F 1450, Paragraph 6.1.2.4. The other assembly shall be equipped with hardware in accordance with ASTM F 1450, Paragraph 6.1.2.5. Test doors and frames shall be installed and tested in accordance with ASTM F 1450, Section 6, "Specimen Preparation" and Section 7.2 "Door Assembly Impact Test." The test assemblies shall meet the acceptance criteria in Section 7.2 in order to qualify under Section 1.05 of this specification.
- C. Detention Hollow Metal Vision System Impact Test In Accordance With ASTM F 1592
 - 1. A four (4) equal light multi-light security hollow metal assembly, overall dimensions of 48 in. width x 48 in. height (1219 x 1219 mm), shall be constructed in accordance with this specification, Section 2.03, and shall be impact tested in accordance with ASTM F 1592, Sections 5, 6 and 7.2. The test assembly shall meet the acceptance criteria in Section 7.2 in order to qualify under Section 1.05 of this specification.
 - 2. A single sidelight security hollow metal assembly, door dimensions 3 ft. x 7 ft. (914 mm x 2134 mm) and sidelight dimensions with clear opening size of 30 in. wide x 42 in. high +/- 1 in. (762 mm x 1066 mm +/- 25 mm), shall be constructed in accordance with Sections 2.01 and 2.03, and shall be impact tested in accordance with ASTM F 1592, Sections 5, 6 and 7.2. The test assembly shall meet the acceptance criteria in Section 7.2 in order to qualify under Section 1.05 of this specification.
 - 3. Door Static Load Test
 - a. Two (2) doors of each Grade to be tested constructed identically to each of the test doors required for Section 1.05.A.1 "Door Assembly Impact Test," 3 ft. x 7 ft. (914 x 2134 mm), with 4 in. x 25 in. (102 mm x 635 mm) vision panel, and with hardware preparations, shall be tested in accordance with ASTM F 1450, Section 7.3, "Door Static Load Test." The test doors shall meet the acceptance criteria in Section 7.3 in order to qualify under Section 1.05 of this specification.
 - 4. Door Rack Test

- a. Two (2) doors constructed identically to each of the test doors required in Section 1.05.A, "Door Assembly Impact Test," 3 ft. x 7 ft. (914 mm x 2134 mm), with 4 in. x 25 in. (102 mm x 635 mm) vision panel, and with hardware preparations shall be tested in accordance with ASTM F 1450, Section 7.4, "Door Rack Test." The test doors shall meet the acceptance criteria in Section 7.4 in order to qualify under Section 1.05 of this specification.
 - b. One 12 gauge door, .093 in. (2.3 mm), with two large vision lights as shown in ASTM F1450, Figure 2, with an "edge cut" food pass/cuff port 5 in. (127 mm) x 14.25 in. (362 mm) located 36.5 from the bottom of the door to the center line of the opening as shown in ASTM F1450, Figure 3, shall be constructed in accordance with Section 2.01 of this specification. The door shall be tested in accordance with ASTM F 1450, Section 7.4, "Door Rack Test". The test door shall meet the acceptance criteria in Section 7.4.4.11 in order to qualify under Section 1.05 of this specification.
5. Door Edge Crush Test
- a. One (1) door constructed identically to any of the test doors required in Section 1.05.A, "Door Assembly Impact Test," with hardware preparations, shall be tested in accordance with ASTM F 1450, Section 7.7 "Door Edge Crush Test."
6. Test Reports
- a. The manufacturer shall provide test reports and documentation by an independent testing laboratory in accordance with the reporting requirements of ASTM F 1450 and ASTM F 1592 certifying compliance with ANSI/NAAMM/HMMA 863, Section 1.05., current within five (5) years.

1.6 QUALITY ASSURANCE

A. Basis of Design Manufacturers

1. Trussbilt, LLC – Vadnais Heights, MN
 - 1) Fax: 651.628.9482
 - (a) Website: www.trussbilt.com
2. American Steel Products
 - a. Telephone: 706-413-3816
 - b. Website: www.amsteelpro.com

B. Manufacturer's Qualification

1. Manufacturer shall provide evidence of having personnel and plant equipment capable of fabricating hollow metal door and frame assemblies of the type specified herein.

Manufacturer shall provide current documentation of the number of employees, a listing of their production equipment, and a description of their manufacturing facility.

 - a. Manufacturers shall be ISO 9001:2008 certified and shall be required to present their Certificate of Registration upon request. The manufacturer's registrar shall be nationally recognized and shall provide the manufacturer with periodic factory follow up audits reaffirming the manufacturer's continuing compliance with their written quality program.
2. Manufacturer's production welders shall be qualified under AWS D1.3 and upon request shall provide copies of Welders Certifications in accordance with AWS D1.3.
3. Manufacturers shall have a minimum of ten (10) years experience successfully producing detention hollow metal of the types and sizes required in the contract documents. Upon request the manufacturer shall provide a list of successfully completed projects and the dates they were completed.
4. Manufacturers shall have written test reports of their having passed the testing requirements of section 1.05 and using their current materials and production processes.

C. Quality Criteria

1. All door and frame construction shall be in accordance with construction of assemblies, which meet the testing requirements of Section 1.05.
2. If any door or frame specified by the Architect to be fire-rated cannot qualify for appropriate labeling because of its design, hardware or any other reason, the
 - a. Architect shall be so advised before fabricating work on that item is started.
3. Fabrication methods and product quality shall meet standards set by the Hollow Metal Manufacturers Association, HMMA, a Division of the National Association of Architectural Metal Manufacturers, NAAMM, as set forth in these specifications.

1.7 SUBMITTALS

A. Submittal Drawings

1. Show door and frame elevations and sections.
2. Show listing of opening descriptions including locations, material thicknesses, and anchors.
3. Show location and details of all openings.

1.8 WARRANTY

- A. All hollow metal work shall be warranted from defects in workmanship and quality for a period of one (1) year from the date of substantial completion of the project.

PART 2 - PRODUCTS

2.1 DETENTION SECURITY HOLLOW METAL DOORS

A. Materials

1. Doors shall be manufactured of commercial quality, level, hot-rolled, pickled and dry steel conforming to ASTM A 1011 / A 1011M CS type B. The steel shall be free of scale, pitting, coil breaks, buckles, waves or other surface blemishes or defects.
2. Interior doors: Face sheets shall be [for Grades 3 and 4: 0.067 in. (1.7 mm)] [for Grades 1 and 2: 0.093 in. (2.3 mm)] minimum thickness.
3. Exterior Doors: Face sheets shall be [for Grades 3 and 4: 0.067 in. (1.7 mm)] [for Grades 1 and 2: 0.093 in. (2.3 mm)] minimum thickness and shall have a zinc coating applied by the hot-dip process conforming to ASTM A 653/A 653M Commercial Steel (CS type B), coating designation A60 (ZF180).
4. For severely corrosive conditions and where specified for individual openings, either interior or exterior: Face sheets shall be [0.067 in. (1.7 mm)] [0.093 in. (2.3 mm)] minimum thickness. Face sheets and components shall be stainless steel conforming to ASTM A 666, Type [304] [316]. Steel stiffened construction methods and finishes for stainless steel doors shall comply with ANSI/NAAMM/HMMA 866.

B. Construction:

1. All doors shall be of the types and sizes shown on the approved submittal drawings, shall be constructed in accordance with the specifications and shall meet the performance requirements of Paragraph 1.05 where applicable. Alternate materials and methods of construction, which meet the aforementioned performance criteria, shall be permitted.
2. Door face sheets shall be joined at their vertical edges by a continuous weld extending the full height of the door. This edge seam weld shall be sanded smooth and be neat in appearance. The door vertical edges shall not be covered with auto body putty or metallic fillers. The weld shall be visible to ensure a continuous weld.

3. Door thickness shall be 2 in. (50 mm) nominal to accommodate detention hardware. Doors shall be neat in appearance and free from warpage or buckle. Edge bends shall be true and straight and of minimum radius for the thickness of material used.
4. The door shall be stiffened by one of the following systems:
 - a. Continuous steel truss design core material, .015 in. (.4 mm) minimum, having truncated triangular roll formed sections extending continuously from one door face to the other, spot welded to each face sheet 2 ³/₄ in. (69.9 mm) oc horizontally and 3 in. (76.2 mm) oc vertically. Core material shall extend full height and width of door.
 - b. Continuous vertical hat sections, one such hat section welded to each face of the door, .053 in. (1.3 mm), with vertical webs no more than 4 in. (101.6 mm) apart. Hat sections shall be welded to each other at 6 in. (152.4 mm) oc both sides in order to prevent separation.
 - c. Spaces between stiffeners shall be filled with fiberglass or mineral rockwool batt-type material, minimum 6 lb. density.
5. The vertical edges shall be reinforced by a continuous steel channel extending the full height of the door and welded to both face sheets. The channels' thickness shall be not less than the thickness of the door face sheet. The top and bottom edges shall be closed with a continuous channel, the same thickness as the vertical edge channels and shall be spot-welded to the face sheet a maximum of 3 in. (76 mm) o.c. The closing end channel shall be continuously welded to the vertical reinforcing channel at all four corners producing a fully welded perimeter reinforcing channel.
6. The top and bottom end channel shall be fitted with an additional flush closing channel of the same material thickness. The flush closing channel shall be welded in place at the corners and at the center. Tops of exterior doors shall be made weather tight where specified.
7. Edge profiles shall be provided on both vertical edges of doors as follows:
 - 1) Single acting doors - beveled 1/8 in. (3 mm) in 2 in. (50 mm) profile
 - 2) Sliding doors or equivalent - square profile
8. Hardware reinforcements:
 - a. Doors shall be mortised, reinforced, drilled and tapped at the factory for completely templated mortised hardware only, in accordance with the final approved hardware schedule and templates provided by the hardware supplier. Where surface mounted hardware - or non-templated mortised hardware - is to be applied, doors shall be reinforced, and all drilling and tapping shall be done by others in the field.
 - b. Minimum thicknesses for hardware reinforcements shall be as follows:
 - 1) Full Mortise HInges and Pivots - 0.167 in. (4.2 mm)
 - 2) Surface applied maximum security hinges - 0.214 in. (5.4 mm)
 - 3) Strikes (reinforcing tabs) 0.167 in. (4.2 mm)
 - 4) Strikes (channel reinforcement) 0.125 in. (3.17 mm)
 - 5) Slide device hanger attachment - per device manufacturer's recommendations
 - 6) Lock fronts, concealed holders 0.093 in. (2.3 mm)
 - 7) All other surface applied hardware 0.093 in. (2.3 mm)
 - c. In cases where electrically operated hardware is required, and where shown on approved submittal drawings, hardware enclosures and junction boxes shall be provided and shall be interconnected using UL approved 0.75" (19 mm) minimum diameter conduit and connectors. Also, where shown on submittal drawings, junction boxes with access plates shall be provided to facilitate the proper installation of wiring. Access plates shall be the same thickness as the face sheet and fastened with a minimum of four (4) #8-32 tamper resistant machine screws, not to exceed 6 in.

- (152 mm) o.c.
9. Glass moldings and stops:
 - a. Where specified, doors shall be provided with steel moldings to secure glazing by others in accordance with glass sizes and thicknesses shown on approved submittal drawings.
 - b. Fixed glass molding shall be not less than 0.093 in. (2.3 mm), and shall be spot-welded to both face sheets 3.0 in. (76 mm) o.c. maximum.
 - c. In glass openings where security glazing is specified and where shown on the approved submittal drawings, pressed steel angle glazing stops (or "Z" or plate type stops depending on glass thickness), no less than 0.093 in. (2.3 mm) thickness, shall be provided. Angle stops shall be mitered or notched and tight fitting at the corner joints, and secured in place using 1/4 - 20 or 1/4 - 28 button head tamper resistant screws with spacing necessary to satisfy the performance criteria outlined in Section 1.05.
 - d. Metal surfaces to which glazing stops are secured, and the inside of the glazing stops shall be treated for maximum paint adhesion and painted with a rust inhibitive primer prior to installation in the door, or shall be fabricated from A60 (ZF180) zinc coated steel per 2.01.A.3.
 10. Product Identification: Doors shall have the Architect's mark number permanently stamped on the center hinge reinforcement for swing doors and on the horizontal Z of the window for sliding door types.

2.2 HOLLOW METAL INFILL PANELS

- A. Hollow metal infill panels shall be made of the same materials and construction and finished in the same way as specified in Section 2.01 of this specification.

2.3 HOLLOW METAL FRAMES

- A. Materials
 1. Frames shall be constructed of commercial quality, hot rolled, pickled dry steel conforming to A1011/A1011M. The steel shall be free of scale, pitting, coil breaks or other surface defects.
 2. Interior openings: Steel shall be [for Grades 3 and 4, 0.067 in. (1.7 mm)] [for Grades 1 and 2, 0.093 in. (2.3 mm)] minimum thickness.
 3. Exterior openings: Steel shall be [for Grades 3 and 4, 0.067 in. (1.7 mm)] [for Grades 1 and 2, 0.093 in. (2.3 mm)] minimum thickness and shall have a zinc coating applied by the hot-dip process conforming to ASTM A 653/A 653M Commercial Steel (CS), coating designation A60 (Z180).
- B. Construction:
 1. All frames, with the exception of cased openings such as for sliding doors, shall have integral stops and be welded units of the sizes and types shown on approved submittal drawings. Frames shall be constructed in accordance with these specifications and meet performance criteria specified in Section 1.05 where applicable. Alternate materials and methods of construction, which meet the aforementioned performance criteria, shall be permitted.
 2. All finished work shall be neat in appearance, square, and free of defects, warps and buckles. Pressed steel members shall be straight and of uniform profile throughout their lengths.
 3. Jamb, header and sill profiles shall be in accordance with the frame schedule and as shown on the approved submittal drawings.

4. Corner joints shall have all contact edges closed tight with faces mitered and stops either butted or mitered. Corner joints shall be continuously welded and the use of gussets or splice plates shall be unacceptable.
5. Minimum height of stops in door openings shall be 0.75 in. (19 mm). Height of stops on security glass or panel openings shall be as shown on approved submittal drawings.
6. When shipping limitations so dictate, frames for large openings shall be fabricated in sections designated for splicing in the field by others. Where splicing is necessary, angle splices shall be installed at the corners of the profile, and shall extend at least 1 in. (25.4 mm) on either side of the joint. Splicing angles shall be the same gage thickness as the frame. Field splices shall be made in accordance with approved submittal drawings.
7. Frames for multiple openings shall have mullion members which, after fabrication, are closed tubular shapes conforming to profiles shown on approved submittal drawings. All exposed joints between faces of abutted members shall be continuously welded and finished smooth. All exposed joints between stops of abutted members shall be welded along the soffit and shall be left neat and uniform in appearance. At mullions, longitudinal joint may occur creating a seam. Where possible, conceal this seam behind a glazing stop. The contractor responsible for installation shall provide for welding and finishing all field joints between faces of abutted members.
8. Hardware Reinforcements and Preparation:
 - a. Frames shall be mortised, reinforced, drilled and tapped for all templated mortised hardware only, in accordance with the final approved hardware schedule and templates provided by the hardware supplier. Where surface mounted hardware - anchor hinges, thrust pivots, pivot reinforced hinges, or non-templated mortised hardware - is to be applied, frames shall be reinforced, and all drilling and tapping shall be done by others in the field.
 - b. Minimum thickness of hardware reinforcing plates shall be as follows:
 - 1) Hinges and pivots 0.167 in. x 1.5 in. x 10 in. length
(a) mm x 38 mm x 254 mm)
 - 2) Strikes 0.167 in. (4.2 mm)
 - 3) Closers (concealed) 0.167 in. (4.2 mm)
 - 4) Flush bolts 0.167 in. (4.2 mm)
 - 5) All other surface applied hardware - 0.093 in. (2.3 mm)
 - c. In cases where electrically operated hardware is required, and where shown on contract drawings, hardware enclosures and junction boxes shall be provided, and shall be interconnected using UL approved 0.75 in. (19 mm) diameter minimum conduit and connectors. Also, where shown on submittal drawings, junction boxes with access plates shall be provided to facilitate the proper installation of wiring. Access plates shall be the same thickness as the frame and fastened with a minimum of four (4) #8-32 tamper resistant machine screws, not to exceed 6 in. (152 mm) o.c.
9. Floor Anchors:
 - a. Floor anchors with two holes for fasteners shall be fastened inside jambs with at least four (4) spot welds, per anchor or MIG welded on both sides.
 - b. Where so scheduled, adjustable floor anchors, providing not less than 2 in. (50 mm) height adjustment, shall be fastened in place with at least four (4) spot-welds per anchor or MIG welded on both sides.
 - c. Thickness of floor anchors shall be the same as frame.
10. Jamb Anchors:
 - a. Anchor Spacing
 - 1) The number of anchors provided on each jamb shall be as follows:

- (a) Borrowed Lite Frames - 2 anchors plus 1 for each 24 in. (406 mm) or fraction thereof over 36 in. (914 mm), spaced at 24 in. (406 mm) maximum between anchors
 - (b) Door Frames - 2 anchors plus 1 for each 24 in. (406 mm) or fraction thereof over 54 in. (1372 mm), spaced at 24 in. (406 mm) maximum between anchors (fire ratings can require additional anchors)
 - b. Masonry Type
 - 1) Frames for installation in masonry walls shall be provided with adjustable jamb anchors of the strap and stirrup type made from the same thickness steel as frame. Straps shall be 2 in. x 10 in. (50 mm x 254 mm) in size, corrugated and perforated.
 - c. Expansion Bolt Type
 - 1) Frames for installation in existing masonry or concrete walls shall be prepared for expansion bolt type anchors. The preparation shall consist of a punch and dimpled hole for a 0.5 in. (13 mm) diameter bolt and a .093 in. (2.3 mm) spacer from the unexposed surface of the frame to the wall. The spacer shall be welded to the frame and the preparation spaced as described in Paragraph 2.03.B.10.a.
 - 2) After sufficient tightening of the bolt, the bolt head shall be welded by the installation contractor so as to provide a non-removable condition. The welded bolt head shall be ground, dressed and finished smooth.
 - d. Frames to be installed in pre-finished concrete, masonry or steel openings shall be constructed and provided with anchoring systems of suitable design as shown on the approved submittal drawings.
 - e. Grout guards shall be provided at all hardware preparations, glazing stop screws and silencer preparations on frames to be set in masonry or concrete openings. Grout guards shall be sufficient to protect preparations from grout of a 4 in. (102 mm) maximum slump consistency which is hand troweled in place. All hinge grout guards and lock pockets shall be caulked after priming to ensure maximum protection from grout seepage.
 - f. Grout guards for glazing stop screws shall be factory installed and shall cover the exposed portion of the screws inside the frame throat, around the perimeter. Where mullions are required to be grouted, screws inside mullions shall be protected with grout guards.
 - g. Steel grout guards shall protect silencer preparations where accessible from the frame throat. Silencers shall be furnished and installed by the contractor responsible for frame installation except where limited access prevents installation of the metal grout guards in mullions, in which case silencers shall be factory furnished and installed.
11. All frames shall be provided with two (2) temporary steel spreaders welded to the bottom of the jambs to serve as bracing during shipping and handling. The installation contractor shall be responsible for removing, finishing, and touch-up of marks caused by spreader removal.
12. Removable glazing stops:
- a. In openings where security glazing is specified and where shown on the approved submittal drawings, pressed steel angle glazing stops, not less than 0.093 in. (2.3 mm), shall be provided. Angle stops shall be mitered or notched and tight fitting at the corner joints, and secured in place using 1/4 - 20 or 1/4 - 28 button head tamper resistant screws with spacing necessary to satisfy the performance criteria outlined in Section 1.05.

2.4 MANUFACTURING TOLERANCES

- A. Manufacturing tolerance shall be maintained within the following limits:
1. Frames for single doors or pairs of doors:
 - a. Width, measured between rabbets at the head: Nominal opening width + 1/16 in. (1.6 mm), - 1/32 in. (0.8 mm).
 - b. Height (total length of jamb rabbet): Nominal opening height +/- 3/64 in. (0.8mm).
(1)
 2. Cross sectional profile dimensions:
 - a. Face +/- 1/32 in. (0.8 mm)
 - b. Stop +/-1/32 in. (0.8 mm)
 - c. Rabbet +/-1/32 in. (0.8 mm)
 - d. Depth +/- 1/32 in. (0.8 mm)
 - e. Throat +/- 1/16 in. (1.6 mm)
 3. Flatness of large frames 1/8 in. (3.1 mm) in 10 ft. (3048 mm) of length or width
 4. Doors – Doors are undersized to fit the frame. Edge clearances are based upon individual door manufacturer's designs. Tolerance on actual door sizes are as follows:
 - a. Width +/- 3/64 in. (1.2 mm)
 - b. Height +/- 3/64 in. (1.2 mm)
 - c. Thickness +/- 1/16 in. (1.5 mm)
 - d. Bow/flatness +/- 1/8 in. (3.2 mm) in 7 ft. (2134 mm)
 5. Hardware
 - a. Cutout and template dimensions □ □ □ □ 0.015 in. (0.38 mm) - 0 in.
 - b. Location +/-1/32 in. (0.8 mm)
 - c. Between hinge centerlines +/- 1/64 in. (0.4 mm)
- B. HARDWARE LOCATIONS
- C. The location of hardware on doors and frames shall be as listed below. Note that all dimensions except the hinge locations are referenced from the finished floor as defined in Section 3.03.
1. Hinges:
 - a. Top 5 in. (177.8 mm) from frame head to top of hinge
 - b. Bottom 10 in. (254 mm) from floor to bottom of hinge
 - c. Intermediate centered between top and bottom hinges
 2. Locks and latches 38 in. (965 mm) to centerline of knob or lever shaft
 3. Deadlocks 37 in. (1168 mm) to centerline of bolt
 4. Exit Hardware 38 in. (965 mm) to centerline of cross bar or as shown on hardware template
 5. Door Pulls - 47 in (1066 mm) to centerline of grip
 6. Push plates 47 in. (1168 mm) to centerline of plate
 7. Intercoms 48 in. (1219 mm) to centerline of intercom / backbox
(1)

2.5 FINISH

- A. After fabrication, all tool marks and surface imperfections shall be filled and sanded as required to make face sheets, vertical edges and weld joints free from irregularities. After appropriate metal preparation, all exposed surfaces of doors and frames shall receive a rust inhibitive primer which meets or exceeds ANSI A 250.10, "Test Procedures and Acceptance Criteria for Prime Painting Steel Surfaces for Steel Doors and Frames." For stainless steel finishes refer to ANSI/NAAMM/HMMA-866.

PART 3 - EXECUTION

3.1 SITE STORAGE AND PROTECTION OF MATERIALS

- A. The contractor responsible for installation shall remove wraps or covers from doors and frames upon delivery at the building site. The contractor responsible for installation shall ensure that any scratches or disfigurement caused in shipping or handling are promptly sanded smooth, cleaned and touched up with a compatible rust inhibitive Direct to Metal (DTM) primer.
- B. The contractor responsible for installation shall ensure that materials are properly stored on planks or dunnage in a dry location. Doors and frames shall be stored in a vertical position and spaced by blocking.

3.2 INSTALLATION

- A. The Contractor responsible for installation shall perform the following:
- B. Prior to installation, all frames shall be checked for correct size and swing, and with temporary spreaders removed be corrected for squareness, alignment, twist and plumb. Permissible installation tolerances shall not exceed 1/16 in. (1.5 mm):
 - 1. Squareness - Measured at rabbet on a line from jamb, perpendicular to frame head.
 - 2. Alignment Measured at jambs on a horizontal line parallel to the plane of the face.
 - 3. Twist - Measured at opposite face corners of jambs on parallel lines, perpendicular to the plane of the door rabbet.
 - 4. Plumbness - Measured at jambs on a perpendicular line from the head to the floor.
 - 5. During the setting of the frames, check and maintain these tolerances for squareness, alignment, twist and plumbness.
- C. Frame jambs shall be fully grouted to provide added security protection against battering, wedging, spreading and other means of forcing open the door. Jamb mounted lock preparations, grout guards for hardware preparations and glazing stop screws, and junction boxes are intended to protect hardware mortises, exposed removable screws, and tapped mounting holes from masonry grout of 4 in. (102 mm) maximum slump consistency which is hand troweled in place. If a light consistency grout (greater than 4 in. (102 mm) slump in accordance with ASTM C 143 / C 143M) is to be used, special precautions shall be taken in the field by the installation contractor to protect tapped holes, electrical knock-outs, lock pockets, grout guards, junction boxes, etc. in the frames.
 - 1. Large frame sections, such as lock columns and lock jambs, are not intended or designed to act as forms for grout or concrete. Grouting of large hollow metal sections shall be done in "lifts" or precautions shall otherwise be taken by the contractor to insure that frames are not deformed or damaged by the hydraulic forces that occur during this process.
- D. Proper door clearances shall be maintained in accordance with 3.03 of these specifications, except for special conditions otherwise noted. Where necessary, metal hinge shims, furnished by the Contractor responsible for installation, are acceptable to maintain clearances.
 - 1. Hardware shall be applied in accordance with hardware manufacturer's templates and instructions.
- E. Any grout or other bonding material shall be cleaned off of frames or doors immediately following installation. Exposed hollow metal surfaces shall be kept free of grout, tar, or other bonding material or sealer.
- F. Exposed field welds shall be finished smooth and touched up with a rust inhibitive primer.
- G. Primed or painted surfaces which have been scratched or otherwise marred during installation, cleaning, and/or field welding, including marks caused by spreader removal, shall promptly be

finished smooth, cleaned, treated for maximum paint adhesion and touched up with a rust inhibitive Direct to Metal (DTM) primer comparable to and compatible with the shop applied primer and finish paint specified in Section 09900. All touch-up primer and finish paint must be formulated for DTM application.

- H. Finish paint in accordance with Section 09900.
- I. Install door silencers.
- J. Install glazing materials in accordance with Section 08800.

3.3 CLEARANCES

- A. Edge clearances for swinging doors shall provide for the functional operation of the assembly and shall not exceed the following:
 - 1. Between doors and frames at head and jambs: 3/16 in. (4.7 mm)
 - 2. Between edges of pairs of doors: 3/16 in. (4.7 mm)
 - 3. At doorsills where a threshold is used: 3/8 in. (9.5 mm)
 - 4. At doorsills where no threshold is used: 3/4 in. (19.1 mm)
 - 5. Between door bottom and nominal surface of floor coverings at fire rated openings as provided in ANSI/NFPA 80, 1/4 in. (12.7 mm).
- B. Clearances for detention sliding doors shall be in accordance with the approved slider device drawings furnished as part of the approved hardware schedule.

END OF SECTION

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SECTION 08 5653 SECURITY WINDOWS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Security view windows, with glazing.
- B. Scur

1.2 RELATED REQUIREMENTS

- A. Section 04 2000 - Unit Masonry: Installation of anchorage items embedded in masonry.
- B. Section 07 9200 - Joint Sealants: Sealing joints between frames and adjacent construction.

1.3 REFERENCE STANDARDS

- A. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Required Hardness, Solution Hardened, and Bake Hardenable 2020.
- B. ASTM F1915 - Standard Test Methods for Glazing for Detention Facilities 2005 (Reapproved 2012).
- C. SSPC-Paint 33 - Coal-Tar Mastic Coating, Cold Applied 2015.
- D. SSPC-SP 5 - White Metal Blast Cleaning 2007.
- E. UL 752 - Standard for Bullet-Resisting Equipment Current Edition, Including All Revisions.

1.4 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's published data showing materials, construction details, dimensions of components, and finishes.
- C. Shop Drawings: Drawings prepared specifically for this project, showing plans, elevations, sections, details of construction, anchorage to other work, hardware, and glazing.
 - 1. For field glazed windows, include detailed instructions for glazing installation.
- D. Test Reports: Test reports for specific window model and glazing to be furnished, showing compliance with specified requirements; window and glazing may be tested separately, provided window test sample adequately simulates the glazing to be used.
 - 1. Include testing agency qualifications.
 - 2. For structural, forced entry, and ballistic tests, provide details on method of anchorage to test frame.
- E. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 01 6000 - Product Requirements, for additional provisions.
 - 2. Extra Security Fasteners: At least one box for every 50 boxes, or fraction thereof, of each type and size installed; provide products matching those installed, packaged and labeled.
 - 3. Tool Kit: 6 sets of tools for security fasteners.

1.5 WARRANTY

- A. See Section 017700 Closeout Procedures, for additional warranty requirements.
- B. Provide manufacturer's warranty agreeing to repair or replace windows and window components that fail within three years after Date of Substantial Completion due to, but not limited to, the following:

1. Structural failure, failure of welds, and deterioration of metals and finishes beyond that expected under detention use and normal weathering.
2. Failure of glazing due to excessive deflection of supporting members under wind load.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Security View Windows:
- B. Security Glazing:
 1. Global Security Glazing; <https://security-glazing.com/>
 2. Sierracin Corporation: www.sierracin.com/#sle.
 3. North America Specialty Glass: www.naspecialtyglass.com/#sle.
 4. Viracon, Apogee Enterprises, Inc: www.viracon.com/#sle.
 5. Substitutions: See Section 01 6000 - Product Requirements.

2.2 ASSEMBLIES

- A. Security and Detention Windows:
 1. Dimensions, profiles, features, and performance specified and indicated on drawings are required; do not deviate unless specifically approved by Design Professional under substitution procedures specified in Section 01 6000.
 2. Design to fit openings indicated on drawings; design to accommodate deviation of actual construction from dimensions indicated on drawings.
 3. Design anchorages to provide performance equivalent to that required for window unit; provide anchorages at least equivalent to those by which the tested units were anchored to the test frame.
 4. Label units to indicate which side is which, such as inside/outside or secure/non-secure; use labels that are removable after installation but durable enough not to be lost during delivery, storage, handling, and installation.

2.3 SECURITY VIEW GLAZING

- A. Security View Windows: Factory-assembled fixed glazing panel reglazable from secure side without disassembly of frame, with non-removable trim and glazing stops on non-secure side (outside).
 1. Glazing: Laminated type with glass on both surfaces; kind as required to achieve performance criteria specified.
 2. Ballistic Resistance: UL 752 Level 1 (medium-power handgun).
 3. Forced Entry Resistance: ASTM F1915 Grade I, tested from outside.

2.4 ASSEMBLY COMPONENTS

- A. Formed Steel Framing: ASTM A1008/A1008M, Designation CS (commercial steel), cold-rolled steel sheet; 12 gauge, 0.1046 inch minimum thickness.
- B. Glazing Seals: Factory installed; molded EPDM or neoprene compressible gaskets and compression strips.
- C. Security Fasteners: Operable only by tools produced by fastener manufacturer or manufacturer's licensee; head style appropriate to installation conditions, strength, and finish of materials being fastened; use countersunk heads wherever possible.
- D. Bituminous Paint: Cold-applied asbestos-free asphalt mastic, complying with SSPC-Paint 33; 30 mils, 0.030 inch minimum thickness per coat.

2.5 FINISHES

- A. Color: As selected by Design Professional from manufacturer's standard range.
- B. Primed Finish on Steel:
 - 1. Cleaned using white metal blast cleaning as specified in SSPC-SP 5.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that window openings are ready for installation of windows.
- B. Notify Design Professional if conditions are not suitable for installation of windows; do not proceed until conditions are satisfactory.

3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions and drawing details.
- B. Install windows in correct orientation (inside/outside or secure/non-secure).
- C. Windows Not Factory-Glazed: Complete field painting before installation of glazing.

END OF SECTION

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SECTION 08 7100 DOOR HARDWARE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Hardware for hollow metal and steel detention and security doors.
- B. Electrically operated and controlled hardware.
- C. Thresholds.
- D. Weatherstripping and gasketing.

1.2 RELATED REQUIREMENTS

- A. Section 07 9200 - Joint Sealants: Sealants for setting exterior door thresholds.
- B. Section 08 1113 - Hollow Metal Doors and Frames.
- C. Section 083463 - Detention Hollow Metal Doors and Frames
- D. Section 28 1000 - Access Control: Electronic access control devices.

1.3 REFERENCE STANDARDS

- A. ASTM F1577 - Standard Test Methods for Detention Locks for Swinging Doors
- B. ASTM F1643 - Standard Test Methods for Detention Sliding Door Locking Device Assembly
- C. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design 2010.
- D. BHMA A156.1 - American National Standard for Butts and Hinges 2016.
- E. BHMA A156.3 - American National Standard for Exit Devices 2014.
- F. BHMA A156.4 - American National Standard for Door Controls - Closers 2013.
- G. BHMA A156.5 - American National Standard for Cylinders and Input Devices for Locks 2014.
- H. BHMA A156.6 - American National Standard for Architectural Door Trim 2015.
- I. BHMA A156.8 - American National Standard for Door Controls - Overhead Stops and Holders 2015.
- J. BHMA A156.13 - American National Standard for Mortise Locks & Latches Series 1000 2017.
- K. BHMA A156.15 - American National Standard for Release Devices - Closer Holder, Electromagnetic and Electromechanical 2015.
- L. BHMA A156.16 - American National Standard for Auxiliary Hardware 2018.
- M. BHMA A156.18 - American National Standard for Materials and Finishes 2016.
- N. BHMA A156.21 - American National Standard for Thresholds 2014.
- O. BHMA A156.22 - American National Standard for Door Gasketing and Edge Seal Systems Sponsor 2017.
- P. BHMA A156.25 - American National Standard for Electrified Locking Devices 2018.
- Q. BHMA A156.30 - American National Standard for High Security Cylinders 2014.
- R. BHMA A156.115W - American National Standard for Hardware Preparation in Wood Doors with Wood or Steel Frames 2006.
- S. NFPA 70 - National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- T. NFPA 105 - Standard for Smoke Door Assemblies and Other Opening Protectives 2019.
- U. UL (DIR) - Online Certifications Directory Current Edition.
- V. UL 437 - Standard for Key Locks Current Edition, Including All Revisions.
- W. UL 1784 - Standard for Air Leakage Tests of Door Assemblies Current Edition, Including All Revisions.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate the manufacture, fabrication, and installation of products that door hardware is installed on.
- B. Keying Requirements Meeting:
 - 1. Schedule meeting at project site prior to Contractor occupancy.
 - 2. Attendance Required:
 - a. Contractor.
 - b. Owner.
 - c. Design Professional.
 - 3. Agenda:
 - a. Establish keying requirements.
 - b. Verify locksets and locking hardware are functionally correct for project requirements.
 - c. Verify that keying and programming complies with project requirements.
 - 4. Incorporate "Keying Requirements Meeting" decisions into keying submittal upon review of door hardware keying system including, but not limited to, the following:
 - a. Access control requirements.
 - b. Key control system requirements.
 - 5. Record minutes and distribute copies within two days after meeting to participants, with two copies to Design Professional, Owner, participants, and those affected by decisions made.
 - 6. Deliver established keying requirements to manufacturers.

1.5 SUBMITTALS

- A. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, and dimensions and profiles of individual components.
- B. Shop Drawings - Door Hardware Schedule: Submit detailed listing that includes each item of hardware to be installed on each door. Use door numbering scheme as included in Contract Documents.
 - 1. Provide complete description for each door listed.
- C. Shop Drawings - Electrified Door Hardware: Submit diagrams for power, signal, and control wiring for electrified door hardware that include details of interface with building safety and security systems. Provide elevations and diagrams for each electrified door opening as follows:
 - 1. Prepared by or under supervision of Architectural Hardware Consultant (AHC) and Electrified Hardware Consultant (EHC).
 - 2. Elevations: Submit front and back elevations of each door opening showing electrified devices with connections installed and an operations narrative describing how opening operates from either side at any given time.
 - 3. Diagrams: Submit point-to-point wiring diagram that shows each device in door opening system with related colored wire connections to each device.
- D. Maintenance Data: Include data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.
- E. Warranty: Submit manufacturer's warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
- F. Maintenance Materials and Tools: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 01 6000 - Product Requirements, for additional provisions.
 - 2. Lock Cylinders: One for each master keyed group.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in performing work of the type specified for commercial door hardware with at least three years of documented experience and approved by manufacturer.
- B. Supplier Qualifications: Company with certified Architectural Hardware Consultant (AHC) and Electrified Hardware Consultant (EHC) to assist in work of this section.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Package hardware items individually; label and identify each package with door opening code to match door hardware schedule.

1.8 WARRANTY

- A. See Section 017700 Closeout Procedures, for additional warranty requirements.
- B. Warranty against defects in material and workmanship for period indicated, from Date of Substantial Completion.
 - 1. Locksets and Cylinders: Three years, minimum.
 - 2. Other Hardware: Two years, minimum.

PART 2 PRODUCTS

2.1 DESIGN AND PERFORMANCE CRITERIA

- A. Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.
- B. Provide individual items of single type, of same model, and by same manufacturer.
- C. Provide door hardware products that comply with the following requirements:
 - 1. Applicable provisions of federal, state, and local codes.
 - 2. Hardware for Smoke and Draft Control Doors (Indicated as "S" on Drawings): Provide door hardware that complies with local codes, and requirements of assemblies tested in accordance with UL 1784.
 - 3. Hardware Preparation for Wood Doors with Wood or Steel Frames: BHMA A156.115W.
 - 4. Products Requiring Electrical Connection: Listed and classified by UL (DIR) as suitable for the purpose specified.
- D. Electrically Operated and/or Controlled Hardware: Provide access to building power connection in compliance with NFPA 70.
 - 1. Refer to Section 28 1000 for additional access control system requirements.

2.2 HINGES

- A. Manufacturers:
 - 1. Basis of Design: Northwest Specialty Hardware (<http://www.northwestsh.com/pdfs/product/nw645hinge.pdf>) 645M.
 - 2. McKinney; an Assa Abloy Group company: www.assaabloydss.com/#sle.
 - 3. Hager Companies: www.hagerco.com/#sle.
 - 4. Stanley, dormakaba Group: www.stanleyhardwarefordoors.com/#sle.
 - 5. Substitutions: See Section 01 6000 - Product Requirements.
- B. Hinges: Comply with BHMA A156.1, Grade 1.
 - 1. Provide hinges on every swinging door.
 - 2. Provide ball-bearing hinges at each door with closer.

3. Provide non-removable pins on exterior outswinging doors.
4. Provide power transfer hinges where electrified hardware is mounted in door leaf.
5. Provide following quantity of butt hinges for each door:
 - a. Doors up to 60 inches High: Two hinges.
 - b. Doors From 60 inches High up to 90 inches High: Three hinges.
 - c. Exterior security doors (corridor and stairway): 4 Hinges

2.3 ELECTRIC HINGES

- A. Basis of Design: Southern Folger 204E Electric Power Transfer Hinge
 1. Hinges must be compatible with all electric door hardware, single source preferred.
- B. Substitutions: See Section 016000 - Product Requirements

2.4 SECURITY SLIDING DOOR TRACK

- A. Manufacturers:
 1. Basis of Design: Midwest Portland Innovative Detention Systems 9200 Device.
 2. R.R. Brink Locking Systems 57700 Sliding
 3. Substitutions: See Section 01 6000 - Product Requirements.

2.5 FLUSH BOLTS

- A. Manufacturers:
 1. Adams Rite, an Assa Abloy Group company: www.assaabloydss.com/#sle.
 2. Hager Companies: www.hagerco.com/#sle.
 3. Ives, an Allegion brand: www.allegion.com/us/#sle.
 4. Substitutions: See Section 01 6000 - Product Requirements.
- B. Flush Bolts: Comply with BHMA A156.16, Grade 1.
 1. Flush Bolt Throw: 3/4 inch, minimum.
 2. Provides extension bolts in leading edge of door, one bolt into floor, one bolt into top of frame.
 - a. Pairs of Swing Doors: At inactive leaves, provide flush bolts of type as required to comply with code.

2.6 EXIT DEVICES

- A. Exit Devices: Comply with BHMA A156.3, Grade 1.
 1. Lever design to match lockset trim.
 2. Provide exit devices properly sized for door width and height.
 3. Provide strike as recommended by manufacturer for application indicated.

2.7 LOCK CYLINDERS

- A. Manufacturers:
 1. Paracentric Key: Southern Folger Paracentric Key.
 2. Mogul Keys: Southern Steel
 3. Standard: Yale
 4. Substitutions: Not permitted.
- B. Lock Cylinders: Provide key access on outside of each lock, unless otherwise indicated.
 1. Provide high security mechanical type cylinders, Grade 1, with six-pin core in compliance with BHMA A156.30 or UL 437 at locations indicated.
 2. Provide cylinders to facility for keying, facility will install cores.
 3. Provide cams and/or tailpieces as required for locking devices.
 4. Exterior Appliance Shop and Power House: YB Keyway

5. Stairwell: SC Keyway

2.8 MORTISE LOCKS

- A. Manufacturers:
 1. Corbin Russwin, Sargent, or Yale; an Assa Abloy Group company: www.assaabloydss.com/#sle.
 2. Best, dormakaba Group: www.bestaccess.com/#sle.
 3. DORMA USA, Inc; M9000 Series: www.dorma.com/#sle.
 4. Hager Companies: www.hagerco.com/#sle.
 5. Schlage, an Allegion brand: www.allegion.com/us/#sle.
 6. Stanley, dormakaba Group: www.stanleyhardwarefordoors.com/#sle.
 7. Substitutions: See Section 01 6000 - Product Requirements.
- B. Mortise Locks: Comply with BHMA A1, Grade 1, Security.
 1. Latchbolt Throw: 3/4 inch, minimum.
 2. Deadbolt Throw: 1 inch, minimum.
 3. Backset: 2-3/4 inch unless otherwise indicated.
 4. Strikes: Provide manufacturer's standard strike for each latchset or lockset with strike box and curved lip extending to protect frame in compliance with indicated requirements.
 - a. Finish: To match lock or latch.

2.9 ELECTROMECHANICAL LOCKS

- A. Manufacturers:
 1. Basis of Design: Southern Folger 10600 Institutional Mortise Lock.
 2. Substitutions: See Section 01 6000 - Product Requirements.
- B. Electromechanical Locks: Comply with ASTM F1577, Grade 1, Security.
 1. Provide motor-driven locks, with strike that is applicable to frame.
 2. Type: Mortise deadlocking latchbolt.

2.10 DOOR PULLS AND PUSH PLATES

- A. Manufacturers:
 1. Basis of Design: Northwest Specialty Hardware .
 2. Rockwood; an Assa Abloy Group company: www.assaabloydss.com/#sle.
 3. Hager Companies: www.hagerco.com/#sle.
- B. Door Pulls and Push Plates: Comply with BHMA A156.6.
 1. Pull Type: Flush, unless otherwise indicated.
 2. Push Plate Type: Flat, with square corners, unless otherwise indicated.
 - a. Edges: Beveled, unless otherwise indicated.
 3. Material: Stainless steel, unless otherwise indicated.
 4. Provide door pulls and push plates on doors without a lockset, latchset, exit device, or auxiliary lock unless otherwise indicated.

2.11 COORDINATORS

- A. Coordinators: Provide on doors having closers and self-latching or automatic flush bolts to ensure that inactive door leaf closes before active door leaf.
 1. Type: Bar, unless otherwise indicated.
 2. Material: Aluminum, unless otherwise indicated.
 3. Ensure that coordination of other door hardware affected by placement of coordinators and carry bar is applied properly for completely operable installation.

2.12 CLOSERS

- A. Manufacturers; Concealed - Overhead:
 - 1. Basis of Design: Allegion LCN 2210.
- B. Closers: Comply with BHMA A156.4, Grade 1.
 - 1. Type: Surface mounted to door.
 - 2. Provide door closer on each door.

2.13 KICK PLATES

- A. Kick Plates: Provide along bottom edge of push side of every door with closer, except aluminum storefront and glass entry doors, unless otherwise indicated.
 - 1. Size: 12 inch high by 2 inch less door width (LDW) on push side of door or as indicated.

2.14 ELECTROMAGNETIC DOOR HOLDERS

- A. Electromagnetic Door Holders: Comply with BHMA A156.15.
 - 1. Type: Wall mounted, single unit, standard duty, with strike plate attached to door.
 - 2. Holding Force, Standard Duty: 40 lbs-force, minimum.
 - 3. Voltage: 12 VDC, and provide power supplies by same manufacturer as holders.
 - 4. Provide interface with fire detectors and fire-alarm system for fire-rated door assemblies.

2.15 FLOOR STOPS

- A. Manufacturers:
 - 1. Basis of Design: Northwest Specialty Hardware NW606 Detention Door Stop.
- B. Floor Stops: Comply with BHMA A156.16, Grade 1 and Resilient Material Retention Test as described in this standard.
 - 1. Provide floor stops when wall surface is not available; be cautious not to create a tripping hazard.

2.16 WALL STOPS

- A. Wall Stops: Comply with BHMA A156.16, Grade 1 and Resilient Material Retention Test as described in this standard.
 - 1. Type: Bumper, concave, wall stop.
 - 2. Material: Aluminum housing with rubber insert.

2.17 ASTRAGALS

- A. Astragals: Comply with BHMA A156.22.
 - 1. Provide surface mounted astragal to cover or fill space for full door height between pair of doors or door and adjacent jamb.
 - 2. Type: Split, two parts, and with sealing gasket.
 - 3. Material: Aluminum, with neoprene weatherstripping.
 - 4. Provide non-corroding fasteners at exterior locations.

2.18 THRESHOLDS

- A. Thresholds: Comply with BHMA A156.21.
 - 1. Provide threshold at each exterior door, unless otherwise indicated.
 - 2. Type: Flat surface.
 - 3. Material: Aluminum, with rubber weatherstripping.
 - 4. Threshold Surface: Fluted horizontal grooves across full width.
 - 5. Field cut threshold to profile of frame and width of door sill for tight fit.

6. Provide non-corroding fasteners at exterior locations.

2.19 WEATHERSTRIPPING AND GASKETING

- A. Weatherstripping and Gasketing: Comply with BHMA A156.22.
 1. Head and Jamb Type: Adjustable.
 2. Door Sweep Type: Encased in retainer.
 3. Material: Aluminum, with brush weatherstripping.
 4. Provide door bottom sweep on each exterior door, unless otherwise indicated.
- B. Self Adhesive Fire and Smoke Seal
 1. Smoke and Draft Control Gasketing (Category H); UL 1784; NFPA 105
 2. NGP 9850 or similar

2.20 DOOR POSITION SENSOR

- A. Basis of Design: Souther Folger Company Model 200 MRS TB Magnetic
 1. Requires embedment in head frame.
 2. Substitutions: See Section 01 6000 -Product Requirements.

2.21 MAGNETIC HOLD CLOSE

- A. Basis of Design: Securitron M82 Magnalock
 1. Substitutions: See Section 01 6000 - Product Requirements

2.22 FINISHES

- A. Finishes: Provide door hardware of same finish, unless otherwise indicated.
 1. Primary Finish: 630; satin stainless steel, with stainless steel 300 series base material (former US equivalent US32D); BHMA A156.18.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that doors and frames are ready to receive this work; labeled, fire-rated doors and frames are properly installed, and dimensions are as indicated on shop drawings.
- B. Verify that electric power is available to power operated devices and of correct characteristics.

3.2 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and applicable codes.
- B. Install hardware for smoke and draft control doors in accordance with NFPA 105.
- C. Use templates provided by hardware item manufacturer.
- D. Door Hardware Mounting Heights: Distance from finished floor to center line of hardware item. As indicated in following list; unless noted otherwise in Door Hardware Schedule or on drawings.
 1. Mounting heights in compliance with ADA Standards:
 - a. Locksets: 40-5/16 inch.
 - b. Push Plates/Pull Bars: 42 inch.
 - c. Deadlocks (Deadbolts): 48 inch.
 - d. Exit Devices: 40-5/16 inch.
- E. Set exterior door thresholds with full-width bead of elastomeric sealant at each point of contact with floor providing a continuous weather seal; anchor thresholds with stainless steel countersunk screws.

3.3 ADJUSTING

- A. Adjust hardware for smooth operation.
- B. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

3.4 CLEANING

- A. Clean finished hardware in accordance with manufacturer's written instructions after final adjustments have been made.

3.5 PROTECTION

- A. Protect finished Work under provisions of Section 01 7000 - Execution and Closeout Requirements.
- B. Do not permit adjacent work to damage hardware or finish.

3.6 DOOR HARDWARE SCHEDULE

A. SET #01 – Interior Corridor Doors with Electromechanical Lockset

- 1. Doors: CE-1, CE-2, CE-3, CE-4, CE-5, CE-6
 - a. 2 Detention Hinges
 - b. 1 Electric Hinge
 - c. 1 Electromechanical Mortise Lock
 - d. 1 Mogul Key Cylinder
 - e. 1 M
 - f. 1 Overhead Closer
 - g. 1 Door Position
 - h. 3 Door Silencers
 - i. 1 Kick Plate

B. SET #02 – Exterior Corridor Doors

- 1. Door: FE-13
 - a. 4 Detention Hinges
 - b. 1 Magnetic Hold Close
 - c. 1 Overhead Close
 - d. 1 Door Position Sensor
 - e. 2 Kick Plates
 - f. 2 Pull Handles
 - g. 1 Threshold
 - h. 3 Door Silencers
 - i. 1 Weather Stripping

C. SET #03 – Exterior Corridor Doors with Automatic Opener

- 1. Door: FE-1
 - a. 4 Detention Hinges
 - b. 1 Magnetic Hold Close
 - c. 1 Automatic Opener
 - d. 1 Remote Operator
 - e. 1 Door Position Sensor
 - f. 2 Kick Plates
 - g. 2 Pull Handles
 - h. 1 Threshold
 - i. 3 Door Silencers
 - j. 1 Weather Stripping

D. SET #04 – Exterior Stair Door

1. Door: FE-26
 - a. 4 Detention Hinges
 - b. 1 Panic Exit Device
 - c. 1 Mortise Lockset
 - d. 1 Mogul Key Cylinder
 - e. 1 Overhead Closer
 - f. 1 Door Position Sensor
 - g. 2 Kick Plates
 - h. 1 Pull Handle
 - i. 1 Threshold
 - j. 3 Door Silencers
 - k. 1 Weather Stripping

E. SET #05 – Interior Sliding Security Doors

1. Doors: S-1, S-2, S-3, S-4, S-5, S-6
 - a. 1 Security Sliding Door Track and Hanger
 - b. 1 Paracentric Lock Core

F. SET #07 – Exterior Double Doors

1. Door: PD-01, SD-01, SD-02, SD-03
 - a. 3 Heavy Duty Hinges
 - b. 1 Mortise Deadlock Set
 - c. 1 Standard Core
 - d. 1 Overhead Closer
 - e. 1 Flushbolt
 - f. 1 Astragal
 - g. 1 Coordinator
 - h. 2 Wall or Floor Stops
 - i. 2 Kick Plates
 - j. 1 Continuous Threshold
 - k. 6 Door Silencers
 - l. 2 Weather Stripping

G. SET #08 – Exterior Single Doors with Closer

1. Door: PD-02 thru PD-07
 - a. 3 Heavy Duty Hinges
 - b. 1 Mortise Deadlock Set
 - c. 1 Standard Core
 - d. 1 Overhead Closer
 - e. 1 Wall or Floor Stops
 - f. 2 Kick Plates
 - g. 1 Threshold
 - h. 3 Door Silencers
 - i. 1 Weather Stripping

END OF SECTION

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SECTION 08 7113 POWER DOOR OPERATORS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Operators for swinging doors.
- B. Controllers, actuators, and safety devices.

1.2 REFERENCE STANDARDS

- A. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum 2014 (2015 Errata).
- B. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design 2010.
- C. BHMA A156.10 - Power Operated Pedestrian Doors 2017.
- D. ITS (DIR) - Directory of Listed Products current edition.
- E. NFPA 70 - National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- F. NFPA 101 - Life Safety Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- G. UL (DIR) - Online Certifications Directory Current Edition.
- H. UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems Current Edition, Including All Revisions.

1.3 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide data on system components, sizes, features, and finishes.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Operators for Swinging Doors:
 - 1. ASSA ABLOY Entrance Solutions; Besam SW200i: www.besam-usa.com/#sle.
 - 2. LCN, an Allegion brand: www.allegion.com/us/#sle.
 - 3. Horton Automatics: www.hortondoors.com/#sle.
 - 4. Stanley Access Technologies; Magic Access LE (Low Energy):
www.stanleyaccess.com/#sle.
 - 5. Substitutions: See Section 01 6000 - Product Requirements.

2.2 POWER DOOR OPERATORS - GENERAL

- A. Electrically Operated or Controlled Hardware: Provide necessary power supplies, relays, and interfaces as required for proper operation; provide wiring between control components and to building power connection in compliance with NFPA 70.
- B. Comply with ADA Standards for egress requirements.
- C. Comply with NFPA 101 and requirements of authorities having jurisdiction; provide units selected for actual door weight and for light pedestrian traffic unless otherwise indicated.
- D. Exterior Doors: Provide units capable of operating, closing, and holding doors closed under positive and negative differential pressure; if necessary, provide power closing.

- E. Fire Door Operators: In addition to other requirements, provide equipment ITS (DIR) or UL (DIR) listed as a fire door operator with automatic closer.

2.3 OPERATORS FOR SWINGING DOORS

- A. Door Operator: Electromechanical.
 - 1. Basis of Design: Horton Automatics HD-Swing Series 4900LE
 - 2. Applications: Include operators for single doors.
 - 3. Electromechanical Operators: 1/8 hp minimum, self-contained, chain driven, with release clutch.
 - 4. Speed Control: Variable, field-adjustable opening and closing cycles.
 - 5. Functionality: Full-power open, spring close operation.
 - a. Full-Power Operators: Comply with BHMA A156.10; safeties required.
 - 1) Comply with UL 325; acceptable evidence of compliance includes UL (DIR) or ITS (DIR) listing or test report by testing agency acceptable to authorities having jurisdiction.
 - 6. Mounting: Surface mounted overhead.
 - 7. Power Supply Units: Self-contained, electrically operated, and independent of door operator.
 - 8. Actuators: Manufacturer's standard.

2.4 CONTROLLERS, ACTUATORS, AND SAFETY DEVICES

- A. Controllers: Manufacturer's standard for products specified.
- B. Actuators: Manufacturer's standard for products specified and as specified below.
 - 1. Push Plate Actuator: Standard, wall mounted, surface mounted, momentary contact type; satin stainless steel plate; 6" inches diameter; labeled PUSH.

2.5 FINISHES

- A. Aluminum Finishes: Manufacturer's standard.
 - 1. Class II Natural Anodized Finish: Clear anodic coating; AAMA 611 AA-M12C22A31, minimum dry film thickness (DFT) of 0.4 mil, 0.0004 inch.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install equipment in accordance with manufacturer's instructions.

3.2 ADJUSTING

- A. Adjust door equipment for correct function and smooth operation.

END OF SECTION

SECTION 08 8000 GLAZING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes glazing for the following products and applications, including those specified in other Sections where glazing requirements are specified by reference to this Section:
 - 1. Doors.

1.2 DEFINITIONS

- A. Interspace: Space between lites of an insulating-glass unit that contains dehydrated air or a specified gas.
- B. Deterioration of Coated Glass: Defects developed from normal use that are attributed to the manufacturing process and not to causes other than glass breakage and practices for maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in metallic coating.
- C. Deterioration of Insulating Glass: Failure of hermetic seal under normal use that is attributed to the manufacturing process and not to causes other than glass breakage and practices for maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.
- D. Deterioration of Laminated Glass: Defects developed from normal use that are attributed to the manufacturing process and not to causes other than glass breakage and practices for maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.

1.3 PERFORMANCE REQUIREMENTS

- A. General: Provide glazing systems capable of withstanding normal thermal movement and wind and impact loads (where applicable) without failure, including loss or glass breakage attributable to the following: defective manufacture, fabrication, and installation, failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials or other defects in construction.
- B. Glass Design: Glass thickness designations indicated are minimums and are for detailing only. Confirm glass thicknesses by analyzing Project loads and in-service conditions. Provide glass lites in the thickness designations indicated for various size openings, but not less than thicknesses and in strengths (annealed or heat treated) required to meet or exceed the following criteria:
 - 1. Glass Thicknesses: Select minimum glass thicknesses to comply with ASTM E 1300, according to the following requirements:
 - a. Design Wind Loads: Determine design wind loads applicable to Project from basic wind speed indicated in miles per hour (meters per second) at 33 feet (10 m) above grade, according to ASCE 7, "Minimum Design Loads for Buildings and Other Structures": Section 6.5, "Method 2-Analytical Procedure," based on mean roof heights above grade indicated on Drawings.
 - 1) Basic Wind Speed: 90 mph (40 m/s)

- 2) Importance Factor: II
 - 3) Exposure Category: B
 - b. Probability of Breakage for Vertical Glazing: 8 lites per 1000 for lites set vertically or not more than 15 degrees off vertical and under wind action.
 - 1) Load Duration: 60 seconds or less.
 - c. Minimum Glass Thickness for Exterior Lites: Not less than 6.0 mm.
 - d. Thickness of Tinted and Heat-Absorbing Glass: Provide the same thickness for each tint color indicated throughout Project.
- C. Thermal Movements: Provide glazing that allows for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures acting on glass framing members and glazing components. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
- D. Thermal and Optical Performance Properties: Provide glass with performance properties specified based on manufacturer's published test data, as determined according to procedures indicated below:
1. For monolithic-glass lites, properties are based on units with lites 6.0 mm thick.
 2. For insulating-glass units, properties are based on units of thickness indicated for overall unit and for each lite.
 3. Center-of-Glass Values: Based on using LBL-44789 WINDOW 5.0 computer program for the following methodologies:
 - a. U-Factors: NFRC 100 expressed as Btu/ sq. ft. x h x deg F(W/sq.mx K).
 - b. Solar Heat Gain Coefficient: NFRC 200.
 - c. Solar Optical Properties: NFRC 300.

1.4 SUBMITTALS

- A. Product Data: For each glass product and glazing material indicated.
- B. Samples: 12-inch-(300-mm-) square, for each type of glass product indicated, other than monolithic clear float glass.
- C. Glazing Schedule: Use same designations indicated on Drawings.
- D. Preconstruction Adhesion and Compatibility Test Report: From glazing sealant manufacturer.

1.5 QUALITY ASSURANCE

- A. Preconstruction Adhesion and Compatibility Testing: Submit to elastomeric glazing sealant manufacturers, for testing according to ASTM C1087, samples of each glazing material type, tape sealant, gasket, glazing accessory, and glass-framing member that will contact or affect elastomeric glazing sealants:
- B. Safety Glazing Products: Comply with testing requirements in 16CFR1201.
- C. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.
 1. IGMA Publication for Insulating Glass: SIGMATM-3000,"Glazing Guidelines for Sealed Insulating Glass Units."

1.6 WARRANTY

- A. Manufacturer's Special Warranty on Insulating Glass: Manufacturer's standard form, made out to Owner and signed by insulating-glass manufacturer agreeing to replace insulating-glass units that deteriorate as defined in "Definitions" Article, f.o.b. the nearest shipping point to Project

site, within specified warranty period indicated below.

1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 -PRODUCTS

2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, products specified.
 2. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.

2.2 GLASS PRODUCTS

- A. Heat-Treated Float Glass: ASTM C 1048; Type I (transparent flat glass); Quality-Q3; of class, kind, and condition indicated.
1. Fabrication Process: By horizontal (roller-hearth) process with roll-wave distortion parallel to bottom edge of glass as installed, unless otherwise indicated.
 2. Provide Kind HS (heat-strengthened) float glass in place of annealed float glass where needed to resist thermal stresses induced by differential shading of individual glass lites and to comply with glass design requirements specified in Part 1 "Performance Requirements" Article.
 3. For uncoated glass, comply with requirements for Condition A.
 4. For coated vision glass, comply with requirements for Condition C (other uncoated glass) .
 5. Provide Kind FT (fully tempered) float glass in place of annealed or Kind HS (heat-strengthened) float glass where safety glass is indicated.

2.3 GLAZING GASKETS

- A. Dense Compression Gaskets: Molded or extruded gaskets of material indicated below, complying with standards referenced with name of elastomer indicated below, and of profile and hardness required to maintain watertight seal:
1. Neoprene, ASTM C 864.
 2. EPDM, ASTM C 864.
 3. Silicone, ASTM C 1115.
 4. Thermoplastic polyolefin rubber, ASTM C 1115.
 5. Any material indicated above.
- B. Soft Compression Gaskets: Extruded or molded, closed-cell, integral-skinned gaskets of material indicated below; complying with ASTM C509, Type II, black; and of profile and hardness required to maintain watertight seal:
1. Neoprene.
 2. Silicone.
 3. Thermoplastic polyolefin rubber.
 4. Any material indicated above.

2.4 GLAZING SEALANTS

- A. General: Provide products of type indicated, complying with the following requirements:

1. Compatibility: Select glazing sealants that are compatible with one another and with other materials they will contact, including glass products, seals of insulating-glass units, and glazing channel substrates, under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
 2. Suitability: Comply with sealant and glass manufacturers' written instructions for selecting glazing sealants suitable for applications indicated and for conditions existing at time of installation.
 3. Colors of Exposed Glazing Sealants: As selected by Architect from manufacturer's full range.
- B. Elastomeric Glazing Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
1. Single-Component Neutral -and Basic-Curing Silicone Glazing Sealants:
 - a. Available Products:
 - 1) Dow Corning Corporation ; 790
 - 2) GE Silicones; SilPruf LM SCS2700.
 - 3) Tremco; Spectrem 1 (Basic).
 - 4) GE Silicones; SilPruf SCS2000.
 - 5) Pecora Corporation, 864.
 - 6) Pecora Corporation, 890.
 - 7) Polymeric Systems Inc.; PSI-641.
 - 8) Sonneborn, Div. of ChemRex, Inc.; Omniseal.
 - 9) Tremco; Spectrem 3.
 - b. Type and Grade: S (single component) and NS (nonsag).
 - c. Class: 100/50.
 - d. Use Related to Exposure: NT (nontraffic).
 - e. Uses Related to Glazing Substrates: M, G, A, and, as applicable to glazing substrates indicated, O.
 - 1) Use O Glazing Substrates: Coated glass color anodic aluminum galvanized steel.

2.5 GLAZING TAPES

- A. Back-Bedding Mastic Glazing Tapes: Preformed, butyl-based elastomeric tape with a solids content of 100 percent; nonstaining and nonmigrating in contact with nonporous surfaces; with or without spacer rod as recommended in writing by tape and glass manufacturers for application indicated; packaged on rolls with a release paper backing; and complying with ASTM C 1281 and AAMA 800 for products indicated below:
1. AAMA806.3 tape, for glazing applications in which tape is subject to continuous pressure.
 2. AAMA 807.3 tape, for glazing applications in which tape is not subject to continuous pressure.
- B. Expanded Cellular Glazing Tapes: Closed-cell, PVC foam tapes; factory coated with adhesive on both surfaces; packaged on rolls with release liner protecting adhesive; and complying with AAMA 800 for the following types:
1. Type 1, for glazing applications in which tape acts as the primary sealant.
 2. Type 2, for glazing applications in which tape is used in combination with a full bead of liquid sealant.

2.6 MISCELLANEOUS GLAZING MATERIALS

- A. General: Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.
- C. Setting Blocks: Elastomeric material with a Shore, Type A durometer hardness of 85, plus or minus 5.
- D. Spacers: Elastomeric blocks or continuous extrusions with a Shore, Type A durometer hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
- E. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).
- F. Cylindrical Glazing Sealant Backing: ASTM C 1330, Type 0 (open-cell material), of size and density to control glazing sealant depth and otherwise produce optimum glazing sealant performance.

2.7 FABRICATION OF GLAZING UNITS

- A. Fabricate glazing units in sizes required to glaze openings indicated for Project, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance requirements.
- B. Provide glazing units from single manufacturer and fabricator.

PART 3 -EXECUTION

3.1 GLAZING

- A. General: Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.
 - 1. Glazing channel dimensions, as indicated on Drawings, provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances. Adjust as required by Project conditions during installation.
 - 2. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass and impair performance and appearance.
 - 3. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction sealant-substrate testing.
 - 4. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
 - 5. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
 - 6. Provide spacers for glass lites where length plus width is larger than 50 inches (1270mm).
 - 7. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.
- B. Tape Glazing: Position tapes on fixed stops so that, when compressed by glass, their exposed edges are flush with or protrude slightly above sightline of stops. Install tapes continuously, but not necessarily in one continuous length. Do not stretch tapes to make them fit opening.

1. Cover vertical framing joints by applying tapes to heads and sills first and then to jambs. Cover horizontal framing joints by applying tapes to jambs and then to heads and sills.
 2. Place joints in tapes at corners of opening with adjoining lengths butted together, not lapped. Seal joints in tapes with compatible sealant approved by tape manufacturer.
 3. Apply heel bead of elastomeric sealant.
 4. Center glass lites in openings on setting blocks and press firmly against tape by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings.
 5. Apply cap bead of elastomeric sealant to conceal exposed edge of tape.
- C. Gasket Glazing (Dry): Fabricate compression gaskets in lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.
1. Insert soft compression gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.
 2. Center glass lites in openings on setting blocks and press firmly against soft compression gasket by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.
 3. Install gaskets so they protrude past face of glazing stops.
- D. Sealant Glazing (Wet): Install continuous spacers, or spacers combined with cylindrical sealant backing, between glass lites and glazing stops to maintain glass face clearances and to prevent sealant from extruding into glass channel and blocking weep systems until sealants cure. Secure spacers or spacers and backings in place and in position to control depth of installed sealant relative to edge clearance for optimum sealant performance.
1. Force sealants into glazing channels to eliminate voids and to ensure complete wetting or bond of sealant to glass and channel surfaces.
 2. Tool exposed surfaces of sealants to provide a substantial wash away from glass.

3.2 CLEANING AND PROTECTION

- A. Protect exterior glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove nonpermanent labels, and clean surfaces. Protect glass from contact with contaminating substances resulting from construction operations, including weld splatter. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended by glass manufacturer.
- B. Remove and replace glass that is broken, chipped, cracked, or abraded or that is damaged from natural causes, accidents, and vandalism during construction period.

END OF SECTION

**SECTION 09 9100
PAINTING**

PART 1 GENERAL

1.1 SUMMARY

- A. Related Documents:
 - 1. Drawings and general provisions of the Subcontract apply to this Section.
 - 2. Review these documents for coordination with additional requirements and information that apply to work under this Section.
 - 3. Refer to other Sections for references to painting work included under this Section.
- B. Section Includes:
 - 1. Field application of paints and coatings.
 - 2. Unless otherwise specified or shown, paint all surfaces and items which are exposed to view, including those out of doors or on roofs.
 - 3. Surface preparation.
- C. Related Sections:
 - 1. Division 01 Section "Quality Requirements."
 - 2. Division 01 Section "Submittal Procedures."
- D. Surfaces Not To Be Painted:
 - 1. Prefinished items, except prefinished items specified to be field painted in Article [3.03] [and] [3.09].
 - 2. Walls or ceilings of concealed or inaccessible areas.
 - 3. Fire or smoke rating labels on doors or frames.
 - 4. Equipment name plates.
 - 5. Heat detectors.
 - 6. Smoke detectors.
 - 7. Piping identification labels.
 - 8. Moving parts of mechanical or electrical equipment.

1.2 REFERENCES

- A. General:
 - 1. The following documents form part of the Specifications to the extent stated. Where differences exist between codes and standards, the one affording the greatest protection shall apply.
 - 2. Unless otherwise noted, the referenced standard edition is the current one at the time of commencement of the Work.
 - 3. Refer to Division 01 Section "Quality Requirements" for the list of applicable regulatory requirements.

1.3 SUBMITTALS

- A. Submit under provisions of Division 01 Section "Submittal Procedures."
- B. Product Data:
 - 1. Materials List: Complete list of proposed manufacturers and products.
 - 2. Manufacturer's Specifications: Manufacturer's technical information for each product, including paint analysis and application instructions.
 - 3. Material safety data sheets for each product.
- C. Samples:

1. Preliminary Samples: 8-1/2" x 11" samples of each color, texture and sheen on glossy card stock.
2. Field Samples: After preliminary samples have been approved, apply minimum 30" x 30" field samples at locations designated by Project Manager for final approval.
 - a. Do not prepare interior field samples until permanent lighting is in place and operating.
 - b. Allow for applying field samples two additional times in order to achieve desired colors, without additional cost to District or delay in schedule.
- D. Certificates: Provide certificate from each manufacturer stating material is premium quality and suitable for intended use on this Project.
- E. Closeout Submittals:
 1. Two copies of manufacturer's color and sheen formula, and 4" x 6" color chips, for each final color used in the Project.
 2. Product Usage Records: Three copies of product usage records for each paint, coating and solvent product used in the project. Include product name, amount used, description of use and use location, and period of time over which the product was used.

1.4 QUALITY ASSURANCE

- A. Applicator Qualifications: Company specializing in performing the work of this section with minimum 5 years successful experience in work of similar scope.
- B. Manufacturer's Instructions: Perform painting work in accordance with manufacturer's written instructions and recommendations.
- C. Pre-Installation Meeting: Before painting begins, meet with Project Manager, Architect and Subcontractor to discuss painting work, color schedule, product compliance, and hazardous material remediation.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the Project in original, new, unbroken packages and containers bearing manufacturer's name and label, with:
 1. Name of material, color and sheen.
 2. Manufacturer's name, product number and date of manufacture.
 3. Contents by volume of major pigments, vehicle constituents and volatile organic compound (VOC) content.
 4. Thinning and application instructions.

1.6 PROJECT CONDITIONS

- A. Comply with paint manufacturer's instructions on temperature and humidity conditions under which materials can be applied.
- B. Environmental Requirements:
 1. Silica Dust: Incorporate controls to eliminate visible emissions from any activity, which may generate silica dust, such as abrasive blasting.
 - a. Do not use silica sand or other substances containing more than 1 per cent crystalline silica as abrasive blasting materials.
 - b. Prevent exposure of workers and others to dust using methods such as removing dust with water, high efficiency particulate air (HEPA) filters, and wet sweeping. Do not use compressed air or dry sweeping to remove dust.
 2. Contain and dispose of materials resulting from cleaning, including lead-containing materials, in accordance with District procedures and applicable regulations.

3. Disposal down District sanitary drains or storm drains of solvents, etching materials, or water contaminated with solvents or etching materials, is not permitted. Contain and dispose of such materials at legal disposal sites approved for this purpose.

1.7 MAINTENANCE STOCK

- A. Provide 1 full gallon of each type and color of finish coats used on the Project. Label with paint manufacturer, paint type, product number, color, sheen and its representative use on the Project.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers: Benjamin Moore, Diamond Vogel, Sherwin Williams or approved equal.

2.2 MATERIALS

- A. Material Quality:
 1. Provide premium quality materials. Materials not bearing manufacturer's identification as a premium-grade product are not acceptable.
 2. Should manufacturer's specifications or product numbers change, provide its current equal or better product.
 3. Primer and undercoats are to be of same manufacturer as final coat.
 4. Materials left from previous jobs are not acceptable.
 5. Use only thinners approved by paint manufacturer, and use only within recommended limits.
 6. Etching Solutions: As recommended by paint manufacturer for the use intended.
 7. Solvents: Non-petroleum based, as recommended by paint manufacturer for the use intended.
 8. Crack Filler: Elastomeric, approved by paint manufacturer for the particular use intended.
- B. Finish Coat Coordination: Provide finish coats which are compatible with prime paints used.
 1. Review other Sections in which prime paints are provided. Ensure compatibility of total coating systems.
 2. Upon request from other trades, furnish information on characteristics of finish materials proposed for use.
 3. Provide barrier coats over incompatible primers, or remove and reprime.
 4. Notify Owner's Representative in writing of any problems anticipated in use of specified coating systems with substrates primed by others.

2.3 COLORS

- A. General:
 1. Use of proprietary names in color selections does not imply exclusion of equivalent products of other manufacturers.
 2. The proposal and acceptance of any paint manufacturer shall not restrict District to selection of standard colors of that manufacturer.
 3. Color palette will consist of existing colors.
- B. Finish coat colors shall be factory mixed.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions under which painting work is to be applied.
- B. Do not paint over dirt, rust, scale, grease, oil, dust, moisture, scuffed or damaged surfaces, or conditions detrimental to a durable paint life.
- C. Starting work indicates acceptance of conditions of surfaces and within any particular area.

3.2 PREPARATION

- A. Perform preparation and cleaning procedures in accordance with paint manufacturer's instructions and as specified for substrate condition.
- B. Remove hardware, accessories, and items in place and not to be painted, or provide protection prior to surface preparation and painting. Reinstall removed items after painting.
- C. Clean surfaces before applying paint. Remove oil and grease prior to mechanical cleaning. Schedule cleaning so contaminants from cleaning process do not fall onto wet, newly painted surfaces.
- D. Moisture Content: Do not paint over surfaces where moisture content exceeds manufacturer's instructions.
- E. Ferrous Metals:
 - 1. Bare Surfaces: Clean of oil, dirt, loose mill scale, and other foreign substances with solvent or by mechanical cleaning.
 - 2. Shop Applied Primer: Touch up where damaged or bare using same type of primer as adjacent surfaces.
 - 3. Galvanized Surfaces: Clean free of oil and surface contaminants using etching solution, and rinse with water to neutralize
- F. Non-Ferrous Metals: Remove contaminants with water, detergent or solvents. Allow metal to dry, then abrade to remove surface oxides.
- G. Gypsum Board: Remove dust, and repair surface imperfections. Spot-prime defects after repair.
- H. Mix painting materials in accordance with manufacturer's instructions.
- I. Store materials in tightly covered containers. Maintain containers used in storage, mixing and application of paint in a clean condition, free of foreign materials and residue.
 - 1. Cover containers of coatings or solvents when not in use.
- J. Stir materials before application to produce mixture of uniform density, and stir as required during application. Do not stir surface film into material, strain material before using if necessary.

3.3 APPLICATION

- A. Apply paint in accordance with manufacturer's instructions. Use applicators and techniques best suited for substrate and type of material being applied.
 - 1. Apply additional coats when stains or blemishes show through final coat, until paint is a uniform finish, color and appearance.
 - 2. Ensure dry film thickness at corners and crevices is equivalent to that of flat surfaces.
 - 3. Sand lightly between each succeeding enamel or varnish coat.
 - 4. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Paint surfaces behind permanently fixed equipment and furniture with prime coat only.
 - 5. Paint interior surfaces of ducts, where visible through registers or grilles, with black, non-specular flat paint.

6. Paint backs and sides of access panels and removable or hinged covers to match exposed surfaces.
 7. Finish exterior doors on tops, bottoms and side edges same as exterior faces.
 8. Paint door louvers, glass stops [and astragals] to match color of door faces.
 9. Paint prime coated access panels, grilles, louvers, etc., same color as adjacent surfaces, or, if adjacent surface does not require painting, use color as directed.
 10. Paint ducts and piping which are exposed in finished areas, or are out-of-doors including roofs, to match wall or ceiling color.
- B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated or otherwise prepared for paint as soon as practicable after preparation.
1. Do not apply materials in areas where dust is being generated, or will be generated, before coatings are thoroughly dry.
 2. Do not commence painting work in an area or space until all firestopping work in that area or space has been completed and inspected.
 3. Allow time between successive coats to permit proper drying.
 4. Do not recoat until paint feels firm and does not deform or feel sticky under moderate thumb pressure.
- C. Minimum Coating Thickness: Apply materials at not less than manufacturer's recommended spreading rate, to achieve a total dry film thickness (DFT) as recommended by coating manufacturer.
- D. Prime Coats: Apply to items not previously primed. Recoat primed and sealed surfaces where there is evidence of suction spots or unsealed areas in first coat. Prime all CMU surfaces with block filler primer.
- E. Finish Coats: Provide even texture. Leave no laps, irregularity in texture, skid marks, or other surface imperfections.
1. Opaque Finishes: Provide opaque, uniform finish, color and coverage. Cloudiness, spotting, holidays, brush marks, runs, sags, ropiness or other surface imperfections are not acceptable.
 2. Transparent Finishes: Provide glass smooth surface film of even luster. Cloudiness, color irregularity, runs, brush marks, orange peel, nail holes, or other surface imperfections are not acceptable.
- F. Completed Work: Match approved samples for color, texture and coverage. Remove, refinish or repaint work not accepted.

3.4 FIELD QUALITY CONTROL

- A. Owner may require materials testing procedures at any time during field painting.
- B. If test results show material being used does not comply with requirements, Subcontractor may be directed to remove non-complying work, pay for testing, and repaint surfaces at no additional cost to owner.

3.5 CLEANING

- A. Remove discarded paint materials, rubbish, cans and rags from site at end of each workday.
 1. Keep flammable materials in approved labeled containers in a well-ventilated area.
 2. Cover containers of coatings or solvent products when not in use.
- B. Protection: Protect work of other trades, whether to be painted or not. Correct damage by cleaning, repairing, replacing, or repainting, as acceptable to Project Manager.
 1. Clean glass and paint-spattered surfaces immediately by proper methods of washing and scraping. Do not damage or scratch finished surfaces.

2. Do not paint fire sprinkler heads, heat detectors, or smoke detectors. If painted by Subcontractor, remove and replace with new items at no additional cost District.
 3. Provide "Wet Paint" signs to protect new painted finishes.
 4. Remove temporary protective wrappings, provided by others for protection of their work, after completion of painting operations.
 5. Do not cover operating mechanical or electrical equipment.
- C. Repair: At completion of work by other trades, touch up and restore damaged surfaces or defaced painted surfaces.

3.6 PAINT SCHEDULE - COATINGS

- A. Primers:
1. Metals - Unprimed Ferrous:
 - a. Preparation: Commercial Blast (Sspc-Sp6)
 - b. Dry Mills 2.7
 - 1) Voc 91 G/L
 - 2) Waterborne Primer & Finish
 2. Metals - Shop Primed:
 - a. Touch Up
 - 1) Dry Mills 2.7
 - 2) Voc 91 G/L
 - 3) Waterborne Primer & Finish
 3. Concrete Masonry Units:
 - a. Basis of Design: Sherwin Williams Heavy Duty Block Filler B42W46
 - b. Dry Mills 10.0 - 18.0
 - c. Voc <50 G/L
- B. Coating Systems:
1. Masonry:
 - a. Basis of Design: Sherwin Williams Pro Industrial B73-300 Water Based Epoxy
 - b. 1st Coat Dry Mills – 2.0 - 4.9
 - c. 2nd Coat Dry Mills – 2.0 - 4.9
 - d. VOC <50 G/L
 2. Coating Systems:
 - a. Primed Metals Basis of Design: Sherwin Williams Pro Industrial B73-300 Water Based Epoxy
 - 1) Dry Mills - As Noted

END OF SECTION