

PROJECT MANUAL

PROJECT NAME:

WRC CDC Freezer Repair

PROJECT ADDRESS:

1251 334th Street
Woodward, Iowa 50276

PROJECT DATE: October 9, 2026

-

OWNER:

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



OWNER PROJECT NUMBER: 9503.00

OWNER REQUEST FOR BID NUMBER: RFB 950300-01

-

CONSTRUCTION MANAGER:

Story Construction
2810 Wakefield Circle
Ames, Iowa 50010



CONSTRUCTION MANAGER PROJECT NUMBER: 25509

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ARCHITECT:

10Fold Architecture + Engineering
413 Kellogg Avenue
Ames, Iowa 50010



ARCHITECT PROJECT NUMBER: 26031

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SECTION 00 0107

SEALS PAGE

ARCHITECT

I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly registered architect under the laws of the State of Iowa.

ERIC J. BADDING

Reg. #07511

Eric Badding

Signature
6-30-2028

10-09-2026

Registration Expires

Date issued

Pages or Sheets covered by this seal:

As listed below



STRUCTURAL ENGINEER

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

My license renewal date is: 12-31-2027

E. Vermeer

10-09-2026

ERIC E. VERMEER

IA Reg. # 19938

Date

Pages or Sheets covered by this seal:

As listed below



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SECTION 00 0110

TABLE OF CONTENTS

PROCUREMENT AND CONTRACTING REQUIREMENTS

1.01 DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

A.	00 0101	Project Title Page
B.	00 0107	Seals Page
C.	00 0110	Table of Contents
D.	00 0115	List of Drawing Sheets
E.	00 0116	Bid Submittal Checklist
F.	00 1113	Notice to Bidders
G.	00 2113	Instructions to Bidders
H.	00 2113.01	IMPACS Electronic Procurement System Instructions
I.	00 2113.02	Sample Contractor Certificate of Insurance
J.	00 3113	Preliminary Schedule
K.	00 3126	Existing Hazardous Material Information
L.	00 3143	Permit Application
M.	00 4116	Bid Form
N.	00 4116.01	Non Discrimination Clause Information
O.	00 4116.02	Targeted Small Business Information
P.	00 4313	Bid Security Forms
Q.	00 5200	Agreement Form
R.	00 6000	Payment Bond and Performance Bond Forms

SPECIFICATIONS

1.02 DIVISION 01 – GENERAL REQUIREMENTS

A.	01 1200	Contract Summary
B.	01 2500	Substitution Procedures
C.	01 2600	Contract Modification Procedures
D.	01 2900	Payment Procedures
E.	01 3100	Project Management and Coordination
F.	01 3100.01	Web Based Construction Management
G.	01 3200	Construction Progress Documentation
H.	01 3300	Submittal Procedures
I.	01 4000	Quality Requirements
J.	01 5000	Temporary Facilities and Controls
K.	01 6000	Product Requirements
L.	01 7300	Execution
M.	01 7700	Closeout Procedures

1.03 DIVISION 02 – EXISTING CONDITIONS

A.	02 4100	Demolition and Cutting
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1.04 DIVISION 03 – CONCRETE

- A. 03 1000 Concrete Forming and Accessories
- B. 03 2000 Concrete Reinforcing
- C. 03 3000 Cast-In-Place Concrete
- D. 03 3900 Concrete Curing

1.05 DIVISION 05 – METALS

- A. 05 1200 Structural Steel Framing

1.06 DIVISION 07 – THERMAL AND MOISTURE PROTECTION

- A. 07 0150.19 Preparation for Re-Roofing
- B. 07 5300 Elastomeric Membrane Roofing
- C. 07 5400 Thermoplastic Membrane Roofing
- D. 07 6200 Sheet Metal Flashing and Trim
- E. 07 7123 Manufactured Gutters and Downspouts
- F. 07 9200 Joint Sealants

1.07 DIVISION 08 – OPENINGS

- A. 08 3413 Cold Storage Doors

1.08 DIVISION 31 – EARTHWORK

- A. 31 2316 Excavation
- B. 31 2323 Fill

1.09 DIVISION 33 – UTILITIES

- A. 33 4100 Subdrainage

END OF SECTION

SECTION 00 0115

LIST OF DRAWING SHEETS

DRAWINGS

1.01	SHEET	TITLE
A.	G0.0	COVER
B.	S1.0	STRUCTURAL FRAMING PLAN AND DETAILS
C.	AD1	DEMO PLAN FIRST FLOOR
D.	A1.0	FIRST FLOOR PLAN
E.	A4.0	ROOF PLAN
F.	A5.0	EXTERIOR ELEVATIONS

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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

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SECTION 00 1113

NOTICE TO BIDDERS

RFB #950300-01

The Iowa Department of Administrative Services will be receiving bids for repairing freezer that has heaving and structural issues by re-grading site, replacing concrete, providing structural steel repairs, roof patching, and various sealant, flashing and downspout modifications at the Woodward Resource Center, 1251 334th Street, Woodward, Iowa 50276.

The Iowa Department of Administrative Services anticipates construction to begin on December 21, 2026 and end on June 30, 2027.

Bids must be received no later than **2:00 pm, Tuesday, November 17, 2026**. 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 <https://teams.microsoft.com/meet/255241234920971?p=gkTIklKvbrobn8uVNq> and teleconference number 1 469-998-6043 Pin: 852 294 705# at 3:00 pm on November 17, 2026.

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 10:00 am November 4, 2026, to the Issuing Officer.

Bidding documents may stipulate a specific product. Substitute product will be considered if a written request is received by 10:00 am November 4, 2026, 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 Wednesday, October 28, 2026 at 10:00 am at the Story CP2.0 trailers located at the Woodward Resource Center at 1251 334th Street, Woodward, Iowa 50276. This meeting is not mandatory but is highly recommended.

Bidding Documents, including drawing sheets bearing the project name WRC CDC Freezer Repair, Dated 10/9/2026 and the Project Manual prepared by 10Fold Architecture + Engineering dated 10/9/2026, may be obtained from Rapids Reproductions by visiting www.rapidsrepro.com or by calling (515) 251-3222 on Monday through Friday 8:00 am to 5:00 pm.

For further information regarding this project contact:

Katelyn Howells – Issuing Officer

Phone: (515) 721-7856

E-Mail: construction.procurement@das.iowa.gov

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SECTION 00 2113
INSTRUCTIONS TO BIDDERS
RFB #950300-01

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
- J. Commencement and Completion Date
- K. Site Visit
- L. Pre-bid Meeting
- M. Questions
- N. Addenda and Interpretations of the Contract Documents
- O. Substitutions
- P. Obligation of Bidder
- Q. Public Records and Requests for Confidential Treatment
- R. Withdrawal of Bid
- S. Bid Closing
- T. Basis of Bids
- U. Informalities/Rejection of Bids
- V. Consideration of Bids
- W. Preference
- 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: Repair freezer that has heaving and structural issues by re-grading site, replacing concrete, providing structural steel repairs, roof patching, and various sealant, flashing and downspout modifications.

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: Katelyn Howells – 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: 515-721-7856; email: construction.procurement@das.iowa.gov
- B. OWNER REPRESENTATIVE: Jennifer Kleene, State of Iowa, Department of Administrative Services, 109 SE 13th Street, Des Moines, IA 50319, Phone: 515-822-8197; email: jennifer.kleene@das.iowa.gov
- C. ON-SITE COORDINATOR: Rodney Carr, Plant Operations Manager, 1251 334th Street, Woodward, Iowa 50276, Phone: 515-314-6643; email: rodney.carr@hhs.iowa.gov
- D. CONSTRUCTION MANAGER CONTACT: Darren Milliken, Story Construction, 2810 Wakefield Circle, Ames, Iowa 50010, Phone: 515-291-5358; email: darren.milliken@storycon.com
- E. DESIGN PROFESSIONAL CONTACT: Eric Vermeer, 10Fold Architecture + Engineering, 413 Kellogg Avenue, Ames, Iowa 50010, Phone: 515-292-0007; email: evermeer@10foldarchitecture.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 2113.02

SAMPLE**CERTIFICATE OF LIABILITY INSURANCE**DATE (MM/DD/YYYY)
xx/xx/xxxx

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Agent's Name Agent's Address	CONTACT NAME: Agent's Information	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
INSURED Trade Contractor's Name Trade Contractor's Mailing Address	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A: Company A (AM Best Rated A/VI or Better)	NAIC # Admitted
	INSURER B:	Carriers
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL(SUBR) INSD W/O	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	Minimum
* A	COMMERCIAL GENERAL LIABILITY	X X	#TBD- CGL	3/1/17	3/1/18	EACH OCCURRENCE	\$ 1,000,000
	CLAIMS-MADE ☒ OCCUR					DAMAGE TO RENTED PREMISES (Ea occurrence)	\$
						MED EXP (Any one person)	\$
						PERSONAL & ADV INJURY	\$ 1,000,000
						GENERAL AGGREGATE	\$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:					PRODUCTS - COM/OP AGG	\$ 1,000,000
	POLICY ☒ PROJECT ☐ LOC						\$
	OTHER:						\$
B	AUTOMOBILE LIABILITY	X X	#TBD-AL	3/1/17	3/1/18	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
	ANY AUTO					BODILY INJURY (Per person)	\$
	ALL OWNED AUTOS					BODILY INJURY (Per accident)	\$
	SCHEDULED AUTOS					PROPERTY DAMAGE (Per accident)	\$
	HIRED AUTOS						\$
C	UMBRELLA LIAB	X X	#TBD-UMB	3/1/17	3/1/18	EACH OCCURRENCE	\$ 10,000,000
	EXCESS LIAB					AGGREGATE	\$
	DED RETENTION \$						\$
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	Y/N N/A X	#TBD-WC	3/1/17	3/1/18	PER STATUTE	\$ 500,000
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)					E.L. EACH ACCIDENT	\$ 500,000
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - EA EMPLOYEE	\$ 500,000
						E.L. DISEASE - POLICY LIMIT	\$ 500,000
* E	Owners Contractors Protective Liability		#TBD-OCF	3/1/17	3/1/18	*Limits equal to CGL (or) as required by owner (Note- Would be either CGL or OCF, not both)	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Additional Insured on a Primary & Non-Contributory basis (CGL;AL;UMB/Excess) in favor of : (Owner) Iowa Department of Administrative Services (DAS), Officers, Directors, Members, Consultants, Agents, and Employees.
Waiver of Subrogation (CGL;AL;WC/EL;UMB/Excess) in favor of: (Owner) Iowa Department of Administrative Services (DAS), Officers, Directors, Members, Consultants, Agents, and Employees.

Project XXXX.XX (Number varies by project)

CERTIFICATE HOLDER**CANCELLATION**

Iowa Department of Administrative Services (DAS) 109 SE 13th Street Des Moines, IA 50319	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE Signature

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ACORD 25 (2014/01)

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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 – 11/18/2026
- B. Anticipated Date of Commencement – 12/21/2026
- C. Substantial Completion by – 6/30/2027

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION



SECTION 00 3126

EXISTING HAZARDOUS MATERIAL INFORMATION

PART 1 - GENERAL

1.01 EXISTING HAZARDOUS MATERIAL INFORMATION

- A. This Document with its referenced attachments is part of the Procurement and Contracting Requirements for Project. They provide Owner's information for Bidders' convenience and are intended to supplement rather than serve in lieu of Bidders' own investigations. They are made available for Bidders' convenience and information, but are not a warranty of existing conditions.
- B. The existing hazardous materials survey reports related to this Project, were prepared by:
 - 1. Atlas Technical Consultants LLC
4503 East 50th Street, Suite 800 Des Moines, IA 50317
- C. Related Requirements:
 - 1. Section 3.12 "Hazardous Materials" in the ConsensusDocs 802 contract for notification requirements if materials suspected of containing hazardous materials are encountered.
 - 2. Atlas Survey Report for Hazardous Building Materials dated 9/18/2026
 - a. Survey Number: 204BS10684

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION



HAZARDOUS BUILDING MATERIALS SURVEY

WRC CDC FREEZER REPAIRS PROJECT 9503.00

2347 N AVENUE

WOODWARD, IOWA

204BS10684

PREPARED FOR:

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

PREPARED BY:

Atlas Technical Consultants LLC
11117 Mockingbird Drive
Omaha, NE 68137

September 18, 2026



11117 Mockingbird Drive
Omaha, NE 68137
(402) 697-9747 | oneatlas.com

September 18, 2026

Ms. Jennifer Kleene
Iowa Department of Administrative Services
109 SE 13th Street
Des Moines, IA 50319

Subject: Limited Hazardous Building Materials Survey
WRC CDC Freezer Repairs Project #9503.00
2347 N Avenue
Woodward, Iowa
Atlas No: 204BS10684

Dear Ms. Kleene:

Atlas Technical Consultants LLC (Atlas) is pleased to submit the attached Limited Hazardous Building Materials Survey Report conducted at the above-referenced site. This report includes procedures, methodologies and analytical laboratory results.

Atlas appreciates the opportunity to perform these services for the Iowa Department of Administrative Services (IDAS) and we look forward to working with you in the future. If you need any assistance with the implementation of the recommendations contained in this report, please feel free to contact the us and we will respond promptly to your needs.

Respectfully submitted,

Atlas Technical Consultants LLC

A handwritten signature in cursive script that reads "Chris Nicolet".

Chris Nicolet
Nebraska Asbestos Inspector

A handwritten signature in cursive script that reads "Phillip Thomas".

Phillip Thomas, OHST, CHMM
Project Manager

T A B L E O F C O N T E N T S

LETTER OF TRANSMITTAL	i
1.0 SCOPE OF SERVICES	1
2.0 GENERAL SITE CONDITIONS	1
3.0 ASBESTOS SURVEY	1
3.1 Regulation Review	1
3.2 Homogeneous Areas	2
3.3 Sampling Strategy	2
3.4 Laboratory Analytical Results	3
3.5 Suspect Asbestos-Containing Materials	3
3.5 Asbestos-Containing Materials	4
4.0 LEAD PAINT TESTING.....	4
4.1 Regulation Review	4
4.2 Summary of Findings	5
5.0 HAZARDOUS BUILDING MATERIALS	5
6.0 CONCLUSIONS	6
6.1 Asbestos	6
6.2 Lead	7
6.3 Hazardous Materials	7
7.0 LIMITATIONS	7

APPENDICES

APPENDIX A:	Laboratory Analytical Report
APPENDIX B:	Lead Analytical Report and Chain of Custody
APPENDIX C:	Drawings with Sample Locations
APPENDIX D:	Photo log of Asbestos Containing Materials
APPENDIX E:	Staff and Company Accreditations



Limited Hazardous Building Materials Survey

WRC CDC Freezer Repairs Project #9503.00
2347 N Avenue
Woodward, Iowa
Atlas No.: 204BS10684

1.0 SCOPE OF SERVICES

The purpose of this project was to perform a Limited Hazardous Building Materials (HBM) Survey of the above-referenced property prior to proposed renovation and demolition activities.

2.0 GENERAL SITE CONDITIONS

The survey was conducted at the WRC CDC Freezer – WRC CDC Freezer Repairs Project #9503 located at 2347 N Avenue in Woodward, Iowa. The survey area was limited to interior and exterior materials of Freezers A, B and C that will be disturbed as part of planned freezer repair activities.

3.0 ASBESTOS SURVEY

On September 9th, 2026, Freezers A, B and C associated with the WRC CDC Freezer Repairs Project #9503 was inspected for ACM by inspector Mr. Chris Nicolet of Atlas. Mr. Nicolet has completed the requisite training for asbestos accreditation as an inspector at a state-approved training provider under TSCA Title II. Mr. Nicolet's State of Iowa Inspector number is 26-14231.

Atlas conducted an asbestos survey of the identified buildings as required by United States Environmental Protection Agency (USEPA) regulation 40 Code of Federal Regulations (CFR) Part 61, the asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) and applicable state and local regulations. The purpose of the inspection was to identify, sample, quantify and assess suspect ACM in locations that may be disturbed as part of planned renovation and demolition activities.

The survey was limited to suspect materials that might be disturbed during planned renovation or demolition activities. Materials that were hidden, not accessible, or when sampled would damage the integrity of the structure, were not sampled as part of this limited survey. Materials visibly identified as non-asbestos (fibrous glass, foam rubber, wood, etc.) were not sampled. The asbestos survey consisted of three basic steps: **1)** a visual inspection of the proposed site; **2)** a determination of homogeneous areas with suspect surfacing, thermal system insulation, and miscellaneous materials; and **3)** sampling accessible, friable and non-friable, suspect materials.

3.1 Regulation Review

In Iowa, asbestos activities are regulated by the Iowa Department of Natural Resources (IDNR) and Iowa Workforce Development (IWD), Division of Labor. IDNR regulates asbestos fiber emissions under Iowa Administrative Code 567 Chapter 23 (IAC 567–23) and asbestos-containing waste disposal under IAC 567–109. IWD regulates occupational exposure to asbestos under IAC 875–10 and asbestos removal and encapsulation activities under IAC 875–155.

IAC 567–23.1(3) adopts the USEPA asbestos NESHAP (40 CFR Part 61, Subpart M) by reference. Subpart M regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing building materials prior to demolition or renovation activity. Under NESHAP, asbestos-containing building materials are classified as friable, Category I nonfriable, or Category II nonfriable

ACM. Friable materials are those that, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. Category I nonfriable ACM includes packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than 1% asbestos. Category II nonfriable ACM are any materials other than Category I materials that contain more than 1% asbestos.

Regulated ACM (RACM) must be removed before renovation or demolition activities that will disturb the materials. RACM includes:

- Friable ACM;
- Category I nonfriable ACM that has become friable or will be subjected to drilling, sanding, grinding, cutting, or abrading; and
- Category II nonfriable ACM that could be crumbled, pulverized, or reduced to powder during renovation or demolition activities.

The owner or operator must provide the IDNR and IWD with written notification of planned removal activities at least 10 working days prior to the commencement of asbestos abatement activities. Removal of RACM must be conducted by an Iowa-permitted asbestos abatement contractor.

IAC 875–155 Asbestos Removal and Encapsulation requires that any asbestos-related activity conducted in a public building be performed by personnel licensed or permitted by the IWD. Inspections for ACM must be conducted by IWD-licensed inspectors. Asbestos abatement must be performed by IWD-permitted asbestos abatement contractors. Management plans developed for the in-place management of asbestos-containing materials must be developed by an IWD-licensed management planner. When an abatement project design is prepared, it must be prepared by an IWD-licensed project designer.

IAC 875–10 adopts the Occupational Safety and Health Administration (OSHA) Asbestos standard for construction (29 CFR 1926.1101) by reference. The OSHA standard requires that employee exposure to airborne asbestos fibers be maintained below the permissible exposure limits (PEL) of 0.1 asbestos fibers per cubic centimeter (0.1 f/cc) of air as an 8-hour time-weighted average and 1.0 f/cc as a 30-minute excursion. The OSHA standard classifies construction and maintenance activities that could disturb ACM and specifies work practices and precautions that employers must follow when engaging in each class of regulated work.

3.2 Homogeneous Areas

Prior to sampling, homogeneous areas were identified in order to facilitate a sampling strategy. A homogeneous sampling area can be described as one or more areas with suspect material similar in appearance and texture that have the same installation date and function. The actual number of samples collected from each homogeneous sampling area may vary, dependent upon material type and the professional judgment of the inspector.

3.3 Sampling Strategy

The sampling strategy incorporated the asbestos hazard emergency response act (AHERA) sampling requirements, estimated quantities of suspect ACM, and the inspector's judgment to aid in the identification of suspect ACM. If the analytical results indicated that all the samples collected per homogeneous area did not contain asbestos, then the homogeneous area (material) was considered non-asbestos-containing. However, if the analytical results of one or more of the samples collected per homogeneous area indicated that asbestos was present in quantities greater than one percent asbestos (as defined by USEPA), all of the homogeneous area (material) was treated as an ACM regardless of any other analytical results. Materials which were visually determined to be non-asbestos (i.e. fibrous glass, foam rubber, etc.) by the accredited inspector were not required to be sampled. Actual collection of a bulk asbestos sample involves physically removing a small piece of material and placing it in an airtight sample container. Sample containers were marked with a unique identification number, which was documented in the field notes.

3.4 Laboratory Analytical Results

A total of **17** samples were collected from building materials suspected of containing asbestos. The samples were submitted under chain of custody to EMSL Analytical, Inc. (EMSL) located at 200 Route 130 North in Cinnaminson, New Jersey for analysis by polarized light microscopy (PLM) with dispersion staining techniques per the *USEPA Method for the Determination of Asbestos in Bulk Building Materials (600/R-93-116)*. The laboratory separated multi-layered materials into individual layers and analyzed a total of **17** individual layers. The percentage of asbestos, if applicable, was established by microscopic visual estimation. EMSL is an accredited laboratory by the National Voluntary Laboratory Accreditation Plan (NVLAP) No. 101048-0. Any material that contains greater than one percent (>1%) asbestos is considered an ACM and must be handled according to Occupational Safety and Health Administration (OSHA), USEPA, and all applicable state and local regulations

Details of sample analysis are included in Appendix A, which contains a listing of all analyzed samples, sample locations, and analytical results relating to the site. Asbestos analytical results are reported as percentage and type. Other common non-asbestos components may also be noted in the analytical report.

3.5 Suspect Asbestos-Containing Materials

A summary of the suspect ACM sampled can be found in Table 1 below:

Table 1: Suspect Asbestos-Containing Materials		
Sample Number	Material	Location
A-1	White Caulk	Freezer Connection to CDC Warehouse
A-2	Gray Panel Gaskets	Freezer Connection to CDC Warehouse
A-3	Gray Panel Gaskets	South wing of Freezer, Exterior
A-4	White Pipe End Sealant	South wing of Freezer, West Wall
A-5	Pipe Insulation	South wing of Freezer, West Wall
A-6	1 st Black Roof Layer	West End of North Freezer
A-7	2 nd Yellow Foam layer	West End of North Freezer
A-8	Black Caulk	South edge of north Freezer
A-9	1 st Black Roof Layer	East end of North Freezer
A-10	2 nd Yellow Foam layer	East end of North Freezer
A-11	1 st White Layer	West End of South Freezer
A-12	2 nd Yellow Layer	West End of South Freezer
A-13	Yellow/Tan Mastic	West End of South Freezer
A-14	1 st White Layer	East end of South Freezer
A-15	Yellow/Tan Mastic	East end of South Freezer
A-16	2 nd Yellow Layer	East end of South Freezer
A-17	Grey Caulk	Compressor Canopy

3.5 Asbestos-Containing Materials

The following table is a summary of the suspect asbestos-containing materials that have been determined, through laboratory analysis, to contain asbestos in concentrations >1%:

Table 2: Asbestos-Containing Materials				
Sample Number	Material	Location	Approx. Quantity	Asbestos Content
No Asbestos Containing Materials were Identified in the Samples Collected				
SF = Square Feet; LF = Linear Feet; MF = Mechanical Fittings				

4.0 LEAD PAINT TESTING

Atlas collected paint chip samples from representative surface coatings that may be impacted by renovation/demolition activities.

Surface coatings that were collected were considered to be representative of materials in a homogeneous area if:

1. They exhibited similar physical characteristics (suspect materials alike in appearance, substrate, color, and time of application were tested as homogenous areas)
2. The application of the tested surface could be associated to an application of an unsampled surface.

Atlas collected and submitted a total of **one** paint chip sample from surface coatings. The sample was submitted to EMSL of Cinnaminson, New Jersey, under proper chain of custody for analysis by Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B). EMSL is accredited under the American Industrial Hygiene Association-Laboratory Accreditation Program (AIHA-LAP, LLC) (AIHA-LAP; lab code 100194).

A copy of the analytical results and chain of custody can be found in Appendix B.

The USEPA has defined LBP as “*paint or other surface coatings that contain lead in excess of 0.5 percent by weight (>0.5%)*”. Results less than 0.5% by weight indicate that lead is not present at or above the USEPA regulatory level; however, lead was present in lower concentrations above the laboratory detection limit in other surfaces tested and these are classified as lead-containing paint (LCP). Negative results do not mean that lead is not present.

4.1 Regulation Review

The disturbance and disposal of materials with surface coatings that contain lead paint are regulated by the USEPA, OSHA and the State of Iowa. The Resource Conservation and Recovery Act (RCRA) provides the USEPA with the authority to regulate the waste status of demolition or renovation debris, including lead-containing materials. Specific notification and testing requirements must be addressed prior to transporting, treating, storing, or disposing of hazardous wastes.

Construction work covered by 29 CFR 1926.62 includes any repair, renovation or other activities that disturb in-place, lead-containing materials, but does not include routine cleaning and repainting where there is insignificant damage, wear or corrosion of existing lead-containing coatings or substrates. Unless adequately protected, employee exposures to lead must not exceed airborne concentrations >50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) averaged over an 8-hour period.

Occupational exposure to lead occurring in the course of construction work, including maintenance activities, painting, alteration and repairs is subject to the OSHA Lead standard (29 CFR 1926.62). The lead standard applies to any detectable concentration of lead in paint, as even small concentrations of lead can result in unacceptable employee exposures depending upon the method of removal and other workplace conditions.

The disposal of lead-based paint waste, as well as paint waste containing other heavy metals, is regulated by the USEPA and State of Iowa. Wastes generated by industrial businesses, commercial businesses, and government institutions are subject to regulation. Commercial business owners and removal contractors are required to determine if paint waste generated from nonresidential structures (such as public and commercial buildings, warehouses, bridges, water towers, and transmission towers) contains heavy metals that would cause the debris to be considered a hazardous waste. Disposal options and applicable management requirements for collected debris will be based upon whether the waste stream is considered a hazardous waste and the amount of debris generated. Removal contractors and building owners need to include these factors when preparing and responding to bid specifications. Specific notification and testing requirements must be addressed prior to transporting, treating, storing, or disposing of hazardous wastes. Lead-containing wastes are considered hazardous waste under RCRA if Toxicity Characteristic Leachate Procedure (TCLP) results exceed 5 milligrams per liter (mg/L). The USEPA has made exceptions for the handling and disposal of lead wastes generated from residential housing.

Specific notification and testing requirements must be addressed prior to transporting, treating, storing, or disposing of hazardous wastes. Lead-containing wastes are considered hazardous waste under RCRA if Toxicity Characteristic Leachate Procedure (TCLP) results exceed 5 milligrams per liter (mg/L). The USEPA has made exceptions for the handling and disposal of lead wastes generated from residential housing.

The above overview is not intended to be inclusive of all potentially pertinent regulatory information. The relevant USEPA, OSHA and State of Iowa regulations should be consulted prior to undertaking activities involving the demolition, renovation or maintenance of surface coatings that contain lead.

4.2 Summary of Findings

The following suspect surface coatings were collected as part of the survey:

Table 4: Lead Paint Summary				
Sample Number	Sample Location	Representative Substrate	Paint Color	Lead Concentration (% by weight)
L-1	Freezer Doors	Metal	White	<0.078%

bolded = lead-based paint

If surface coatings are identified to contain concentrations of lead above regulatory levels, they should be removed, controlled and/or disposed of in accordance with federal, state, and local regulations, prior to disturbance.

This evaluation report can help the Owner develop a plan for renovating the building by having concentrations of lead in the paint identified. It is our understanding that the information in this report will be provided to the contractors so that appropriate precautions can be made to minimize worker exposure to lead. If surface coatings with lead containing paint are handled improperly, exposure could occur to workers and future occupants of the facility.

5.0 HAZARDOUS BUILDING MATERIALS

Atlas completed a visual inspection of areas throughout the intended work areas in an attempt to identify

hazardous wastes or universal wastes that may be impacted by planned renovation activities. The survey included a visual inspection of: light fixtures and other equipment for the presence of polychlorinated biphenyls (PCB); light bulbs, thermostats, switches, and other equipment for the presence of mercury; chlorofluorocarbons (CFC) and hydrochlorofluorocarbons (HCFC) refrigerants, batteries, and devices with potential radioactive materials.

Table 4: Hazardous Building Materials		
Category	Material	Estimated Quantity
Batteries	Lead Acid	NA
	Nickel Cadmium	NA
	Lithium-Ion	NA
	Emergency Exit Sign	NA
Mercury	Thermostat	NA
	Fluorescent Light Tube	NA
	High Intensity Discharge Bulb	NA
	Emergency Strobe	NA
RCRA Metals	LED Light Fixture (single bulb)	40
	LED Light Fixture (2' x 2' light fixture)	NA
	LED Light Fixture (2' x 4' light fixture)	NA
Poly-Chlorinated Biphenyl (PCB)	Light Ballast	NA
	Transformer	NA
Low Level Radioactive Sources (LLR)	Tritium Exit Sign	NA
	Smoke Detector	NA
Chlorofluorocarbons (CFC) or Hydro Chlorofluorocarbons (HCFC)	Air Conditioner (AC)	NA
	Refrigerator/Cooler	4
	Freezer	NA
	Water Fountain	NA
Other	Fire Extinguisher	NA

6.0 CONCLUSIONS

6.1 Asbestos

Asbestos **was not identified** in any of the samples collected as part of the survey.



6.2 Lead

Lead **was not identified** above the USEPA level of 0.5% in the any of the surface coatings collected and analyzed.

6.3 Hazardous Materials

If any of the hazardous materials or universal wastes identified in Table 4 above are to be impacted as part of the renovation contractor's scope of work, they shall be collected and disposed of according to the USEPA Toxic Substances Control Act (TSCA) and the State of Iowa regulations.

7.0 LIMITATIONS

The results, findings, conclusions, and recommendations expressed in this report are based solely on conditions noted during the September 9, 2026, Atlas inspection of the WRC CDC Freezer – WRC CDC Freezer Repairs Project #9503 located at 2347 N Avenue in Woodward, Iowa

Although Atlas performed limited destructive sampling to access suspect ACM, additional suspect but unsampled materials could be located under existing building materials, in isolated areas or in other concealed areas. Therefore, if suspect materials are encountered during renovation/demolition activities that do not appear to have been characterized as non-ACM, samples should be collected and analyzed prior to disturbing these materials or the materials can be assumed to be ACM and abated accordingly. Atlas's selection of sample locations and frequency of sampling was based on the inspector's assumption that like materials in the same area are homogeneous in content.

The report is designed to aid the building owner, architect, construction manager, general contractor, and potential asbestos and lead abatement contractor(s) in locating ACM and lead containing surface coatings. Under no circumstances is the report to 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 Project Design or an Abatement Work plan.

Our professional services have been performed, our findings obtained, and our conclusions and recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. This statement is in lieu of other statements either expressed or implied. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated.

This report is intended for the sole use of the IDAS. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users and use or re-use of this document or the findings, conclusions, or recommendations is at the risk of said user.

APPENDIX A
ASBESTOS ANALYTICAL REPORT 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: 042619154

Customer ID: ATC55

Customer PO:

Project ID:

Attention: Chris Nicolet
Atlas Technical
11117 Mockingbird Drive
Omaha, NE 68137

Phone: (402) 697-9747
Fax: (402) 597-8532
Received Date: 09/10/2026 10:25 AM
Analysis Date: 09/15/2026
Collected Date: 09/09/2026

Project: WRC CDC Freezer Replacement / State of Iowa / HBM Survey / 204BS

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
A-1 042619154-0001	1st Floor - Freezer, where Freezer meets Building - White Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
A-2 042619154-0002	1st Floor - Freezer, next to Door - Gray Freezer Panel Gaskets	Gray/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
A-3 042619154-0003	E - Freezer, South Wing, West Wall - Gray Freezer Panel Gaskets	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
A-4 042619154-0004	E - Freezer, South Wing, West Wall - White Pipe End Sealant	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
A-5 042619154-0005	E - Freezer, South Wing, West Wall - Pipe Insulation on Cut Pipes	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
A-6 042619154-0006	R - North Freezer West Edge Roof - 1st Black Roof Layer	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
A-7 042619154-0007	R - North Freezer West Edge Roof - 2nd Yellow Foam Roof Layer	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
A-8 042619154-0008	R - North Freezer South Edge Roof - Black Caulk	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
A-9 042619154-0009	R - North Freezer, East End - 1st Black Roof Layer	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
A-10 042619154-0010	R - North Freezer, East End - 2nd Yellow Foam Roof Layer	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
A-11 042619154-0011	R - South Freezer West End - 1st White Layer	White Fibrous Homogeneous	20% Synthetic	80% Non-fibrous (Other)	None Detected
A-12 042619154-0012	R - South Freezer West End - 2nd Yellow Layer (Foam)	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
A-13 042619154-0013	R - South Freezer West End - Yellow/Tan Mastic under 1st Layer	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
A-14 042619154-0014	R - South Freezer East End - 1st White Roof Layer	White Fibrous Homogeneous	20% Synthetic	80% Non-fibrous (Other)	None Detected

Initial report from: 09/15/2026 18:15:12



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: 042619154

Customer ID: ATC55

Customer PO:

Project ID:

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
A-15	R - South Freezer	Tan/Yellow		100% Non-fibrous (Other)	None Detected
	East End -	Non-Fibrous			
042619154-0015	Tan/Yellow Mastic	Homogeneous			
A-16	R - South Freezer	Yellow		100% Non-fibrous (Other)	None Detected
	East End - 2nd Foam	Non-Fibrous			
042619154-0016	Roof Layer	Homogeneous			
A-17	R - Compressor	Gray		30% Ca Carbonate	None Detected
	Canopy - Grey Caulk	Non-Fibrous		70% Non-fibrous (Other)	
042619154-0017	on Compressor	Homogeneous			
	Canopy				

Analyst(s)

Amiri Lewis (9)

Nicholas Wood (8)

Samantha Sweeney, 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, PA ID# 68-00367, LA #04127

Initial report from: 09/15/2026 18:15:12

Asbestos Chain of Custody (Air, Bulk, Soil)

EMSL Analytical, Inc.

EMSL

EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS • TRAINING

EMSL Order Number / Lab Use Only

042619154

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

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information	Customer ID:		Billing Information	Billing ID:	ATC55				
	Company Name:	Atlas Technical Omaha, NE 68137 US			Company Name:	Atlas Technical Omaha, NE 68137 US			
	Contact Name:	Chris Nicolet			Billing Contact:	Phil Thomas			
	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:	christopher.nicolet@oneatlas.com				Email(s) for Invoice:	phil.thomas@oneatlas.com		

Project Information			
Project Name/No:	WRC CDC Freezer Replacement		Purchase Order:
EMSL LIMS Project ID:	US State where samples collected:	State of Connecticut (CT) must select project location:	
(If applicable, EMSL will provide)	IA	☐ Commercial (Taxable) ☐ Residential (Non-Taxable)	
Sampled By Name:	Sampled By Signature:	No. of Samples in Shipment	
Chris Nicolet	<i>Chris Nicolet</i>	17	

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.									

PCM Air ☐ NIOSH 7400 ☐ NIOSH 7400 w/ 8hr. TWA 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)	Test Selection TEM - Air ☐ AHERA 40 CFR, Part 763 ☐ NIOSH 7402 ☐ EPA Level II ☐ ISO 10312* TEM - Bulk ☐ TEM EPA NOB ☐ NYS NOB 198.4 (Non-Friable-NY) ☐ TEM EPA 600/R-93/116 w Milling Prep (0.1%) Other Test (please specify)	TEM - Settled Dust ☐ Microvac - ASTM D5755 ☐ Wipe - ASTM D6480 ☐ Qualitative via Filtration Prep ☐ Qualitative via Drop Mount Prep Soil - Rock - Vermiculite (reporting limit)* ☐ PLM EPA 600/R-93/116 with milling prep (<0.25%) ☐ PLM EPA 600/R-93/116 with milling prep (<0.1%) ☐ TEM EPA 600/R-93/116 with milling prep (<0.1%) ☐ TEM Qualitative via Filtration Prep ☐ TEM Qualitative via Drop Mount Prep
---	--	--

*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)
See Attached Sheets			

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

Method of Shipment:	<i>Fedex</i>			Sample Condition Upon Receipt:			
Relinquished by:	Chris Nicolet	Date/Time:	<i>9/9/26 1230</i>	Received by:	<i>FF+</i>	Date/Time:	<i>9/10/26</i>
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.

042619154


 11117 Mockingbird Drive
 Omaha, NE 68137
 Phone (402) 697-9747

 RECEIVED
 CINNAMINSON, NJ
 SEP 10 2026

ASBESTOS BULK SAMPLE FORM

Client: State of Iowa	Project Description: ~~Asbestos~~ HBM Survey	Project Manager: Inspector: CN
Date: 9/9/26	Site Location: WRC - CDC	Atlas Project Number: 204BS

Sample #	Material Description	Floor	Sample Location	Quantity
A-1	White Caulk	1st	Freezer, Where Freezer Meets Building	20 LF
A-2	~~Gray~~ Freezer Panel Gaskets	1st	Freezer, Next to door	
A-3	Gray Freezer Panel ~~Gaskets~~ Gaskets	E	Freezer, south wing, west wall	
A-4	White pipe End Sealant	E	└	
A-5	Pipe Insulation on cut pipes	E		
A-6	1st Black Root Layer	R	North Freezer ^{West edge} Root	
A-7	2nd Yellow ^(Found) Root Layer	R	└	
A-8	Black Caulk	R	North Freezer ^{South edge} Root	
A-9	1st Black Root Layer	R	North Freezer, East end	
A-10	2nd Yellow ^(Found) Root Layer	R	North Freezer East end	
A-11	1st White layer	R	South Freezer West end	
A-12	2nd Yellow ^(Found) Layer	R	└	
A-13	Yellow / tan ^{1st} mastic under layer	R	South Freezer West end	



Client: Slate at Jersey	Project Description: HBM Survey	Project Manager: Inspector: CN PT
Date: 9/9	Site Location: WRC CDC Freezer	Atlas Project Number: 204BS

Sample #	Material Description	Floor	Sample Location	Quantity
A-14	1 st White Root Layer	R	South Freezer East end	
A-15	Tan / Yellow mastre	R		
A-16	2nd Foam Root Layer	R		
A-17	Grey Caulk on Compressor Canopy	R	Compressor Canopy	

RECEIVED
EMSL
CINNAMINSON, NJ
2026 SEP 10 P 1:26

RECEIVED
EMSL
CINNAMINSON, NJ
2026 SEP 10 P 1:26

APPENDIX B
LEAD ANALYTICAL REPORT AND CHAIN OF CUSTODY

**EMSL Analytical, Inc.**

200 Route 130, Cinnaminson, NJ, 08077
Telephone: 856-858-4800 Fax:cs@emsl.com
www.emsl.com

EMSL Order ID: 012635999**LIMS Reference ID:** AE35999**EMSL Customer ID:** ATC55

Attention: Chris Nicolet
Atlas Technical [ATC55]
11117 Mockingbird Drive
Omaha, NE 68137
(402) 697-9747
christopher.nicolet@oneatlas.com

Project Name: WRC CDC Freezer Replacement

Customer PO:
EMSL Sales Rep: Anthony DeRosa

Received: 09/10/2026 11:50

Reported: 09/14/2026 16:42

Analytical Results

Analyte	Results	RL	Weight	Prep Date & Tech	Prep Method	Analysis Date & Analyst	Analytical Method	Q	DF
Client Sample ID: L-1/White - Metal - Freezer Door Brakcet							Date Sampled: 09/09/26		
Matrix: Chips							LIMS Reference ID: AE35999-01		
Lead	<0.078 % wt	0.078 % wt	0.0206 g	09/11/26 lxW	SW-846 3050B	09/11/26 PMx	SW846-7000B	1	

**EMSL Analytical, Inc.**

200 Route 130, Cinnaminson, NJ, 08077
Telephone: 856-858-4800 Fax:cs@emsl.com
www.emsl.com

EMSL Order ID: 012635999
LIMS Reference ID: AE35999
EMSL Customer ID: ATC55

Attention: Chris Nicolet
Atlas Technical [ATC55]
11117 Mockingbird Drive
Omaha, NE 68137
(402) 697-9747
christopher.nicolet@oneatlas.com

Project Name: WRC CDC Freezer Replacement

Customer PO:
EMSL Sales Rep: Anthony DeRosa

Received: 09/10/2026 11:50
Reported: 09/14/2026 16:42

Work Order Case Narrative

Underweight sample analyzed with elevated reporting limit.

**EMSL Analytical, Inc.**

200 Route 130, Cinnaminson, NJ, 08077
Telephone: 856-858-4800 Fax:cs@emsl.com
www.emsl.com

EMSL Order ID: 012635999

LIMS Reference ID: AE35999

EMSL Customer ID: ATC55

Attention: Chris Nicolet
Atlas Technical [ATC55]
11117 Mockingbird Drive
Omaha, NE 68137
(402) 697-9747
christopher.nicolet@oneatlas.com

Project Name: WRC CDC Freezer Replacement

Customer PO:
EMSL Sales Rep: Anthony DeRosa
Received: 09/10/2026 11:50
Reported: 09/14/2026 16:42

Certified Analyses included in this Report

Analyte	Certifications
SW846-7000B in Chips	
Lead	AIHA LAP

List of Certifications

Code	Description	Number	Expires
NJDEP	New Jersey Department of Environmental Protection	03036	06/30/2027
AIHA LAP	American Industrial Hygiene Association (AIHA LAP, LLC)	100194	04/01/2027
NYSDOH	New York State Department of Health ELAP	10872	04/01/2027
California ELAP	California Water Boards	1877	06/30/2027
A2LA	A2LA Environmental Certificate	2845.01	07/31/2028
21-A2LA	A2LA Food Chem/Mat Sci	2845.15	07/31/2028
PADEP	Pennsylvania Department of Environmental Protection	68-00367	11/30/2026
HIDOH	Hawaii Department of Health	HI via NJ 03036	06/30/2027
MADEP	Massachusetts Department of Environmental Protection	M-NJ337	06/30/2027
CTDPH	Connecticut Department of Public Health	PH-0270	06/30/2028

Please see the specific Field of Testing (FOT) on www.emsl.com <<http://www.emsl.com>> for a complete listing of parameters for which EMSL is certified.

Notes and Definitions

Item	Definition
(Dig)	For metals analysis, sample was digested.
[2C]	Reported from the second channel in dual column analysis.
DA	Direct Analysis
DF	Dilution Factor
MDL	Method Detection Limit.
ND	Analyte was NOT DETECTED at or above the reporting limit, or the mdl if provided.
NR	Spike/Surrogate showed no recovery.
Q	Qualifier
RCS	Respirable Crystalline Silica
RL	Reporting Limit For paint chips, the RL is 0.0064% by wt. (equiv. to 64 mg/kg, or ppm) based upon a minimum sample weight of 0.25 grams. For soils, the RL is 32 mg/kg (ppm) based upon a minimum sample weight of 0.5 grams. For dust wipes, the RL is 8 µg/wipe; reporting units of µg/sq. ft. are not validated by the lab based upon data provided by non-lab personnel.
Wet	Sample is not dry weight corrected.
Measurement of uncertainty and any applicable definitions of method modifications are available upon request. Per EPA NLLAP policy, sample results are not blank corrected.	

**EMSL Analytical, Inc.**

200 Route 130, Cinnaminson, NJ, 08077
Telephone: 856-858-4800 Fax: cs@emsl.com
www.emsl.com

EMSL Order ID: 012635999**LIMS Reference ID:** AE35999**EMSL Customer ID:** ATC55

Attention: Chris Nicolet
Atlas Technical [ATC55]
11117 Mockingbird Drive
Omaha, NE 68137
(402) 697-9747
christopher.nicolet@oneatlas.com

Project Name: WRC CDC Freezer Replacement

Customer PO:
EMSL Sales Rep: Anthony DeRosa

Received: 09/10/2026 11:50

Reported: 09/14/2026 16:42

Owen McKenna 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. QC sample results are within quality control criteria and met method specifications unless otherwise noted. All results for soil samples are reported on a dry weight basis, unless otherwise noted.

Analysis following EMSL SOP for the Determination of Environmental Lead by FLAA. The laboratory has a reporting limit of 0.0064% by wt., based upon a minimum sample weight of 0.25g submitted to the lab, and is not responsible for any result or reporting limit provided in mg/cm² since it is dependent upon an area value provided by non-lab personnel. A "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty and definitions of modifications are available upon request. Results in this report are not blank corrected unless specified.



Lead Chain of Custody

EMSL Order Number / Lab Use Only

EMSL Analytical, Inc.

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

AE 35999

EMSL ANALYTICAL, INC.

LABORATORY • PRODUCTS • TRAINING

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information	Custo	Billing ID: ATC55		
	Company Name:	Atlas Technical Omaha, NE 68137 US		
	Contact Name:	Chris Nicolet		
	Street Address:	11117 Mockingbird Drive		
	City, State, Zip:	Omaha	NE 68137	Country: US
	Phone:	(402) 697-9747		
	Email(s) for Report:	christopher.nicolet@oneatlas.com		
Billing Information	Company Name:	Atlas Technical Omaha, NE 68137 US		
	Billing Contact:	Phil Thomas		
	Street Address:	11117 Mockingbird Drive		
	City, State, Zip:	Omaha	NE 68137	Country: US
	Phone:	(402) 697-9747		
	Email(s) for Invoice:	phil.thomas@oneatlas.com		

Project Information			
Project Name/No: WRC CDC Freezer Replacement		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:		☐ Commercial (Taxable) ☐ Residential (Non-Taxable)	
Sampled By Name: Chris Nicolet		Sampled By Signature: <i>Chris Nicolet</i>	
No. of Samples in Shipment: 1		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 ☒ % by wt. ☐ ppm (mg/kg) ☐ mg/cm ² *Chips reporting Limit based on a minimum 0.25g sample weight. Not appropriate for Ceramic Tiles - XRF is recommended.	SW 846-7000B	Flame Atomic Absorption	*Please select reporting on left: - 0.0064% - 64 ppm - mg/cm ² - RL is Variable	☒
	SW 846-6010D	ICP-OES	*Please select reporting on left: - 0.0004% - 4 ppm - mg/cm ² - RL is Variable	☐
AIR	NIOSH 7082	Flame Atomic Absorption	3.2 µg/filter	☐
	NIOSH 7303M	ICP-OES	1.0µ g/filter	☐
	NIOSH 7303M	ICP-MS	0.05 µg/filter	☐
WIPE ☐ ASTM ☐ NON-ASTM *If no box is checked, non-ASTM Wipe is assumed	SW 846-7000B*	Flame Atomic Absorption	8 µg/wipe	☐
	SW 846-6010D*	ICP-OES	1.0 µg/wipe	☐
TCLP	SW 846-1311 / 7000B / SM 3111B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	SW 846-1311 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
SPLP	SW 846-1312 / 7000B / SM 3111B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	SW 846-1312 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
TTLC	22 CCR App. II, 7000B	Flame Atomic Absorption	32 mg/kg (ppm)	☐
	22 CCR App. II, SW 846-6010D*	ICP-OES	2 mg/kg (ppm)	☐
STLC	22 CCR App. II, 7000B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
	22 CCR App. II, SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)	☐
Soil	SW 846-7000B	Flame Atomic Absorption	32 mg/kg (ppm)	☐
	SW 846-6010D*	ICP-OES	2 mg/kg (ppm)	☐
Wastewater	SM 3111B / SW 846-7000B	Flame Atomic Absorption	0.32 mg/L (ppm)	☐
Unpreserved	EPA 200.7 / 6010D	ICP-OES	0.020 mg/L (ppm)	☐
Preserved with HNO ₃ ☐ PH<2	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	☐
Drinking Water	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	☐
Unpreserved	40 CFR Part 50	ICP-OES	12 µg/filter	☐
Preserved with HNO ₃ ☐ PH<2		ICP-MS	0.6 µg/filter	☐
TSP/SPM Filter				☐
Other:				☐

Sample Number	Sample Location	Volume / Area	Date / Time Sampled
	See Attached Sheets		

Method of Shipment: Fedex	Sample Condition Upon Receipt:	
Relinquished by: Chris Nicolet	Date/Time: 9/9/26 1230	Received by: <i>EF+</i> Date/Time: 9/10/26 1150
Relinquished by:	Date/Time:	Received by: Date/Time:

Controlled Document: COC-25 Lead R22 03/28/2025

*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.

Page 1 of 2

Page 5 of 6



AE35999

11117 Mockingbird Drive
Omaha, NE 68137
Phone (402) 697-9747

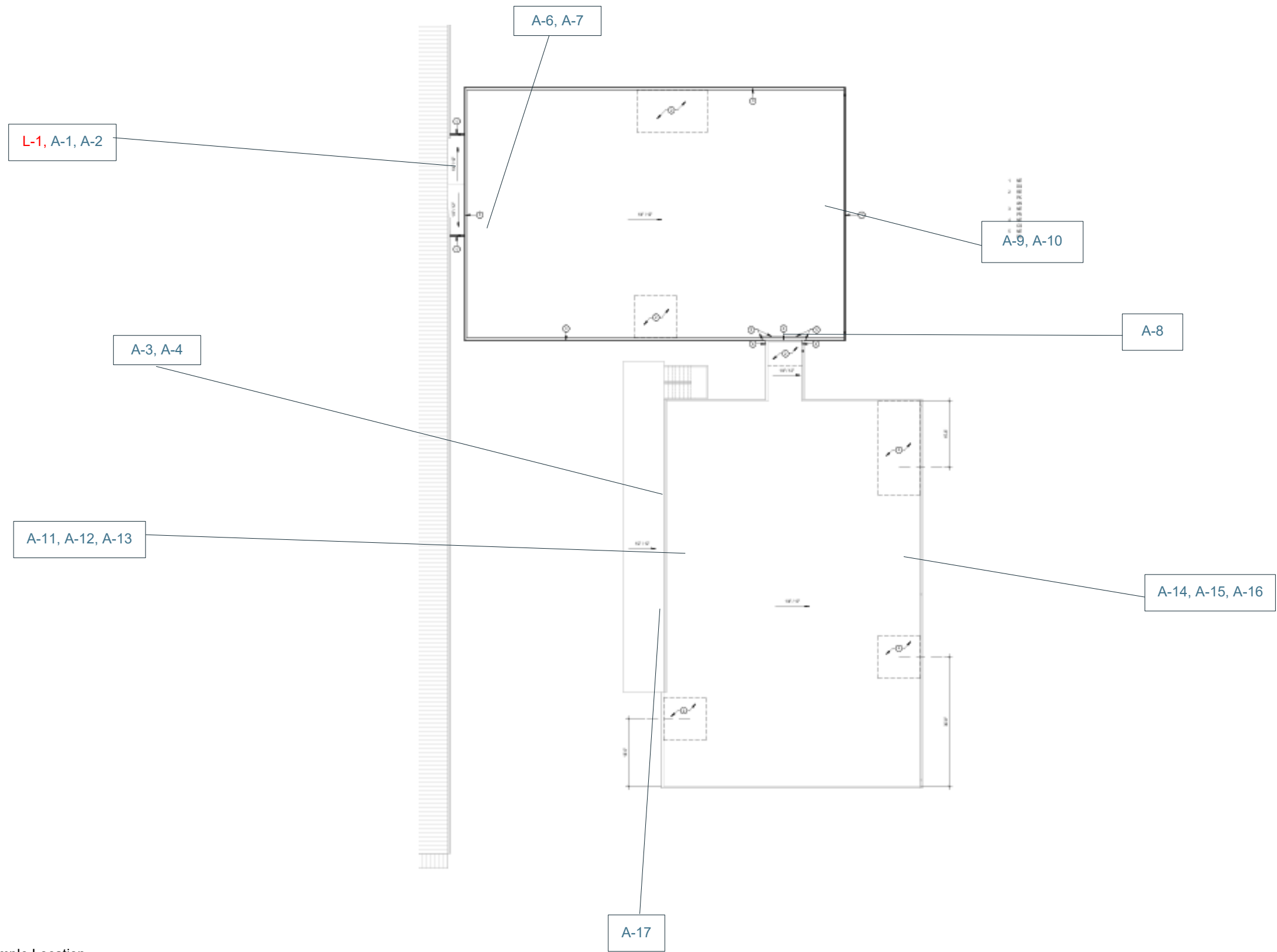
PAINT CHIP SAMPLE LOG SHEET

Client: <i>State of Iowa</i>	Project Description: <i>HBM Survey</i>	Project Manager: <i>PT</i> Inspector: <i>CN</i>
Date: <i>9/9</i>	Site Location: <i>WRC CDC Freezer</i>	Atlas Project Number: 204BS

Sample #	Paint Color	Substrate	Material Description	Sample Location (Floor/Room/Location in Room)	Quantity
L-1	White	Metal	~~Freezer~~	Freezer door/bracket	

RECEIVED
EMSL
CINNAMINSON, NJ
2026 SEP 10 A 11:58

APPENDIX C
DRAWINGS WITH SAMPLE LOCATIONS



X-XX = Asbestos Sample Location
X-XX = Lead Paint Sample Location

Project No. 204BS10684

Date: September 9, 2026

Project Manager: Phil Thomas

Name: WRC CDC Freezer Repairs Project #9503



11117 Mockingbird Drive
Omaha, NE 68137
PH. (402) 697-9747

Asbestos and Lead Paint Sample Locations

WRC CDC Freezer
2347 N Avenue
Woodward, Iowa 50276

APPENDIX D
PHOTO LOG OF ASBESTOS CONTAINING MATERIALS



Photo #1 Interior of WRC CDC Freezer (No Asbestos Containing Materials Found).



Photo #2 Interior of WRC CDC Freezer (No Asbestos Containing Materials Found).



Photo #3 Interior of WRC CDC Freezer (No Asbestos Containing Materials Found).



Photo #4 Interior of WRC CDC Freezer (No Asbestos Containing Materials Found).



Photo #5 Roof of North Freezer (No Asbestos Containing Materials Found)



Photo #6 Roof of South Freezer (No Asbestos Containing Materials Found)

APPENDIX E
STAFF AND COMPANY ACCREDITATIONS

CHRISTOPHER NICOLET

DOB: 05-24-1995

Issued: 01-12-2026



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.



License Type
INSPECTOR

Number
26-14231

Expires
12-18-2026

IOWA

Asbestos

Aaron Baack
Interim Director

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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. 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

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SECTION 00 4116

BID FORM

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

RFB #950300-01

BID FORM for CONSTRUCTION CONTRACT
for
Woodward Resource Center
1251 334th Street, Woodward, Iowa
Project 9503.00

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 October 9, 2026, 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: Structural

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

Dollars
(\$_____).

BP 02

Description: Building Envelope

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

Dollars
(\$_____).

ALTERNATES:

BP 02 ALT 01

Description: Freezer #3 Additional Sealant

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

Dollars
(\$_____).

UNIT PRICES:

BP 01 UNIT 01

Description: Over-Excavation & Fill

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

REQUIRED: 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

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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

CONTRACTOR	BID NO.	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.

[illegible]

00 4116.02 - 2

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").

By virtue of this Bid Bond (the "Bond"), the Constructor as Principal and _____ as Surety ("Surety"), are bound to the Owner as Obligor 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 Obligor shall accept the bid of the Constructor, the Constructor shall enter into an Agreement with the Obligor 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 Obligor the difference between the amount of Constructor's bid and the amount of such agreement the Obligor 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)

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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 in 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 cancelation 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.



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 Obligor 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.

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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)



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 Obligatee 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.

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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: _____

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.

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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: Woodward Resource Center 1251 334th Street, Woodward, Iowa 50276
- B. DAS Project #: 9503.00
- 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: Jennifer Kleene, Iowa Department of Administrative Services, 109 SE 13th Street, Des Moines, IA 50319
- E. Construction Manager: Darren Milliken, Story Construction, 2810 Wakefield Circle, Ames, Iowa 50010

1.03 PROJECT SUMMARY

- A. The project includes repairing freezer that has heaving and structural issues by re-grading site, replacing concrete, providing structural steel repairs, roof patching, and various sealant, flashing, and downspout modifications.
- B. Target date to provide substantial completion is June 30, 2027.

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 7:00 AM to 5:00 PM, Monday 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 building throughout the Project.
- 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. Maintain control of all tools, supplies, and debris at all times during the work.

- J. 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.
- K. Do not give anything to residents or take anything from residents; if they offer, inform your supervisor.
- L. 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.
- M. 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.
- N. During an emergency, follow the instructions of the security staff.
- O. Ladders and scaffolding must be taken down when not in use and at the end of each shift.
- P. Fuel cans are always to be secured.
- Q. Photography of the Woodward Resource Center residents or employees is prohibited.
- R. Contractors will need to sign in to freezer log each day they work inside of freezer.

1.09 BID PACKAGE INSTRUCTIONS

- A. **Bid Package #01** – Structural: Trade Contractor shall include all of the following, but not limited to, as part of the contract:
 - 1. Specifications:
 - a. Division 00 – Procurement and Contracting Requirements
 - b. Division 01 – General Requirements
 - c. Division 02 – Existing Conditions
 - 1) Specification 02 4100 Demolition. Complete all demo work as associated with work corresponding to BP #01.
 - d. Division 03 – Concrete
 - 1) Complete
 - e. Division 05 – Metals
 - 1) Complete
 - f. Division 31 – Earthwork
 - 1) Complete
 - g. Division 33 – Utilities
 - 1) Complete
 - 2. Drawings:
 - a. Include all work shown for drawings G0.0 and S1.0
 - b. Include the following keynotes for sheet AD1.
 - 1) Keynotes: 1, 2, 3, 4, 7, 9, 11, 14, 15, and 16.
 - c. Include the following keynotes for sheet A1.0.
 - 1) Keynotes: 2, 3, 4, 5, 6, 7, 8, 16, 19, and 20.
 - d. Include the following keynotes for sheet A5.0.
 - 1) Keynotes: 2, 3, 4, 5, 8, and 19.
 - 3. Clarification: For keynotes 3, 4, and 5 on A1.0 and A5.0, involving tying downspouts to subdrain systems, BP #01 is responsible for the subdrainage piping below grade and the PVC boots and BP #02 is responsible for connecting downspouts to the subdrainage systems.
 - 4. Clarification: For keynote 19 on A5.0, BP #01 is to exclude the sealant work.
 - 5. Clarification: For freezers 1 and 2 the temperature can be increased to 20 degrees Fahrenheit while working, but they must coordinate this change in advance.

6. **Unit Price #01 – Over-Excavation & Fill:** Trade Contractor shall include all of the following, but not limited to, as part of the contract:
 - a. Cost per cubic yard to over-excavate below the concrete slab to be removed as described in keynote 1 on sheet AD1 and provide granular fill to achieve final slab elevations.
 - b. Unit prices include all necessary material, plus cost for delivery, installation, insurance, overhead, and profit.
 - c. Owner reserves the right to reject Contractor's measurements of work in place that involves use of established unit prices and to have this work measured, at the Owner's expense, by an independent surveyor acceptable to the Contractor.
- B. **Bid Package #02 – Building Envelope:** Trade Contractor shall include all of the following, but not limited to, as part of the contract:
 1. Specifications:
 - a. Division 00 – Procurement and Contracting Requirements
 - b. Division 01 – General Requirements
 - c. Division 02 – Existing Conditions
 - 1) Specification 02 4100 Demolition. Complete all demo work as associated with work corresponding to BP #02.
 - d. Division 07 – Thermal and Moisture Protection
 - 1) Complete
 - e. Division 08 – Openings
 - 1) Complete
 2. Drawings:
 - a. Include all work shown for drawings G0.0 and A4.0.
 - b. Include the following keynotes for sheet AD1.
 - 1) Keynotes: 6, 8, 10, 12, 13, 14, 15, and 16.
 - c. Include the following keynotes for sheet A1.0.
 - 1) Keynotes: 1, 3, 4, 5, 10, 11, 12, 13, 14, 15, 17, and 18.
 - d. Include the following keynotes for sheet A5.0
 - 1) Keynotes: 1, 3, 4, 5, 6, 7, 9, 10, 11, 12, 15, 17, 18, and 19.
 3. Clarification: For keynotes 3, 4, and 5 on A1.0 and A5.0, involving tying downspouts to subdrain systems, BP #01 is responsible for the subdrainage piping below grade and the PVC boots and BP #02 is responsible for connecting downspouts to the subdrainage systems.
 4. Clarification: Exclude alternate #1 from base bid price.
 5. Clarification: For keynote 19 on A5.0, BP #02 is responsible for only the sealant work.
 6. **Alternate #01 – Freezer #3 Additional Sealant:** Trade Contractor shall include all of the following, but not limited to, as part of the contract:
 - a. Provide sealant at the interior and exterior of IMP seams for freezer #3. If this alternate is accepted all roof edge will need replaced while the gutter and downspouts will be salvaged and reinstalled.
 - b. Work is delineated by keynote 16 on A5.0.
 - c. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - d. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
 - e. Execute accepted alternates under the same conditions as other work of the Contract.

- C. **Work Performed by Owner:** WRC will perform the following work items:
1. Relocate all moveable furniture, fixtures and equipment (FF&E), including window treatments; and personal materials from each sequenced work area prior to demolition and construction activities and after new construction is completed.
 2. Remove and replace the wooden steps on the west side of freezer #2 per keynote 5 on AD1, keynote 9 on A1.0, and keynote 14 on A5.0.
 3. Remove and replace exterior vents per keynote 21 on A1.0 and keynote 13 on A5.0.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

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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 ☐ _____

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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 CONSENSUSDOCS 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 Contactor 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 and include a line item for closeout paperwork for a value of no less than 1% of the total contract value or \$1,000, whichever is greater.
 - 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. 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 the Certificate of Substantial Completion has been fully executed, submit an Application for Payment showing 100 percent completion for the portion of the Work claimed as substantially complete, not including the closeout paperwork line item.
 - 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 3% of the value of the work performed. Upon substantial completion for the entire work, a sum sufficient to decrease the total retained to 3% of the contract sum, plus the full amount of the line item for closeout paperwork, plus such other retainage as the engineer shall determine for all incomplete work and unsettled claims will be authorized. The closeout paperwork line item may only be billed once the certificate of final completion has been fully executed.

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.
- B. Private utility locates will be provided by facility. Contractor will not pay for locates on PRIVATE lines.

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 **Procore**. As recommendations are modified by **Procore**, 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 **Procore** 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. **Procore** 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 **Procore** 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 **Procore** to the maximum extent possible. If a form does not exist in **Procore** 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 **Procore** (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 **Procore** 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 **Procore**.

1.06 CONNECTIVITY PROBLEMS

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

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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. Sanitary facilities are provided near the Story CP2.0 trailers for use by the contractor. If contractor would like these facilities closer to their work they will need to provide their own.
- 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.

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 slopped 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.

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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

TABLE OF CONTENTS

DIVISION 02 - EXISTING CONDITIONS

02 4100 DEMOLITION AND CUTTING

DIVISION 03 - CONCRETE

03 1000 CONCRETE FORMING AND ACCESSORIES

03 2000 CONCRETE REINFORCING

03 3000 CAST-IN-PLACE CONCRETE

03 3900 CONCRETE CURING

DIVISION 05 - METALS

05 1200 STRUCTURAL STEEL FRAMING

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 0150.19 PREPARATION FOR RE-ROOFING

07 5300 ELASTOMERIC MEMBRANE ROOFING

07 5400 THERMOPLASTIC MEMBRANE ROOFING

07 6200 SHEET METAL FLASHING AND TRIM

07 7123 MANUFACTURED GUTTERS AND DOWNSPOUTS

07 9200 JOINT SEALANTS

DIVISION 08 - OPENINGS

08 3413 COLD STORAGE DOORS

DIVISION 31 - EARTHWORK

31 2316 EXCAVATION

31 2323 FILL

DIVISION 33 - UTILITIES

33 4100 SUBDRAINAGE

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**SECTION 02 4100
DEMOLITION AND CUTTING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Demolish designated exterior abandoned mechanical condensers, concrete slabs and sealant joints.
- B. Removal of all demolished items from site.
- C. Salvage of existing materials for reuse in the Work.

1.02 RELATED REQUIREMENTS

- A. Section 01 1200 - Contract Summary
- B. Section 01 5000 - Temporary Facilities and Controls

PART 2 PRODUCTS

2.01 NOT USED

PART 3 EXECUTION

3.01 SITE INVESTIGATION

- A. Tour all work area pre-bid to become familiar with existing conditions.
- B. Take existing conditions into consideration in the preparation of bids. Include resultant sums in bid to Owner.
- C. Coordinate new work with the existing conditions.
- D. Verify all existing dimensions, conditions, quantities, locations, construction types, structural spacings, and other construction as may affect the work and cost thereof.

3.02 PREPARATION

- A. Protect existing structures and components around site where demolition is to occur.
- B. Provide temporary protection measures such that no damage is inflicted on items of existing construction which are to remain at completion of project.
- C. Temporary protection shall be securely installed such that whether or not workers are on the job site, the measures remain intact.

3.03 SALVAGE DISPOSITION, STORAGE AND HANDLING

- A. Remove items designated for re-use as a unit.
 - 1. Clean, condition, tag, protect from damage and store until reinstalled in new work.
 - 2. Thoroughly clean all surfaces and wipe dry.
- B. Dispose of items or materials not designated for Owner's salvage or reuse.
 - 1. Promptly remove from site.
 - 2. Do not store or sell Contractor salvaged items or materials on site.

3.04 DEMOLITION ILLUSTRATED ON DRAWINGS

- A. By necessity, demolition indicated on the Drawings is general in nature. An attempt has been made to identify location and quantity of work necessary to complete the work.
- B. Review all of the Drawings to become familiar with the scope of work, in addition to observing existing conditions to ascertain the extent of demolition required in order to accomplish the new work.
- C. Provide and include as part of bid all demolition work required to accomplish new work.

3.05 CLEAN UP

- A. Remove demolished materials from site as work progresses.

- B. Leave areas of work in clean condition.
- C. Dispose of materials at site where removed items may be legally deposited.

3.06 CONCRETE SLAB DEMOLITION AND EXCAVATION

- A. Saw cut through concrete full slab thickness to allow removal without adversely affecting adjacent concrete surfaces. Make all removal areas rectangular or square in shape.
- B. Remove concrete in small sections.
- C. If adjacent concrete sections to remain are damaged as a result of this work, continue demolition and removal to limits where existing construction is undamaged. Do not remove partial concrete slab panels, remove full panels.
- D. Excavate as required to install new work.
- E. Excavation spoils are to be removed from site.
- F. Do not undermine slabs

3.07 SALVAGE DISPOSITION

- A. Remove and deliver to Owner as their salvage the following items.
 - 1. Gutters and Downspouts
 - 2. Any items requested by the Owner as desirable salvage prior to demolition commencing.
- B. Remove and reuse in the new work, only if indicated in the Project Manual or on the Drawings or directed by owner.
- C. All other demolished items not indicated as owner's salvage or for reuse in the new work shall become the contractor's salvage.

3.08 DUST MIGRATION

- A. The work will be occurring in and around an operational food distribution facility. Measures must be taken to minimize dust migration to the greatest extent possible. Provide proper reinforced plastic sheeting and/or temporary walls as necessary to prevent dust migration.

**SECTION 03 1000
CONCRETE FORMING AND ACCESSORIES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Formwork for cast-in place concrete, with shoring, bracing and anchorage. Any formed concrete remaining exposed is to be of architectural grade finish as defined by the ACI.
- B. Openings for other work.
- C. Form accessories.
- D. Form stripping.

1.02 RELATED REQUIREMENTS

- A. Section 03 2000 - Concrete Reinforcing.
- B. Section 03 3000 - Cast-In-Place-Concrete.
- C. Section 03 3900 - Concrete Curing
- D. Section 07 9200 - Joint Sealants
- E. Section 31 2316 - Excavation.
- F. Section 31 2323 - Fill

1.03 REFERENCE STANDARDS

- A. ACI 117 - Standard Specifications for Tolerances for Concrete Construction and Materials; 2010.
- B. ACI 301 - Specifications for Structural Concrete; 2010 (Errata 2012).
- C. ACI 305 - Hot Weather Concreting; American Concrete Institute; 2010.
- D. ACI 306 - Cold Weather Concreting; 2010.
- E. ACI 318 - Building Code Requirements for Structural Concrete and Commentary; 2011.
- F. ACI 347R - Guide to Formwork for Concrete; 2014 (Reapproved 2021).
- G. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.
- H. PS 1 - Structural Plywood; 2009.

1.04 SUBMITTALS

- A. Product Data: Provide data on void form materials and installation requirements.
- B. Shop Drawings: Indicate pertinent dimensions, materials, bracing, and arrangement of joints and ties.
- C. As Built Drawing: Record locations (dimensioned to the nearest inch, plan and vertical height dimensions - using finish floor as the benchmark for vertical dimension) of all sleeves placed by this, and other, Section(s) in the work of this Section..

1.05 QUALITY ASSURANCE

- A. Maintain one copy of each installation standard on site throughout the duration of concrete work.
- B. Any concrete to remain exposed-to-view is to be finished to architectural finish standards as defined by the ACI.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver prefabricated forms and installation instructions in manufacturer's packaging.

- B. Store prefabricated forms off ground in ventilated and protected manner to prevent deterioration from moisture.

PART 2 PRODUCTS

2.01 FORMWORK - GENERAL

- A. Provide concrete forms, accessories, shoring, and bracing as required to accomplish cast-in-place concrete work.
- B. Design and construct to provide resultant concrete that conforms to design with respect to shape, lines, and dimensions.
- C. Chamfer Edges and Control Joints: Wood, new clean, triangular at corners; 1/2" 45 degree chamfer corners at all exposed corners/edges of cast in place concrete. Provide maximum possible lengths.
- D. Sloped sills where indicated in details. Provide smooth finish. Fill any bug holes or correct irregularities in concrete surface.
- E. Comply with relevant portions of ACI 347R, ACI 301, and ACI 318.
- F. Use the following form types:
 - 1. Walls Not Exposed To View: Undamaged, undented steel or wood forms.
 - 2. Walls Exposed To View: Smooth Finish Plywood Forms

2.02 WOOD FORM MATERIALS

- A. Plywood: Douglas Fir species; medium density overlaid one side grade; sound undamaged sheets with clean, true edges.

2.03 FORMWORK ACCESSORIES

- A. Form Release Agent: Capable of releasing forms from hardened concrete without staining or discoloring concrete or forming bugholes and other surface defects, compatible with concrete and form materials, and not requiring removal for satisfactory bonding of coatings to be applied.
 - 1. Composition: Colorless reactive, mineral oil-based, soy-based, or vegetable-oil based compound.
 - 2. Do not use materials containing diesel oil or petroleum-based compounds.
 - 3. VOC Content: None; water-based.
 - 4. Products:
 - a. SpecChem, LLC; Bio Strip WB (water-based): www.specchemllc.com/#sle.
 - b. W. R. Meadows, Inc; Duogard: www.wrmeadows.com/#sle.
 - c. Substitutions: See Section 01 6000 - Product Requirements.
- B. Anchorages: Sized as required, of sufficient strength and character to maintain formwork completely plumb and in place while placing concrete.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify lines, levels and centers before proceeding with formwork. Ensure that dimensions agree with drawings.

3.02 ERECTION - FORMWORK

- A. Erect formwork, shoring and bracing to achieve design requirements, in accordance with requirements of ACI 301.
- B. Provide bracing to ensure stability of formwork. Shore or strengthen formwork subject to overstressing by construction loads.
- C. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping.

- D. Align joints and make watertight. Keep form joints to a minimum. Alignment of forms is critical. Smooth joint transitions will be required. Align all side and end joints to create a uniform grid pattern. Do not stagger panels or create random joint form pattern. Ensure grid pattern is symmetrical.
- E. Coordinate this section with other sections of work that require attachment of components to formwork.
- F. If formwork is placed after reinforcement, which would result in insufficient concrete cover over reinforcement, request instructions from Construction Manager, Architect and Structural Engineer before proceeding.

3.03 APPLICATION - FORM RELEASE AGENT

- A. Apply form release agent on formwork in accordance with manufacturer's recommendations.
- B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items. Do not allow form release agent on any reinforcing or on top of footing.
- C. Do not apply form release agent where concrete surfaces will receive special finishes or applied coverings that are affected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.

3.04 INSERTS, SLEEVES, EMBEDDED PARTS, AND OPENINGS

- A. Provide formed openings where required for items to be embedded in passing through concrete work.
- B. Locate and set in place items that will be cast directly into concrete.
- C. Coordinate with the future work of other sections in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, other inserts, and components of other work.
- D. This Section is responsible for providing the sleeve materials, placing "sealed" sleeves in the excavations and at the correct elevation below (or above as the case may be) finish floor. Coordinate all sleeve placement with Section 03 3000 Work.
- E. Seal both open ends of pipe and wood formed sleeves with adequate layers of duct tape to prohibit any concrete from entering into the sleeves. Where installed in footings below grade, extend sleeve ends into adjacent soil 4" on both sides of footing to allow ease of location in future work by others who will be using sleeve to pass their work through the footing. Record actual dimensioned locations (both in plan and elevation below (vertically) finish floor) on As Built drawings.
- F. Ensure that all sleeves are solidly held in place to avoid being displaced during reinforcing and concrete placement.
- G. Once all sleeves are placed, request field verification by General Contractor prior to Section 03 2000 and 03 3000 commencing their respective aspects of work.
- H. For all sleeve through footing work, should any questions arise as to sizes, locations or elevations, contact General Contractor who shall either issue directives or request clarification and direction from Architect at their discretion. Do not guess or make any assumptions on placement of sleeves.
- I. Install accessories in accordance with manufacturer's instructions, so they are straight, level, and plumb. Ensure items are not disturbed during concrete placement.
- J. Close sleeves and formed openings in above grade forms with tight fitting panels, flush with inside face of forms, and neatly fitted so joints will not be apparent in exposed concrete surfaces post form stripping and in the finished Work..

3.05 FORM CLEANING

- A. Clean forms as erection proceeds, and remove all foreign matter and debris within forms.
- B. Clean formed cavities of debris prior to placing concrete.
 - 1. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.

2. During cold weather, remove ice and snow from within forms. Do not use de-icing salts. Do not use water to clean out forms, unless formwork and concrete construction proceed within heated enclosure. Use compressed air or other means to remove foreign matter.

3.06 FORMWORK TOLERANCES

- A. Construct formwork to maintain tolerances required by ACI 117, unless otherwise indicated.

3.07 FIELD QUALITY CONTROL

- A. An independent testing agency will perform field quality control tests.
- B. A Geotechnical Engineer shall inspect all sub-grade excavations and test for allowable soil bearing pressure once excavation and fill is complete. Coordinate with the Construction Manager, a minimum of 24 hours in advance, as to when excavation will be complete and the Geotechnical Engineer is required on site to perform the required inspections.

3.08 ABOVE GRADE FORM REMOVAL

- A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads.
- B. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
- C. Remove formwork progressively and in accordance with code requirements.
- D. Any bug holes or honeycombing present on the face of the exposed concrete are required to be filled or removed and replaced with methods approved by the Architect and Structural Engineer.
- E. Cut off tie rods neatly and evenly with finished concrete surface.

**SECTION 03 2000
CONCRETE REINFORCING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Reinforcing steel for cast-in-place concrete.
 - 1. Deformed billet reinforcement.
 - 2. Welded wire reinforcement.
- B. Supports and accessories for steel reinforcement.

1.02 RELATED REQUIREMENTS

- A. Section 03 3000 - Cast-In-Place Concrete.
- B. Section 03 3900 - Concrete Curing.
- C. Section 07 9200 - Joint Sealants

1.03 REFERENCE STANDARDS

- A. ACI 301 - Specifications for Structural Concrete; 2010 (Errata 2012).
- B. ACI 318 - Building Code Requirements for Structural Concrete and Commentary; 2011.
- C. ACI SP-66 - ACI Detailing Manual; 2004.
- D. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement; 2015.
- E. CRSI (DA4) - Manual of Standard Practice; 2024.
- F. CRSI (P1) - Placing Reinforcing Bars, 10th Edition; 2019.
- G. ACI – 315 – Details and detailing of concrete reinforcement.

1.04 SUBMITTALS

- A. See Section 01 3300 - for submittal procedures.
- B. Shop Drawings: Comply with requirements of ACI SP-66. Include bar schedules, shapes of bent bars, spacing of bars, and location of splices.
- C. Manufacturer's Certificate: Certify that reinforcing steel and accessories supplied for this project meet or exceed specified requirements.

1.05 QUALITY ASSURANCE

- A. Perform work of this section in accordance with ACI 301.

PART 2 PRODUCTS

2.01 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi).
 - 1. Deformed billet-steel bars.
 - 2. Unfinished.
- B. Reinforcement Accessories:
 - 1. Tie Wire: Annealed, minimum 16 gage, 0.0508 inch.
 - 2. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement.
- C. Welded wire reinforcement: Size as indicated in the Drawings. Follow all requirements of ASTM A 185.
 - 1. Only flat mats allowed; no coiled rolls of welded wire shall be used.

2.02 FABRICATION

- A. Fabricate concrete reinforcing in accordance with CRSI (DA4) - Manual of Standard Practice and ACI-315.
- B. Welding of reinforcement is not permitted.
- C. Locate reinforcing splices not indicated on drawings at point of minimum stress.

PART 3 EXECUTION

3.01 PLACEMENT

- A. Placement and the fabrication of the bars shall fully comply with standards of the Manual of Standard Practice for Detailing Reinforced Concrete Structures as published by the ACI. The placement shall comply with the Recommended Practice for Placing Reinforcing Bars, as published by CRSI.
- B. When unloading bars, carefully observe safety measures not only of applicable government agencies and departments, but also as outlined by CRSI. Reinforcing shall not be bent or in any way have their design strength impaired by the handling of the pieces.
- C. Reinforcing shall be clean, free of loose scale, dirt, or other foreign coatings. Protect the top of reinforcing so that rust and deterioration during the period between their installation and the arrival on the site and subsequent installation is kept to a minimum.
- D. Place, support and secure reinforcement against displacement. Do not deviate from required position.
- E. Accommodate placement of formed openings and embedded components.
- F. Maintain minimum concrete cover around reinforcing as follows:
 - 1. Slabs on Fill: 2 inches.
- G. Install reinforcement, supported and secured against displacement.
- H. Lap all reinforcement 30 bar diameters minimum. Place preformed corner bars at all exterior and interior corners.
- I. Dowel all pours into subsequent pours unless noted otherwise.
- J. Ensure that welded wire reinforcement is placed within the thickness of the slab such that required minimum concrete cover is achieved.
- K. Contractor shall notify the Special Inspector, Architect and Structural Engineer of the reinforcing installation schedule sufficiently prior to forming and pouring so that the Structural Engineer and special inspector have adequate time to examine same. Notify a minimum of 24 hours prior to pouring of concrete to allow observation of materials.

3.02 FIELD QUALITY CONTROL

- A. An independent testing agency will inspect installed reinforcement for conformance to Contract Documents before concrete placement. Do not proceed with placing concrete until all reinforcing is inspected and found to be acceptable to the inspectors and in compliance with the Contract Document requirements.

**SECTION 03 3000
CAST-IN-PLACE CONCRETE**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Slabs on grade.
- B. Joint devices associated with concrete work.
- C. Miscellaneous concrete elements.

1.02 RELATED REQUIREMENTS

- A. Section 03 1000 - Concrete Forming and Accessories.
- B. Section 03 3900 - Concrete Curing
- C. Section 31 2316 - Excavation.
- D. Section 31 2323 - Fill
- E. Section 07 9200 - Joint Sealers.

1.03 REFERENCE STANDARDS

- A. ACI 117 - Standard Specifications for Tolerances for Concrete Construction and Materials; 2010.
- B. ACI 211.1 - Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete; 1991 (Reapproved 2009).
- C. ACI 301 - Specifications for Structural Concrete; 2010 (Errata 2012).
- D. ACI 302.1R - Guide for Concrete Floor and Slab Construction; 2004 (Errata 2007).
- E. ACI 303R-12 Guide to Cast-in-Place Architectural Concrete Practice.
- F. ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete; 2000.
- G. ACI 305R - Hot Weather Concreting; 2010.
- H. ACI 306R - Cold Weather Concreting; 2010.
- I. ACI 308R - Guide to Curing Concrete; 2001 (Reapproved 2008).
- J. ACI 318 - Building Code Requirements for Structural Concrete and Commentary; 2014 (Errata 2016).
- K. ACI 347R - Guide to Formwork for Concrete; 2014.
- L. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement; 2015.
- M. ASTM C33/C33M - Standard Specification for Concrete Aggregates; 2016.
- N. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens; 2015a.
- O. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete; 2015.
- P. ASTM C150/C150M - Standard Specification for Portland Cement; 2016.
- Q. ASTM C173/C173M - Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method; 2014.
- R. ASTM C260/C260M - Standard Specification for Air-Entraining Admixtures for Concrete; 2010a.
- S. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete; 2013.
- T. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete; 2015.

- U. ASTM C685/C685M - Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing; 2014.
- V. ASTM C1059/C1059M - Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete; 2013.
- W. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types); 2004 (Reapproved 2013).
- X. ASTM E1155 - Standard Test Method for Determining F(F) Floor Flatness and F(L) Floor Levelness Numbers; 1996 (Reapproved 2008).

1.04 SUBMITTALS

- A. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements.
- B. Design mixes for specified concrete strengths. Provide mix design for each strength and use type of concrete according to ACI 301; "Specification for Structural Concrete." Prior to placement, include all products, quantities and admixtures as well as alternate designs for varying conditions. Indicate locations for the proposed mix design on the submittal. Include historical testing results from former uses of the mix design.
- C. Manufacturer's Installation Instructions: For concrete accessories, indicate installation procedures and interface required with adjacent construction.
- D. Project Record Documents: Accurately record actual locations of embedded sleeves for and actual utilities and components that will be concealed from view upon completion of concrete work.
- E. A plan with proposed concrete sawn joint and construction joint locations.

1.05 QUALITY ASSURANCE

- A. Perform work of this section in accordance with ACI 301 and ACI 318.
 - 1. Maintain one copy of each document on site.
- B. Follow recommendations of ACI 305R when concreting during hot weather.
- C. Follow recommendations of ACI 306R when concreting during cold weather.
- D. Quality Control: At the Construction Manager, Architect and/or Owner's discretion, the slabs may be tested to verify flatness of (FF) and levelness (FL). If testing occurs, and it is found that the slabs do not comply with the following standards, this Section shall be responsible for all costs associated with removal and replacement of slab areas not meeting the specified flatness or levelness.
 - 1. If performed, testing shall be accomplished as set forth and in compliance with ASTM E1155 for a randomly trafficked surface.
 - 2. Required overall value of floor flatness: FF 50.
 - 3. Required overall value of floor levelness: FL 35.

PART 2 PRODUCTS

2.01 FORMWORK

- A. Comply with requirements of Section 03 1000.

2.02 REINFORCEMENT

- A. Comply with requirements of Section 03 2000.

2.03 CONCRETE MATERIALS

- A. Cement: ASTM C595/C595M, Type IL - Portland - Limestone Cement.
- B. Fine and Coarse Aggregates: ASTM C 33.
 - 1. Acquire all aggregates for entire project from same source.
 - 2. Coarse:

- a. The maximum size of the material for exterior slabs shall be 1 inch.
- b. All concrete shall have limestone aggregate.
- c. Limestone aggregate shall meet D.O.T. specifications and ASTM C33 from sources approved by the Iowa Department of Transportation.
- 3. Fine:
 - a. Slabs
 - 1) Shale and coal particles shall not exceed 2% of material retained on a No. 14 sieve.
 - 2) Clean, hard, durable, mineral, natural aggregate particles.
 - 3) Organic matter shall not exceed acceptable standards when tested by ASTM C40.
- C. Aggregate Gradation: It is absolutely critical that a very uniform gradation of aggregate be utilized in all concrete mixes. Gradation must comply with ASTM C33.
- D. Fly Ash: ASTM C 618, Class C.
- E. Water: Clean and not detrimental to concrete.
- F. Slab cracking will be grounds for full section or panel removal (joint to joint) and replacement during construction as well as during the one year warranty period. Panel removal and replacement will require full slab depth saw cutting, drilling and doweling the replaced slab into the adjacent slab.

2.04 ADMIXTURES

- A. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement. Do not add calcium chloride to any mixture at any time.
- B. Air Entrainment Admixture: ASTM C 260.
 - 1. All Exterior Slabs: 5 to 7 percent.
 - a. Exterior concrete only. Do not provide air entrainment in freezer slabs.

2.05 ACCESSORY MATERIALS

- A. Curing Materials: Comply with requirements of Section 03 3900.
- B. Non-shrink cementitious grout: ASTM C 1107/C 1107M; premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents.
 - 1. Minimum compressive strength at 28 days: 7,000 psi (48 MPa).

2.06 BONDING AND JOINTING PRODUCTS

- A. Slab Edge Joint Filler: ASTM C1751, premolded asphaltic board, 1/2 inch thick interior, 3/4 inch thick exterior, both with removable plastic cap allowing for exterior recess after concrete has set, Bo Metals Inc. Catalog No. 1020 for 1/2" expansion joint, No. 1021 for 3/4" expansion joint or approved equal.
- B. Slab Isolation Joint Filler: 1/2 inch thick, height equal to slab thickness, with removable top section that will form 1/2 inch deep sealant pocket after removal.
- C. Sealant: Provided by Section 07 9200.

2.07 CONCRETE MIX DESIGN

- A. Proportioning Normal Weight Concrete: Comply with ACI 211.1 recommendations.
- B. Concrete Strength: Establish required average strength for each type of concrete on the basis of field experience or trial mixtures, as specified in ACI 301.
- C. Air Entrainment Admixtures: Add acceptable admixtures as recommended in ACI 211.1 and at rates recommended by manufacturer.
 - 1. Air entrainment is for exterior concrete only and is not to be utilized for freezer slabs.
- D. Normal Weight Concrete:
 - 1. Compressive Strength, when tested in accordance with ASTM C39/C 39M at 28 days.
 - a. 4,000 psi: All concrete unless specified otherwise herein.
 - 2. Total Air Content: 5-6 percent, determined in accordance with ASTM C 173/C 173M.

- a. Provide air entrainment in all exterior concrete or concrete exposed to freezing temperatures.
 - 1) Air entrainment is for exterior concrete only and is not to be utilized for freezer slabs.
- 3. Maximum Slump: 4 inches. Reject all concrete with more than 4 inch (100 mm) slump.
- 4. Eliminate all calcium chloride and sodium chloride from the mix, materials and ingredients and in the mix.
- 5. Minimum concrete density of 140 pounds per cubic foot.
- E. Fly Ash: Class C, maximum 15% replacement of portland cement.

2.08 MIXING

- A. Transit Mixers: Comply with ASTM C94/C94M.
- B. Transporting:
 - 1. In accordance with ACI 614-59 so as to prevent separation of materials.
 - 2. Do not add water during transporting of concrete.
 - 3. Do not allow concrete that is being dumped to have a free fall of over four (4) feet.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify lines, levels, and dimensions before proceeding with work of this section.

3.02 PREPARATION

- A. At all construction joints in concrete slabs on grade where new slabs abut existing concrete slabs, install smooth greased dowel construction joint reinforcement, centered in the slab thickness/depth, and spaced as indicted or scheduled or stipulated within this Section, in compliance with manufacturer's instructions.
- B. Remove all water, debris, and loose materials from excavations and/or surfaces to receive concrete.
- C. Provide drainable, trimmable granular fill under all slabs on grade. Fill under freezer slab to be qualified by Geotechnical Engineer and compacted in lifts as directed by the Geotechnical Engineer to provide minimum 2,000 psf bearing pressure, 120 pcf subgrade modulus, and 95% proctor density. Condition fill to ensure proper compaction is achieved.
- D. Install vapor barrier as recommended by the manufacturer. Extend to the exterior perimeter of the wall or freezer panel, turn up behind slab edge joint filler to the elevation of the finished floor and terminate with sealant to make vapor tight. Repair underslab vapor barrier damaged during placement of concrete reinforcing. Repair with vapor barrier material with a minimum 6" lap and seal watertight.

3.03 REINFORCEMENT INSTALLATION

- A. Comply with Section 03 2000 - Concrete Reinforcing.

3.04 INSERTS, EMBEDDED COMPONENTS, AND OPENINGS

- A. Division 03 is to provide formed openings and sleeves where required for work to be embedded in and/or passing through concrete members. Protect placement of all sleeves and formed openings and ensure displacement does not occur during the Work of this Section.
- B. Coordinate work of other Sections, and cooperate with them in forming and setting openings, slots, recesses, chases, sleeves, bolts, anchors, electrical conduits and other inserts.
- C. Install concrete accessories straight, level, and plumb.
- D. Place construction joint dowels in slab pattern pouring sequence.
- E. Place joint filler at perimeter of slab.
- F. Separate slabs-on-grade from vertical surfaces with specified joint filler with plastic recess cup, extended from bottom of slab to finished slab surface. Attach expansion joint over vapor retarder which is turned up the wall surface.
- G. Extend joint filler from bottom of slab to within 1/2 inch of finished slab surface.

- H. Provide construction isolation and control joints as indicated and/or required. Locate construction joints so as to not impair strength or appearance of structure. Locate isolation and control joints in slabs on grade to eliminate random cracking.

3.05 PLACING CONCRETE

- A. Place concrete in accordance with ACI 304R.
- B. Place concrete for floor and topping slabs in accordance with ACI 302.1R.
- C. Notify Construction Manager not less than 24 hours prior to commencement of placement operations to allow field observation of preparation work. Prior to placing concrete make arrangements for Architect to view the fully prepared reinforcing and other installed concrete accessories.
- D. Ensure reinforcement, inserts and embedded parts, and other components installed by others are not be disturbed during concrete placement.
- E. Finish slabs level and flat, unless otherwise indicated, within the tolerances specified below.

3.06 SLAB JOINTING - ON GRADE SLABS

- A. Locate joints as indicated on the drawings.
- B. Anchor joint fillers and devices to prevent movement during concrete placement.
- C. Isolation Joints: Use preformed joint filler with removable top section for joint sealant, total height equal to thickness of slab, set flush with top of slab.
- D. Place concrete continuously between predetermined expansion, control, and construction joints. Do not break or interrupt successive pours such that cold joints occur.
- E. Do not interrupt successive placement; do not permit cold joints to occur.

3.07 SAW CUTTING - ON GRADE SLABS

- A. Saw cut joints within 12 hours after placing. Use 3/16 inch thick blade, cut into 1/3 depth of slab thickness.
- B. Ensure when slabs are soft cut that edge "raveling" does not occur. If it does, immediately cease cutting and allow slab to cure an additional length of time prior to continuing cutting to eliminate edge "raveling".

3.08 SLAB FLATNESS AND LEVELNESS TOLERANCES

- A. Correct defects by removal and replacement of the defective work. Areas requiring corrective work and type of correction required will be identified by the Construction Manager. Re-measure corrected areas by the same process.

3.09 CONCRETE FINISHING

- A. Concrete slabs: Finish to requirements of ACI 302.1R
- B. Exterior Concrete
 - 1. Strike off concrete to top of forms; consolidate and ensure full placement of concrete occurs full depth and from form to form surface.
 - 2. Bull float to consolidate surface and eliminate depressions, high spots and "bird baths".
 - 3. Provide medium broom finish perpendicular to normal traffic pathway.

3.10 CURING, PROTECTION AND SEALERS - ALL FLATWORK

- A. Comply with requirements of Section 03 3900.

3.11 FIELD QUALITY CONTROL

- A. An independent testing agency will perform field quality control tests.
- B. Provide free access to concrete operations at project site and cooperate with retained firm.

- C. Submit proposed mix design of each class of concrete to Structural Engineer via the Construction Manager and Architect and to inspection and testing firm for review prior to commencement of concrete operations.
- D. Compressive Strength Tests: ASTM C39/C39M. For each test cooperate with providing the molding and curing of three (3) concrete test cylinders. Test samples for every 35 cubic yards or less and of each class of concrete placed shall be taken.
- E. Take one (1) additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.
- F. One (1) slump test for each set of test cylinders shall be taken, following procedures of ASTM C 143/C 143M. Slump tests shall be taken for each set of test cylinders taken, and whenever water might be added to the mix after a slump test is taken. REJECT ANY LOAD OF CONCRETE EXCEEDING THE SPECIFIED MAXIMUM SLUMP AMOUNTS.
- G. Results of slump tests shall be submitted in writing to Construction Manager and Architect, one (1) copy of each test cylinder report to be sent to Architect and Structural Engineer via the Construction Manager.
- H. Cylinder testing and performance of slump and air entrainment tests shall be done in accordance with ASTM C172, ASTM C143, and ASTM C31 respectfully.

3.12 DEFECTIVE CONCRETE

- A. Test Results: The testing agency shall report test results in writing to Construction Manager and Architect within 24 hours of test.
- B. Repair or replacement of defective concrete will be determined by the Construction Manager, Architect and Structural Engineer. The cost of additional testing shall be borne by this Section when defective concrete is identified.
- C. Do not patch, fill, touch-up, repair, or replace exposed defective concrete except upon express direction of Construction Manager and/or Architect for each individual area.

**SECTION 03 3900
CONCRETE CURING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Curing of exterior slabs.
- B. Salt guard protection on exterior slabs.

1.02 RELATED REQUIREMENTS

- A. Section 03 3000 - Cast-in-Place Concrete.

1.03 REFERENCE STANDARDS

- A. ACI 302.1R - Guide for Concrete Floor and Slab Construction; American Concrete Institute International; 2004 (Errata 2007).
- B. ACI 308R - Guide to Curing Concrete; American Concrete Institute International; 2001. (Reapproved 2005).
- C. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete; 2007.
- D. ACI 305R - Hot Weather Concreting; American Concrete Institute International; 2010.
- E. ACI 306R - Cold Weather Concreting; American Concrete Institute International; 2010.

1.04 SUBMITTALS

- A. See Section 01 3300 - for submittal procedures.
- B. Product Data: Provide data on curing compounds including compatibility of different products and limitations.

1.05 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301 and ACI 302.1R and ACI 308.
- B. Maintain one copy of each document on project site.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver curing materials in manufacturer's sealed packaging, including application instructions.

PART 2 PRODUCTS

2.01 CURING MATERIALS

- A. Exterior Concrete: Curing Compound: compound shall retard evaporation and allow concrete to cure at a controlled rate to achieve proper strength and reduce adverse effect of accelerating surface hydration.

2.02 SALT GUARD PROTECTION

- A. Coat all exposed exterior slabs with salt guard sealer.
 - 1. Products
 - a. Saltguard WB, Prosoco
 - b. Intraguard, W.R. Meadows
 - c. Substitutions: See Section 01 6000 Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that substrate surfaces are ready to be cured.

3.02 EXTERIOR SLAB ON GRADE CURING COMPOUND

- A. Cure slabs in accordance with ACI 308.

- B. Apply liquid curing agent to exterior concrete work following the curing compound manufacturers written instructions and approved shop drawings.
- C. Where liquid base curing compound is utilized, apply on surfaces in accordance with manufacturer's instructions.
- D. All tools used to make the application of liquid curing agents for exterior slabs shall be thoroughly cleaned before they are used.
- E. Particular attention is necessary to the manufacturer's curing time, which may be temperature-based.

3.03 PROTECTION

- A. Do not permit traffic over unprotected or uncured slab on grade surface.

3.04 SCHEDULE

- A. Provide curing agent over all exterior concrete.

SECTION 05 1200
STRUCTURAL STEEL FRAMING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Structural steel framing members, support members.
- B. Base plates.
- C. Grouting under base plates.

1.02 REFERENCE STANDARDS

- A. AISC (MAN) - Steel Construction Manual; 2023, with Errata (2026).
- B. AISC S303 - Code of Standard Practice for Steel Buildings and Bridges; 2016.
- C. AISC S348 - Specification for Structural Joints Using ASTM A325 or A490 Bolts; 2004.
- D. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2014.
- E. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless; 2012.
- F. ASTM A108 - Standard Specification for Steel Bar, Carbon and Alloy, Cold Finished; 2013.
- G. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2015.
- H. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength; 2014.
- I. ASTM A325 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength; 2014.
- J. ASTM A490 - Standard Specification for Structural Bolts, Alloy Steel, Heat Treated, 150 ksi Minimum Tensile Strength; 2014a.
- K. ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2013.
- L. ASTM A501/A501M - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing; 2014.
- M. ASTM A563 - Standard Specification for Carbon and Alloy Steel Nuts; 2007a (Reapproved 2014).
- N. ASTM A992/A992M - Standard Specification for Structural Steel Shapes; 2011 (Reapproved 2015).
- O. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable; 2015.
- P. ASTM C1107/C1107M - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink); 2014.
- Q. ASTM E164 - Standard Practice for Contact Ultrasonic Testing of Weldments; 2013.
- R. ASTM E165/E165M - Standard Test Method for Liquid Penetrant Examination for General Industry; 2012.
- S. ASTM E709 - Standard Guide for Magnetic Particle Testing; 2014.
- T. ASTM F436 - Standard Specification for Hardened Steel Washers; 2011.
- U. AWS A2.4 - Standard Symbols for Welding, Brazing, and Nondestructive Examination; 2012.
- V. AWS D1.1/D1.1M - Structural Welding Code - Steel; 2015.
- W. RCSC (HSBOLT) - Specification for Structural Joints Using High-Strength Bolts; Research Council on Structural Connections; 2009.

- X. SSPC-Paint 15 - Steel Joist Shop Primer/Metal Building Primer; 2004.
- Y. SSPC-Paint 20 - Zinc-Rich Coating (Type I - Inorganic, and Type II - Organic); 2019.
- Z. SSPC-SP 2 - Hand Tool Cleaning; Society for Protective Coatings; 1982 (Ed. 2004).
- AA. SSPC-SP 6 - Commercial Blast Cleaning.

1.03 SUBMITTALS

- A. See Section 01 3300 - for submittal procedures.
- B. Shop Drawings:
 - 1. Indicate profiles, sizes, spacing, locations of structural members, openings, attachments, and fasteners.
 - 2. Connections not detailed.
 - 3. Indicate cambers and loads.
 - 4. Indicate welded connections with AWS A2.4 welding symbols. Indicate net weld lengths.
- C. Manufacturer's Mill Certificate: Certify that products meet or exceed specified requirements.
- D. Welders Certificates: Certify welders employed on the Work, verifying AWS qualification within the previous 12 months.

1.04 QUALITY ASSURANCE

- A. Fabricate structural steel members in accordance with AISC "Steel Construction Manual."
- B. Fabricator: Company specializing in performing the work of this Section with a minimum of 10 years of documented experience.
- C. Design connections not detailed on drawings under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State in which the Project is located.
- D. Bearing:
 - 1. Steel: 2-1/2 inches minimum.
 - 2. Concrete: 6 inches minimum.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Steel Angles, Plates, and Channels: ASTM A36/A36M.
- B. High-Strength Structural Bolts, Nuts, and Washers: ASTM A325 or ASTM A325M, Type 1, medium carbon, galvanized, with matching compatible ASTM A563 or ASTM A563M nuts and ASTM F436 washers.
- C. Welding Materials: AWS D1.1/D1.1M; type required for materials being welded and type required for low-temperature welding.
- D. Grout: Non-shrink, non-metallic aggregate type, complying with ASTM C 1107/C 1107M and capable of developing a minimum compressive strength of 7,000 psi at 28 days. Masterflow 713 manufactured by Master Builders or approved equal.
- E. Shop and Touch-Up Primer: SSPC-Paint 15, complying with VOC limitations of authorities having jurisdiction.
- F. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20 Type I - Inorganic, complying with VOC limitations of authorities having jurisdiction.
- G. Deformed Bar Anchors: Solid flux, cold drawn wire conforming to ASTM A496.
- H. Threaded coupler/nuts and all thread rod: Unprimed for field installation in grouted masonry.

2.02 FABRICATION

- A. Shop fabricate to greatest extent possible.

- B. Continuously seal joined members by intermittent welds and plastic filler. Grind exposed welds smooth.
- C. Fabricate connections for bolt, nut, and washer connectors.
- D. Fabricate and assemble material in shop to the greatest extent possible. Comply with requirements of the AISC specification for fabrication of all components.
- E. Fabricate connections as indicated, with shop made welded connections and field connections utilizing bolted connections. Type of bolts and connections as indicated in the Drawings.
- F. Base plates and connection sizes shown are minimum required. Components may be increased in size only upon written request from fabricator to Structural Engineer. Request to stipulate why modification is required.
- G. Fabricating tolerances for all finished parts shall be in compliance with Section 1.23.8 of the AISC specification.
- H. Cut, drill or punch holes at right angles to surface of metal. Do not make or enlarge holes by burning. Make holes clean cut, without torn or ragged edges. Remove outside burrs resulting from drilling or reaming operations with a tool making a 1/16 inch bevel.
- I. Provide holes in members to permit connection of work of other trades. Holes may be oversized as allowed by AISC specifications.
- J. Supply two sets of nuts with each column anchor bolt for use in leveling all columns.

2.03 FINISH

- A. Prepare structural component surfaces in accordance with SSPC SP2 for non exposed members and SSPC6 for exposed members. See the Drawings for steel structure to remain exposed.
- B. Shop prime structural steel members. Do not prime surfaces that will be field welded or in contact with concrete.
- C. Galvanize drawing indicated structural steel members to comply with ASTM A 123/A 123M. Provide minimum 1.7 oz/sq ft galvanized coating.
- D. Any components exposed to view (interior or exterior) shall have surfaces prepared by SSPC SP6 commercial blast.

PART 3 EXECUTION

3.01 EXAMINATION AND PREPARATION

- A. Verify that conditions are appropriate for erection of structural steel and that the work may properly proceed.
- B. Welded joints shall be inspected and tested if the soundness or quality is in question.

3.02 ERECTION

- A. Erect structural steel in compliance with AISC "Code of Standard Practice for Steel Buildings and Bridges".
- B. Allow for erection loads, and provide sufficient temporary bracing to maintain structure in safe condition, plumb, and in true alignment until completion of erection and installation of permanent bracing.
- C. Field weld components indicated on shop drawings.
- D. Use carbon steel bolts only for temporary bracing during construction, unless otherwise specifically permitted on drawings. Install high-strength bolts in accordance with RCSC "Specification for Structural Joints Using High-Strength Bolts".
- E. Do not field cut or alter structural members without approval of Architect or Structural Engineer.
- F. After erection, prime welds, abrasions, and surfaces not shop primed, except surfaces to be in contact with concrete.

- G. Grout solidly and completely between column plates and bearing surfaces, complying with manufacturer's instructions for nonshrink grout. Trowel grouted surfaces smooth, splaying neatly to 45 degrees.
- H. Install temporary bracing to allow erection, construction and dead loads to be fully supported, including erection equipment and its operation. As erection proceeds, securely fasten work to support and sustain all dead, wind and erection loads. Remove temporary bracing only after work is fully complete, when full safety is assured and permanent bracing and final construction are securely tightened.
- I. After assembly and before final tightening, adjust individual pieces of complete frame so that deviation from plumb does not exceed 1:500 and:
 - 1. Displacement of centerlines of columns from established centerlines does not exceed 1/2 inch.
- J. Tighten all high strength bolts to "snug tight" as required by AISC specification.
- K. Do not field cut or alter any major structural members. Alterations on minor non-dead-loaded members may only be performed after written approval from the Architect is received.
- L. Supply and coordinate placement of anchor plates for bar joist bearing locations.
- M. After erection, prime welds, abrasions, and surfaces not shop primed or galvanized, except surfaces to be in contact with concrete.
- N. Backup all weld blows and areas where primer removed.

3.03 TOLERANCES

- A. Maximum Variation From Plumb: 1/4 inch per story, non-cumulative.
- B. Maximum Offset From True Alignment: 1/4 inch.

3.04 FIELD QUALITY CONTROL

- A. An independent testing agency will perform field quality control tests, as specified in Section 01 4000 - Quality Requirements.
- B. Welded Connections:
 - 1. Radiographic testing performed in accordance with ASTM E94.
 - 2. Ultrasonic testing performed in accordance with ASTM E164.
 - 3. Liquid penetrant inspection performed in accordance with ASTM E165/E165M.
 - 4. Magnetic particle inspection performed in accordance with ASTM E709.
- C. Costs for field testing to be paid for as follows:
 - 1. If the welds are found to be deficient the contractor shall be liable for the testing costs.
 - 2. If welds are found to be acceptable, the owner will pay for the testing costs.
 - 3. Prorated charges will be determined when a portion of the welds are found to be different and acceptable.

**SECTION 07 0150.19
PREPARATION FOR RE-ROOFING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Removal of existing flashing and counterflashings.
- B. Temporary roofing protection.

1.02 FIELD CONDITIONS

- A. Existing Roofing System: EPDM and TPO roofing.
- B. Do not remove existing roofing membrane when weather conditions threaten the integrity of building contents or intended continued occupancy.
- C. Maintain continuous temporary protection prior to and during repair of the existing roofing system.
- D. Provide notice at least three days before starting activities that will affect normal building operations.
- E. Owner will occupy building areas directly below re-roofing area.
 - 1. Provide Owner with at least 48 hours written notice of roofing activities that may affect their operations and to allow them to prepare for upcoming activities as necessary.
 - 2. Maintain access of Owner's personnel to corridors, existing walkways, and adjacent buildings.

1.03 WARRANTY

- A. The owner is unaware of any warranty.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Patching Materials: Provide necessary materials in accordance with requirements of existing roofing system.
- B. Temporary Roofing Protection Materials:
 - 1. Contractor's responsibility to select appropriate materials for temporary protection of roofing areas as determined necessary for this work.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that existing roof surface has been cleared of materials being removed from existing roofing system and ready for next phase of work as required.

3.02 PREPARATION

- A. Sweep roof surface clean of loose matter.
- B. Remove loose refuse and dispose of properly off-site.

3.03 MATERIAL REMOVAL

- A. Remove only existing roofing materials that can be replaced with new materials the same day.

3.04 INSTALLATION

- A. Coordinate scope of this work with requirements for installation of new roofing system, refer to Section 07 5300 for additional requirements.

3.05 PROTECTION

- A. Provide protection of existing roofing system that is not having work performed on it.
- B. Do not permit traffic over unprotected or repaired deck surface.

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SECTION 07 5300
ELASTOMERIC MEMBRANE ROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Localized repair and restoration of existing EPDM roofing membrane.
- B. Cutting, lifting, and temporarily removing portions of existing membrane as required to perform indicated work.
- C. Reinstallation of existing membrane where feasible.
- D. Installation of new TPO flashing, cover strips, membrane patches, sealants, and accessories required to restore a watertight assembly.
- E. Elastomeric roofing membrane, conventional adhered application.

1.02 RELATED REQUIREMENTS

- A. Section 07 6200 - Sheet Metal Flashing and Trim: roof edge metal and gutters
- B. Section 07 9200 - Joint Sealers.

1.03 SYSTEM DESCRIPTION

- A. Existing roof system is fully adhered EPDM membrane over insulated metal roof panels.
- B. Roof work is limited to repair of existing roofing system. Additional work is required at exterior corners, see construction documents for locations.
- C. Existing roofing membrane is to remain in place except where removal is required to complete the Work.
- D. New materials shall be compatible with the existing membrane and approved by the repair material manufacturer for use with existing weathered EPDM roofing.

1.04 REFERENCE STANDARDS

- A. ASTM C177 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus; 2013.
- B. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2025.
- C. ASTM D412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers--Tension; 2006a (Reapproved 2013).
- D. ASTM D624 - Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers; 2000 (Reapproved 2012).
- E. ASTM D746 - Standard Test Method for Brittleness Temperature of Plastics and Elastomers by Impact; 2014.
- F. ASTM D2240 - Standard Test Method for Rubber Property--Durometer Hardness; 2005 (Reapproved 2010).
- G. ASTM D4637/D4637M - Standard Specification for EPDM Sheet Used in Single-Ply Roof Membrane; 2013.
- H. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials; 2014.
- I. FM DS 1-28 - Wind Design; 2015, with Editorial Revision (2026).
- J. UL (DIR) - Online Certifications Directory; current listings at database.ul.com.
- K. UL (FRD) - Fire Resistance Directory; Current Edition.

1.05 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate with installation of associated counterflashings installed under other sections.

1.06 SUBMITTALS

- A. Product Data: Provide pictorial and written descriptive data indicating membrane materials, flashing materials, surfacing, and fasteners.
- B. Manufacturer's Installation Instructions: Indicate membrane seaming precautions and perimeter conditions requiring special attention, and general installation requirements.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Manufacturer's Field Reports: Indicate procedures were followed to ensure installed roof system warranty will be issued, and supplementary instructions given were followed.
- E. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.
- F. Project data for final closeout:
 - 1. Written report by manufacturer's representative that roof has been installed properly.
 - 2. Executed and notarized warranty

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Ensure storage and staging of materials does not exceed static and dynamic load-bearing capacities of roof decking.
- B. Protect foam insulation from direct exposure to sunlight.

1.08 FIELD CONDITIONS

- A. Do not apply roofing membrane during unsuitable weather, when any precipitation is imminent or occurring, protect all products, either stored or installed from moisture.
- B. Do not apply roofing membrane when ambient temperature is below 40 degrees F.
 - 1. Perform repair work only when weather conditions and substrate temperatures comply with the manufacturer's written requirements for repair materials.
- C. Do not apply roofing membrane to damp or frozen insulation surface or when precipitation is expected or occurring.
- D. Schedule applications so that no partially completed sections of roof are left exposed at end of workday.

1.09 WARRANTY

- A. Contractor shall warrant repaired roofing areas against leakage for one year from Substantial Completion.
- B. Manufacturer's NDL roofing system warranty is not required.
- C. Repairs shall be performed using materials compatible with the existing EPDM roofing system.

PART 2 PRODUCTS

2.01 MEMBRANE MANUFACTURERS

- A. EPDM Membrane Materials:
 - 1. Carlisle SynTec: www.carlisle-syntec.com.
 - 2. Firestone Building Products, LLC: www.firestonebpco.com/#sle.
 - 3. Johns Manville; JM EPDM: www.jm.com/#sle.
 - 4. Substitutions: See Section 01 6000 - Product Requirements.

2.02 ROOFING ADHERED APPLICATIONS

- A. Elastomeric Membrane Roofing: One ply membrane, fully adhered over insulated metal panels.

- B. Roofing Assembly Requirements:
 - 1. Roof Covering External Fire-Resistance Classification: UL Class B.
 - 2. Wind Uplift Classification: FM - 1- 90.

2.03 ROOFING MEMBRANE AND ASSOCIATED MATERIALS

- A. Membrane: Ethylene-propylene-diene-terpolymer (EPDM); unreinforced; complying with minimum properties of ASTM D4637.
 - 1. Thickness: 0.060 inch.
 - 2. Sheet Width: 120 inches, minimum; factory-fabricate into largest sheets possible.
 - 3. Color: Black.
 - 4. Tensile Strength: 1,400 psi, measured in accordance with ASTM D 412.
 - 5. Ultimate Elongation: 300 percent, measured in accordance with ASTM D412.
 - 6. Hardness: 60 +/- 10, measured in accordance with ASTM D2240, using Type A durometer.
 - 7. Tear Strength: 175 lbf/in, measured in accordance with ASTM D 624.
 - 8. Water Absorption: 1 percent increase in weight, maximum, measured in accordance with ASTM D570, 24 hour immersion.
 - 9. Water Vapor Permeability: 2.0 perm inch, measured in accordance with ASTM E 96/E 96M.
 - 10. Brittleness Temperature: -70 deg F, measured in accordance with ASTM D 746.
- B. Seaming Materials: 6 inch (150 mm) width or as required by membrane manufacturer to maintain existing warranty.

2.04 ACCESSORIES

- A. Membrane Adhesive: As recommended by membrane manufacturer.
- B. Thinners and Cleaners: As recommended by adhesive manufacturer, compatible with membrane.
- C. Sealants: As recommended by membrane manufacturer.
- D. Related materials: Bonding adhesive; splicing cement, lap sealant, water cut-off mastic night seal and pourable sealer, as recommended by membrane manufacturer.
- E. Metal flashings, compression bars, counterflashing, fascia, copings and related metal trim as specified in Section 07 6200 - Sheet Metal Flashings and Trim.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces and site conditions are ready to receive work.
- B. Verify deck is supported and secure.
- C. Verify deck is clean and smooth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system. Do not proceed with installation if any of the aforementioned defects are present. Advise Contractor and request remedial work be performed prior to proceeding with the Work of this Section.
- D. Verify deck surfaces are dry and free of snow or ice. Do not install any work over wet, damp, frosty, icy or snow covered deck.
- E. Verify that roof openings, curbs, and penetrations through roof are solidly set, and cant strips are in place.

3.02 PREPARATION - GENERAL

- A. Exert care in the stockpiling of any and all materials on the roof structure. In the event that this Section overloads the roof structure such that damage is inflicted on the structure, this Section shall be liable for all costs to repair the damage to the full and complete satisfaction of the Architect.

- B. Only apply materials over dry underlying surfaces including metal roof deck, vapor barrier, insulation, and blocking. Under no circumstances install materials over wet or damp substrates. Do not allow any moisture to enter into or under completed roof system.

3.03 FLASHINGS AND ACCESSORIES

- A. General
 - 1. Flash all penetrations passing through the membrane.
 - 2. The flashing seal must be made directly to the penetration.
 - 3. Apply flexible flashings to seal membrane to vertical elements.
 - 4. Coordinate installation of gravel stop, metal fascia, copings and related flashings.

3.04 PROTECTION

- A. Prevent water from penetrating below previously installed membrane by using water cut-offs in bad weather and at end of each day's work. In the event water does flow under the new work, remove and replace any wet insulation.
- B. Make water cut-offs by extending membrane beyond insulation and setting end of membrane in 4 inch wide strip of water cut-off mastic.
- C. Remove all temporary water cut-offs prior to proceeding with next work period. Cut off portion of membrane in contact with mastic.
- D. Ensure that water does not flow beneath any completed whether or not the crew is at the site. Each night prior to leaving the site, temporarily seal all loose membrane with manufacturer approved night seal. Properly seal all flashings, penetrations, and perimeter conditions to eliminate water entering the roof assembly.
- E. DO NOT BUILD IN ANY WET MATERIALS INTO THE ROOF SYSTEM. It cannot be assumed wet insulation will "dryout". If it gets wet, it shall be removed and thrown away, and replaced with new. Do not allow moisture to enter the permanent construction such that mold or mildew can begin to grow.

3.05 LIABILITY

- A. This Section shall be financially liable for any and all costs for clean up, repairs, damage, replacement of wetted and/or damaged new and permanently built in materials or roof insulation under the roof surface.
- B. Replace wet roof materials with new.

3.06 CLEANING

- A. Remove bituminous or adhesive markings from finished surfaces.
- B. Repair or replace defaced or damaged finishes caused by work of this Section.
- C. Remove all excess adhesive from adjacent surfaces including walls, roof equipment, window system or flashings.

3.07 PROTECTION

- A. Protect installed roofing and flashings from construction operations.
- B. Where traffic must continue over finished roof membrane, protect surfaces using durable materials. Until Substantial Completion at which time the protective materials shall be removed from the roof and site by this Section.

SECTION 07 5400
THERMOPLASTIC MEMBRANE ROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Localized repair and restoration of existing TPO roofing membrane.
- B. Cutting, lifting, and temporarily removing portions of existing membrane as required to perform indicated work.
- C. Reinstallation of existing membrane where feasible.
- D. Installation of new TPO flashing, cover strips, membrane patches, sealants, and accessories required to restore a watertight assembly.
- E. Hot-air welding and patching of existing TPO membrane to maintain a continuous weather-tight roofing system.
- F. Adhered system with thermoplastic roofing membrane.
- G. Flashings.

1.02 SYSTEM DESCRIPTION

- A. Existing roof system is fully adhered TPO membrane over insulated metal roof panels.
- B. Work is limited to repair of existing roofing system.
- C. Existing roofing membrane is to remain in place except where removal is required to complete the Work.
- D. New materials shall be compatible with the existing membrane and approved by the repair material manufacturer for use with existing weathered TPO roofing.

1.03 RELATED REQUIREMENTS

- A. Section 07 6200 - Sheet Metal Flashing and Trim: roof edge metal and gutters

1.04 REFERENCE STANDARDS

- A. ASTM D6878/D6878M - Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing; 2013.
- B. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials; 2014.
- C. NRCA (RM) - The NRCA Roofing Manual; 2017.
- D. NRCA (WM) - The NRCA Waterproofing Manual; 2021.

1.05 SUBMITTALS

- A. Product Data: Provide data indicating membrane materials, flashing materials, insulation, vapor retarder, surfacing, and fasteners.
- B. Shop Drawings: Submit drawings that indicate joint or termination detail conditions, conditions of interface with other materials, and paver layout.
- C. Manufacturer's Installation Instructions: Indicate membrane seaming precautions and perimeter conditions requiring special attention.
- D. Manufacturer's Field Reports: Indicate procedures followed, ambient temperatures, humidity, wind velocity during application, and supplementary instructions given.
- E. Warranty Documentation:
 - 1. Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
 - 2. Submit installer's certification that installation complies with warranty conditions for waterproof membrane.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Store materials in weather protected environment, clear of ground and moisture.
- B. Ensure storage and staging of materials does not exceed static and dynamic load-bearing capacities of roof decking.

1.07 FIELD CONDITIONS

- A. Do not apply roofing membrane during unsuitable weather.
- B. Do not apply roofing membrane when ambient temperature is below 40 degrees F.
 - 1. Perform repair work only when weather conditions and substrate temperatures comply with the manufacturer's written requirements for repair materials.
- C. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.
- D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.
- E. Schedule applications so that no partially completed sections of roof are left exposed at end of workday.

1.08 WARRANTY

- A. Contractor shall warrant repaired roofing areas against leakage for one year from Substantial Completion.
- B. Manufacturer's NDL roofing system warranty is not required.
- C. Repairs shall be performed using materials compatible with the existing TPO roofing system.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Thermoplastic Polyolefin (TPO) Membrane Roofing Materials:
 - 1. Carlisle Roofing Systems, Inc; Sure-Weld TPO: www.carlisle-syntec.com/#sle.
 - 2. Firestone Building Products, LLC; UltraPly TPO Standard / EcoWhite: www.firestonebpco.com/#sle.
 - 3. Johns Manville: JM TPO www.jm.com/#sle.
 - 4. Substitutions: See Section 01 6000 - Product Requirements.

2.02 MEMBRANE ROOFING AND ASSOCIATED MATERIALS

- A. Membrane Roofing Materials:
 - 1. TPO: Thermoplastic polyolefin (TPO) complying with ASTM D6878/D6878M, sheet contains reinforcing fabrics or scrims.
 - a. Thickness: 60 mil, 0.060 inch, minimum.
- B. Seaming Materials: As recommended by membrane manufacturer.
- C. Flexible Flashing Material: Same material as membrane.

2.03 ACCESSORIES

- A. Membrane Adhesive: As recommended by membrane manufacturer.
- B. Surface Conditioner for Adhesives: Compatible with membrane and adhesives.
- C. Thinners and Cleaners: As recommended by adhesive manufacturer, compatible with membrane.
- D. Sealants: As recommended by membrane manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces and site conditions are ready to receive work.

- B. Verify deck is supported and secure.
- C. Verify deck is clean and smooth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system.
- D. Verify deck surfaces are dry and free of snow or ice.
- E. Verify that roof openings, curbs, and penetrations through roof are solidly set, and cant strips are in place.

3.02 INSTALLATION - GENERAL

- A. Perform work in accordance with manufacturer's instructions, NRCA (RM), and NRCA (WM) applicable requirements.

3.03 FINISHING UNBALLASTED SURFACES

- A. Apply finish coating to membrane and flashing surfaces exposed to view, in accordance with manufacturer's instructions.

3.04 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements, for general requirements for field quality control and inspection.

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SECTION 07 6200
SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Prefinished metal roof edge and counter flashing.
- B. Sealants for joints within sheet metal fabrications.

1.02 RELATED REQUIREMENTS

- A. Section 07 5300 - Elastomeric Sheet Roofing
- B. Section 07 5400 - Thermoplastic Polyolefin (TPO) Roofing

1.03 REFERENCE STANDARDS

- A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.
- B. SMACNA (ASMM) - Architectural Sheet Metal Manual; 2012.

1.04 SUBMITTALS

- A. See Section 01 3300 - for submittal procedures.
- B. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details of all sheet metal furnished by this Section. Submit concurrently with and coordinated with the submittals from Section 07 5300.
- C. Samples: Submit two (2) complete sample sets 2 x 3 inch in size illustrating available metal finish colors.

1.05 QUALITY ASSURANCE

- A. Perform work in accordance with CDA A4050, SMACNA (ASMM), CDA A4050, and SMACNA (ASMM) requirements and standard details, except as otherwise indicated.
- B. Fabricator Qualifications: Company specializing in sheet metal work with five (5) continuous years of documented experience.
- C. Perform Work in accordance with the following:
 - 1. AA (Aluminum Association) - Aluminum Construction Manufacturer: Aluminum Sheet Metal Work and Building Construction.
 - 2. NRCA (National Roofing Contractors Association) - Roofing Manual.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- B. Prevent contact with materials that could cause discoloration or staining.

1.07 WARRANTY

- A. Install all work of this Section to ensure a watertight roof system warranty is provided.

PART 2 PRODUCTS

2.01 SHEET MATERIALS

- A. Manufacturers:
 - 1. Firestone Type: Una-Clad
 - 2. Petersen Aluminum Corporation Type: PAC-CLAD
 - 3. Substitutions: See Section 01 6000 Product Requirements.

- B. Prefinished Galvanized Steel: ASTM A525, G90, 24 gage core steel, shop precoated with Kynar. Color shall be selected from manufacturer's standard choices to match existing fascia color. Premium metallic colors will not be chosen.
- C. Galvanized Steel: ASTM A525, G90, 24 gage minimum except where indicated otherwise.

2.02 ACCESSORIES

- A. Fasteners: Of compatible type with material being fastened, with soft neoprene backed metal washers exposed fasteners. Use exposed fasteners only where concealed from view from grade level or only where visible when standing on the roof. Finish exposed fasteners same as flashing material, or color matched rivets. CAUTION!! Where anchoring into treated blocking, hot dipped galvanized, stainless steel or specially coated anchors MUST BE USED. Ensure that the hot dipped coating is compatible with the lock strips and other materials being anchored to the blocking. If not compatible, substitute anchors which are and which will resist corrosion.
- B. Mechanical Anchors: Prefinished to match finish when used on prefinished material. See CAUTION in 2.2.A. above. Corrosion resistant, non-staining.
- C. Provide preformed corners for all roof edge corners.
- D. Primer: Zinc chromate type.
- E. Protective Backing Paint: Zinc molybdate alkyd.
- F. Sealant: Polyurethane sealant, (exterior and interior use) ASTM C920 single or multi-component, chemical curing, non-staining, non-bleeding, non-sagging TYPL; color as selected.
 - 1. NPI manufactured by Sonneborn or Vulkem 116 as manufactured by Mameco.
 - 2. Elongation Capability: 25 percent.
 - 3. Service Temperature Range: 40 to 180 degrees F.
 - 4. Shore A Hardness Range: 20 to 35.
- G. Plastic Cement: ASTM D4586, Type 1.
- H. Touch-Up Paint: Color matched paint to touch-up all exposed fasteners and minor scratches in prefinished metal.

2.03 COMPONENTS

- A. Roof Edge: Configuration to cover exterior wall construction as indicated and as detailed with continuous lock strip.
- B. Coping: As indicated and detailed with continuous lock strips.
- C. Wall counter and miscellaneous flashing, as indicated and detailed.
- D. Lockstrips: Furnish continuous lockstrips at all flashings of same material as flashings/copings.

2.04 FABRICATION

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- B. Fabricate continuous lock strips of same material as sheet, continuously interlocking with sheet.
- C. Fabricate flashings to allow toe to extend over roofing as indicated. Return and brake edges.
- D. Where cutting is required, utilize sharp shears, creating smooth, square, burr-free, non-defaced and non-deformed edges. Make pitch pans watertight with plastic cement.
- E. Form pieces in longest possible lengths.
- F. The new pieces of material shall be fabricated as dimensioned on the drawings, as job conditions demand, and recognized sheet metal practices.
- G. Hem exposed edges on underside 1/2 inch; miter and seam corners.

- H. Hem all exposed metal edges in addition to where required on the drawing details.
- I. Metal shall be cut, formed, or riveted using hand or power tools. Keep cutting edges sharp, clean, properly dressed and closely aligned.
- J. Exercise care during fabrication and erection to avoid damage.
- K. All fabrication and installation shall be accomplished with the strippable film in place.
- L. After installation is complete, IMMEDIATELY REMOVE STRIPPABLE FILM.
- M. Provide concealed joint covers for all flashing components. Covers shall be 6 inches wide. Double caulk between cover and flashing above. Anchor through cover below. Space covers at 10'-0" oc maximum. Allow expansion and contraction between adjacent members. Do not fasten through cover and fascia both.
- N. Form material with flat lock seams, except where otherwise indicated. At moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
- O. Fabricate corners from one piece with minimum 18 inch long legs; seam for rigidity, seal with sealant. At corners extend portions of the un-trimmed metal over and under the adjacent section to provide a minimum of 4 inch (100 mm) overlap. Provide sealant between the mating surfaces, prior to mechanically anchoring the sections together. Field seal the joint after installation to complete watertight installation.
- P. Fabricate vertical faces with bottom edge formed outward 1/4 inch (6 mm) and hemmed to form drip, of height as indicated and/or as approved on shop drawings.
- Q. Fabricate flashings to allow toe to extend 2 inches over roofing gravel gaurd. Return and brake edges.

3.05 FINISH

- A. Touch-up all surfaces that are visible which are scratched or marred as to conceal abrasions and all anchor heads remaining exposed at the completion of the work.
- B. Use color matched paint as supplied by prefinished metal manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located.
- B. Verify roofing termination and base flashings are in place, sealed, and secure.

3.02 PREPARATION

- A. Install starter and edge strips, lock strips and cleats before starting installation.

3.03 INSTALLATION

- A. Secure flashings in place using concealed fasteners. Use exposed fasteners only where permitted by the Architect.
- B. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- C. Seal metal joints watertight.
- D. Conform to indicated details.
- E. Install continuous lock strips at all sheet metal flashings.
- F. Remove strippable protective film from surface of metal.
- G. Touch-up all minor scratches and exposed fasteners with color matched paint.

- H. Fasten materials at SMACNA and recognized trade practice intervals. Allow for expansion and contraction of materials. Anchor thoroughly covers at joints; DO NOT anchor through ends (close to the joints between adjacent sections of coping) of flashing. Allow movement between ends of flashing.
- I. Install flashings to provide spring action with exposed edges hemmed or folded to create tight junctures.
- J. The installation of new pieces of metal shall be tightly fit.
- K. All flashings shall be installed in a full bed of sealant in addition to the placement of sealant at edges of flashings and other locations that are indicated on the drawings.
- L. Make pitch pans watertight with approved sealant.

3.04 ROOF EDGE INSTALLATION

- A. Prior to starting work, verify governing dimensions. Examine, clean and repair, if necessary, any adjoining work on which this Sections work is in any way dependent for its proper installation.
- B. Install in accordance with manufacturer's written installation requirements, and normal trade practices for quality architectural sheet metal work. Install in a watertight fashion, protect underlying construction and roofing from water entry.
- C. Special details shown on the Drawings shall be included as part of installation.
- D. Upon completion, clean all work.

3.05 FIELD QUALITY CONTROL

- A. Coordinate inspection of installed components with that of Section 07 5300 warranty inspections.

**SECTION 07 7123
MANUFACTURED GUTTERS AND DOWNSPOUTS**

PART 1 GENERAL

2.01 SECTION INCLUDES

- A. Pre-finished aluminum gutters and downspouts.

2.02 RELATED REQUIREMENTS

- A. Section 07 5300 - Elastomeric Sheet Roofing - (EPDM)

2.03 REFERENCE STANDARDS

- A. AAMA 2604 - Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels; 2013.
- B. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2014.
- C. ASTM B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate [Metric]; 2014.
- D. SMACNA (ASMM) - Architectural Sheet Metal Manual; 2012.

2.04 DESIGN REQUIREMENTS

- A. Conform to SMACNA (ASMM) for sizing components for rainfall intensity determined by a storm occurrence of 1 in 5 years.

2.05 SUBMITTALS

- A. See Section 01 3300 - for submittal procedures.
- B. Shop Drawings: Indicate locations, configurations, jointing methods, fastening methods, locations, and installation details.
- C. Product Data: Provide data on prefabricated components.

2.06 DELIVERY, STORAGE, AND HANDLING

- A. Stack material to prevent twisting, bending, or abrasion, and to provide ventilation. Slope to drain.
- B. Prevent contact with materials that could cause discoloration, staining, or damage.

PART 2 PRODUCTS

3.01 MANUFACTURERS

- A. Gutters and Downspouts:
 - 1. PAC-CLAD Petersen Aluminum flat and coil stock: www.pac-clad.com.
 - 2. Cheney Flashing Company: www.cheneyflashing.com/#sle.
 - 3. Drexel Metals Inc: www.drexmet.com/#sle.
 - 4. Substitutions: See Section 01 6000 - Product Requirements.

3.02 MATERIALS

- A. Pre-Finished Aluminum Sheet: ASTM B209 (ASTM B209M); 0.032 inch thick.
 - 1. Finish: Plain, shop pre-coated with PVDF (polyvinylidene fluoride) coating.
 - 2. Color: As selected from manufacturer's standard colors.

3.03 COMPONENTS

- A. Gutters: box style, roll formed on site - seamless.
 - 1. Size: 6 inch. (Contractor to verify existing gutter dimensions before ordering)
- B. Downspouts: Rectangular profile.

1. Size: 3 inch x 4 inch open face. (Contractor to verify existing downspout dimensions before ordering)
- C. Anchors and Supports: Profiled to suit gutters and downspouts.
 1. Anchoring Devices: Type recommended by fabricator.
 2. Gutter Supports: Brackets.
 3. Downspout Supports: Brackets.
- D. Fasteners: Same material and finish as gutters and downspouts , with soft neoprene washers.

3.04 ACCESSORIES

- A. Downspout Boots: Polyvinyl Chloride (PVC); size and profiles indicated:
 1. Custom fabricated to match existing boots. Match existing material thickness and construction.

3.05 FABRICATION

- A. Form gutters and downspouts of profiles and size indicated.
- B. Gutters to be seamless, without joints, except for connections to downspouts.
- C. Fabricate with required connection pieces.
- D. Form sections square, true, and accurate in size, in maximum possible lengths, free of distortion or defects detrimental to appearance or performance.
- E. Hem exposed edges of metal.
- F. Fabricate gutter and downspout accessories; seal watertight.

3.06 FACTORY FINISHING

- A. Fluoropolymer Coating: High Performance Organic Finish AAMA 2604; multiple coat, thermally cured fluoropolymer finish system; color as selected from manufacturer's standard colors.
- B. Primer Coat: Finish concealed side of metal sheets with primer compatible with finish system, as recommended by finish system manufacturer.

PART 3 EXECUTION

4.01 EXAMINATION

- A. Verify that surfaces are ready to receive work.

4.02 PREPARATION

- A. Paint concealed metal surfaces and surfaces in contact with dissimilar metals with protective backing paint to a minimum dry film thickness of 15 mil.

4.03 INSTALLATION

- A. Install gutters, downspouts, and accessories in accordance with manufacturer's instructions.
- B. Join lengths with seams sealed watertight. Flash and seal gutters to downspouts and accessories.
- C. Slope gutters 1/4" drop in 10' (standard pitch)
- D. Discharge downspouts into sub-grade drainage system.

**SECTION 07 9200
JOINT SEALANTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Sealants and joint backing.
- B. Preparing sealant substrate surfaces.
- C. Placement of joint fillers, backing, and sealants.

1.02 RELATED REQUIREMENTS

- A. Section 03 3000 - Concrete.
- B. Section 08 3413 - Cold Storage Doors
- C. Existing Insulated Metal Wall Panels.

1.03 REFERENCE STANDARDS

- A. ASTM C834 - Standard Specification for Latex Sealants; 2014.
- B. ASTM C919 - Standard Practice for Use of Sealants in Acoustical Applications; 2012.
- C. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2014.
- D. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2013.
- E. ASTM D1056 - Standard Specification for Flexible Cellular Materials—Sponge or Expanded Rubber; 2020.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate the work with other sections referencing this section.

1.05 SUBMITTALS

- A. Product Data: Provide written descriptive data indicating sealant chemical characteristics and printed literature for all sealants and accessories.
- B. Colors: Color deck for sealant.

1.06 QUALITY ASSURANCE

- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.
- C. System performance to provide continuity of thermal and moisture barriers.

1.07 MOCK-UP

- A. Prior to installation, Contractor shall verify compatibility between new sealant and existing adjacent materials. Where compatibility is uncertain, perform field adhesion and compatibility testing and submit results to Architect.
 - 1. Perform adhesion testing at representative locations in accordance with sealant manufacturer's recommendations prior to proceeding with full installation.
- B. Construct mock-ups with specified sealant types and with other components noted.
- C. Locate .
- D. Accepted mock-up may not remain as part of the Work.

1.08 FIELD CONDITIONS

- A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

1.09 ENVIRONMENTAL REQUIREMENTS

- A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.
- B. Perform work when ambient temperature is 0° F or higher at the exterior and interior of the freezers with specified low temperature sealant installation instructions from the manufacturer.
- C. Verify that all surfaces are dry and suitable to receive the sealant.

1.10 WARRANTY

- A. Provide manufacturer's standard written warranty for sealant products used.
- B. Warranty Period: Five (5) years minimum from Date of Substantial Completion.
- C. Warranty Coverage: Failures including loss of adhesion, cohesive failure, cracking, splitting, hardening, shrinkage, deterioration, or loss of watertight and airtight performance under normal service conditions and temperatures for the intended application.
 - 1. Sealants used within freezer environments shall remain flexible and maintain adhesion at temperatures anticipated for service conditions, including exposure to temperatures of minus 20 degrees Fahrenheit without cracking, loss of adhesion, or cohesive failure.
- D. Corrective Action: Manufacturer shall provide replacement material. Contractor shall remove and replace failed sealant work at no cost to Owner.
- E. Warranty shall cover compatibility between primers, backing materials, and sealants furnished by the same manufacturer.
- F. Warranty shall not be voided by existing sealant remnants unable to be removed in the Project, ensure provided products are installed in accordance with manufacturer's written recommendations and approved compatibility requirements.
- G. If the Contractor does not use the basis of design, verify compatibility and submit written documentation from each manufacturer indicating suitability for adjacent materials and conditions of exposure.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Sealants:
 - 1. Basis of Design: Tremco Vulkem Max
 - 2. Pecora Dynatrol I-XL
 - 3. Sonneborn Sonolastic NP 1
 - 4. Substitutions: See Section 01 6000 - Product Requirements or engineer pre-approved equivalent.

2.02 SEALANTS

- A. Type A: Exterior & Interior Insulated Metal Panel Sealant at Seams and Concrete to Building Joint: Polyurethane; ASTM C 920, Type S, Grade NS, Class 25, Use NT, M, A, and O - single component.
 - 1. Base Manufacturer and Product: Tremco Vulkem Max.
 - 2. Color: As selected from manufacturer's standard color range.
 - 3. Elongation Capability: 600 psi passing ASTM D412.
 - 4. Joint movement capability: ±25 percent minimum.
 - 5. Service Temperature Range: -40 to 350 degrees F.
 - 6. Shore A Hardness Range: 25 to 40 when tested in accordance with ASTM C661.
 - 7. Adhesion in Peel: Minimum 25 pli when tested in accordance with ASTM C794 and TT-S-00230C.

8. Compatible with painted metal, galvanized steel, stainless steel, aluminum, insulated metal panels, and adjacent construction materials.
9. Capable of maintaining adhesion and flexibility in continuous service temperatures ranging from -20°F to 180°F minimum.
10. Suitable for cold-storage environments operating at -10°F.
11. VOC compliant.
12. Sealant manufacturer shall certify product suitability for cold-storage applications with operating temperatures of -20°F and exposure to freeze-thaw cycling typical of exterior conditions in Iowa.

2.03 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application. Refer to types above for suggested primer.
- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- C. Joint Backing: Round foam rod compatible with sealant; ASTM D 1667, closed cell PVC; oversized 30 to 50 percent larger than joint width; Sonofoam manufactured by Sonneborn or approved equal.
- D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.
- E. Masking Tape: Duct tape or masking tape, or material designed to not leave a residue on the surface once removed.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that substrate surfaces and joint opening are ready to receive work.
- B. Verify that joint backing and release tapes are compatible with sealant. Place joint backing in ALL MOVEMENT JOINTS!
- C. Remove loose materials and foreign matter which might impair adhesion of sealant.
- D. Perform preparation in accordance with ASTM C804 for solvent release and ASTM C790 for latex base sealants.

3.02 PREPARATION

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.
- B. Clean and prime joints in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- D. Protect elements surrounding the work of this section from damage or disfigurement.
- E. Check shelf life (expiration date) of sealant to ensure sealant is usable. Do not use old sealant.
- F. Install insulation around perimeters of door and window frames to provide continuous thermal barrier, prior to placing sealant.
- G. At the base of the precast to concrete walk joints are to be sealed in exposed to view locations, apply tape to both sides of the joint, with the edge of the tape in straight alignment, immediately adjacent to the sawn or control/expansion joint edges to be sealed.

3.03 INSTALLATION

- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Perform installation in accordance with ASTM C1193.
- C. Cold Weather Application Requirements:
 1. Sealant manufacturer shall provide written recommendations for installation at anticipated project temperatures.

2. Store sealant and primer at room temperature for a minimum of 24 hours prior to application.
 3. Do not apply sealant to surfaces containing frost, ice, moisture, or condensation.
 4. Clean substrates in accordance with sealant manufacturer's written requirements for low-temperature applications.
 5. Protect newly installed sealant from damage and contamination until fully cured.
- D. Measure joint dimensions and size joint backers to achieve the following:
1. Width/depth ratio of 2:1.
 2. Neck dimension no greater than 1/3 of the joint width.
 3. Surface bond area on each side not less than 75 percent of joint width.
 4. Install joint backer/rod at uniform depth in joints to create a 2:1 width to depth ratio, and uniform sealant thickness in entire joint.
 5. Ensure that only two point (both sides) is achieved in all movement joint applications.
- E. Install bond breaker tape where joint backing is not used.
- F. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- G. Provide sealant at insulated metal panel joints, trim joints, door-frame (jamb and casing) perimeters, penetrations, and locations indicated.
- H. Install sealant to maintain continuous air barrier and vapor barrier.
- I. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- J. Tool sealant to achieve full contact with substrates and eliminate voids, skips, and discontinuities.
- K. Seal joints to prevent air infiltration, moisture migration, and ice formation within the freezer envelope.
- L. Where sealant is not exposed to view in finished work, provide manufacturer's color which has best performance.
- M. Make all joints air and moisture tight.
- N. Fill all voids full with insulation up to back side of backer rod or trim as is applicable.
- O. Clean and prime seal joints in accordance with manufacturer's instructions. If primer required, limit application to areas to receive caulking. Mask off adjacent areas to protect surfaces from primer.
- P. Seal all joints between adjacent dissimilar material.
- Q. Tool all joints to seat sealant. Clean smears and over runs to provide uniform width joint.
- R. Install insulation around perimeters of door and window frames to provide continuous thermal barrier, prior to placing sealant.
- S. Contractor shall verify all existing conditions and identify any joint, penetration, void, or discontinuity that may compromise the air or vapor barrier. Notify Architect of conditions differing from Contract Documents prior to proceeding with sealant installation.

3.04 CLEANING

- A. Clean adjacent soiled surfaces.

3.05 PROTECTION

- A. Protect sealants until cured.

3.06 SCHEDULE

- A. Exterior & Interior Insulated Metal Panel Sealant Type A
- B. Cold Storage Freezer Door Type A
- C. Concrete to Building Joint Type A

**SECTION 08 3413
COLD STORAGE DOORS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Swinging metal doors.

1.02 REFERENCE STANDARDS

- A. ITS (DIR) - Directory of Listed Products; Current Edition.
- B. NEMA EN 10250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2024.
- C. UL (DIR) - Online Certifications Directory; current listings at database.ul.com.
- D. UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems; Current Edition, Including All Revisions.

1.03 SUBMITTALS

- A. See Section 01 3300 - for submittal procedures.
- B. Product Data: Provide general construction, electrical equipment, and component connections and details.
- C. Shop Drawings: Indicate pertinent dimensioning, anchorage methods, hardware locations, and installation details.
- D. Samples: door and frame color and finish texture.
- E. Maintenance Data: Indicate lubrication requirements and frequency and periodic adjustments required.
- F. Executed warranties.

1.04 QUALITY ASSURANCE

- A. Products Requiring Electrical Connection: Listed and classified by ITS (DIR), UL (DIR), or testing firm acceptable to authorities having jurisdiction as suitable for purpose specified.

1.05 WARRANTY

- A. See Section 01 7700 for additional warranty requirements.
- B. Manufacturer Warranty: Five-year parts and labor warranty on door, casing, jambs, and back trim for defects of material and workmanship.
- C. Hardware is warranted to be free of defects in material and workmanship for one year.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Swinging Metal Doors:
 - 1. Basis of Design: Weiland Painted Galvanized Steel Infitting Hinged Door as manufactured by Weiland, Inc., Norfolk, Nebraska. <https://weilanddoors.com/>
 - a. Mike Kipp, mike@weilanddoors.com, 402-454-2106
 - 2. Chase Doors, a Division of Senneca Holdings; ColdGuard Swinging Cold Storage Doors: www.chasedoors.com/#sle.
 - a. Michael Robinson, michael@LSHC.org, 815-790-2056
 - 3. Hercules Doors, a Division of Senneca Holdings; Swinging Cold Storage Door: www.herculesdoors.com/#sle.
 - a. Will Elwood, hercules@senneca.com, 312-632-0943
 - 4. Substitutions: See Section 01 6000 - Product Requirements.

2.02 APPLICATION

- A. Type: Cold storage.
 - 1. Door shall be designed for exposure to exterior ambient conditions, including wind-driven moisture, snow, ice, and seasonal temperature extremes.
- B. Cold Storage Space Operating Environment: Typical set point for normal operation.
 - 1. Temperature: minus 10 degrees F for freezer storage.
- C. External Environment: Temperature of space directly outside of cold storage space door.
 - 1. Surrounding Ambient Air Temperature, Summer: 95°F dry-bulb, 75°F wet-bulb.
 - 2. Surrounding Ambient Air Temperature, - 20°F dry-bulb.

2.03 SWINGING METAL DOORS

- A. Infitting Insulated Metal Doors: Manufacturer's standard.
 - 1. Regulatory Compliance: Meet APHIS-U.S.D.A. (M.I.D.) sanitation regulations.
 - 2. Doors: Single leaf.
 - a. Operation: Manual, side-hinged.
 - b. Size: contractor to verify onsite before ordering.
 - c. Construction: Galvanized steel skin, filled with polyurethane insulation.
 - d. Internal Framing: Manufacturer's standard.
 - e. Overall Thickness: 6 inches.
 - 1) Specify 6" of insulation for all blast freezer applications; when cold room temperature is 0°F or colder; or when the temperature difference between rooms is more than 40°F.
 - 3. Door Frame Construction: Manufacturer's standard.
 - a. Wood-free. Standard face casings, jambs (up to 6" deep), and back trim to be clad on all exposed surfaces with 26-gauge stucco-embossed galvanized steel.
 - 4. Hardware: Standard door hardware includes a K-56 polished chrome latch and D-240 cam-rise hinges. Door latch has a padlock provision to permit the door to be opened from inside, even when locked from outside.
 - 5. Gaskets: at sides and head of frame to be grease-resistant extruded neoprene. The gasket at the sill to be nylon-reinforced double neoprene sweep type.
 - 6. Sill: thermally broken aluminum sill.
 - a. Basis of Design: Flush sill doors to receive a Weiland FrostGard Door Bottom, consisting of a patented stainless steel base, accessible heater wire tray for rapid replacement, and independently operating gaskets for adjustment on the inside and outside of the door.
 - b. Substitutions: See Section01 6000-Product Requirements.
 - 7. Electrical: Freezer door frames to be equipped at sides, head, and sill with self-regulating heater cables. Complete system assembled and ready for connection (by electrician) to the existing 120 volt connection.
 - 8. Accesories: provide exterior aluminum drip above door.
 - a. Pemko 346C Overhead Rain Drip Guard, Clear Anodized Aluminum. Extend beyond door on both sides 2".
 - b. Substitutions: See Section01 6000-Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that opening sizes, tolerances, and conditions are acceptable.

3.02 INSTALLATION

- A. Install units in accordance with manufacturer's instructions.
- B. Use Type A when manufacturer calls for sealant to be installed.

- C. Use anchorage devices to securely fasten assembly to wall construction and building structure without distortion or stress.
- D. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.
- E. Fit and align assembly including hardware; level and plumb, to provide smooth operation.
- F. Mechanically install the work in accordance with manufacturer instructions.
- G. All electrical high-power and low-voltage wiring to be supplied, installed, and connected to doors by the electrical contractor.
- H. Wall construction (existing) to be sufficient to support the door assembly and the operation of the door panel.

3.03 ADJUSTING

- A. Adjust operating assemblies for smooth and noiseless operation.

3.04 CLEANING

- A. Clean installed components.
- B. Remove labels and visible markings.

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**SECTION 31 2316
EXCAVATION**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Compacted fill, backfilling and finish grading.
- B. Excavating for paving, including over excavation.

1.02 RELATED REQUIREMENTS

- A. Section 31 2323 - Fill: Fill materials, filling, and compacting.

1.03 REFERENCE STANDARDS

- A. 29 CFR 1926 - U.S. Occupational Safety and Health Standards; current edition.

1.04 SUBMITTALS

- A. Temporary Support and Excavation Protection Plan.
- B. Project Record Documents: Record drawings at project closeout Execution and Closeout. Show locations of installed support materials left in place, including referenced locations and depths, on drawings.
- C. Field Quality Control Submittals: Document visual inspection of load-bearing excavated surfaces.

1.05 QUALITY ASSURANCE

- A. Temporary Support and Excavation Protection Plan:
 - 1. Indicate sheeting, shoring, and bracing materials and installation required to protect excavations and adjacent structures and property.
 - 2. Include drawings and calculations for bracing and shoring.
 - 3. Bracing and shoring design to meet requirements of OSHA's Excavation Standard, 29 CFR 1926, Subpart P.
- B. Designer Qualifications: For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

PART 2 PRODUCTS

2.01 FILL MATERIALS

- A. As described in 31 2323.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that intended elevations for the work are as indicated.
- B. Survey existing adjacent structures and improvements and establish exact elevations at fixed points to act as benchmarks.
 - 1. Resurvey benchmarks during installation of excavation support and protection systems and notify Owner if any changes in elevations or positions occur or if cracks, sags, or other damage is evident in adjacent construction.
- C. Determine the prevailing groundwater level prior to excavation. If the proposed excavation extends less than 1 foot into the prevailing groundwater, control groundwater intrusion with perimeter drains routed to sump pumps, or as directed by Architect. If the proposed excavation extends more than 1 foot into the prevailing groundwater, control groundwater intrusion with a comprehensive dewatering procedures, or as directed by Geotechnical Engineer.

3.02 PREPARATION

- A. Identify required lines, levels, contours, and datum locations.

- B. The Contractor shall pay for and arrange to have construction staking provided as required to perform the work. During the work process the contractor shall maintain required lines, levels, contours and datum. Protect monuments and reference points for duration of Work.
- C. Notify Architect of unexpected subsurface conditions and discontinue affected work in area until notified to resume work.
- D. Identify underground, above ground, and aerial utilities by contacting Iowa One-Call, review of known conditions with Owner on site, and using other reasonable means to discover identifiable underground utilities.
- E. Maintain and protect existing utilities remaining which pass through Work area. Maintain utility systems to allow continued owner operation and use of adjacent facilities.
- F. Review and become familiar with the existing soil and subgrade conditions by studying the Geotechnical Report.
- G. Locate, identify, and protect utilities that remain and protect from damage.
- H. Notify utility company to remove and relocate utilities, if applicable.
- I. Protect bench marks, survey control points, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- J. Protect plants, lawns, rock outcroppings, and other features to remain.
- K. Prevent surface water from draining into excavation. Provide temporary means and methods, as required, to maintain surface water diversion until no longer needed, or as directed by the Architect.

3.03 TEMPORARY EXCAVATION SUPPORT AND PROTECTION

- A. Excavation Safety: Comply with OSHA's Excavation Standard, 29 CFR 1926, Subpart P.
 - 1. Excavations in stable rock or in less than 5 feet in depth in ground judged as having no cave-in potential do not require excavation support and protection systems.
 - 2. Depending upon excavation depth, time that excavation is open, soil classification, configuration and slope of excavation sidewalls, design and provide an excavation support and protection system that meets the requirements of 29 CFR 1926, Subpart P:
 - a. Sloping and benching systems.
 - b. Support systems, shield systems, and other protective systems.
- B. Leave excavation support and protection systems, used as formwork or within 10 feet of existing foundations, permanently in place, unless otherwise noted.
 - 1. Cut off top 4 feet below grade, abandon remainder.
- C. Excavation support and protection systems not required to remain in place may be removed subject to approval of Owner or Owner's Representative.
 - 1. Remove temporary shoring and bracing in a manner to avoid harmful disturbance to underlying soils and damage to buildings, structures, pavements, facilities and utilities.

3.04 EXCAVATING

- A. Underpin adjacent structures that could be damaged by excavating work.
- B. Excavate to accommodate new structures and construction operations.
 - 1. Excavate to the specified elevations.
 - 2. Excavate to the length and width required to safely install, adjust, and remove any forms, bracing, or supports necessary for the installation of the work.
 - 3. Cut utility trenches wide enough to allow inspection of installed utilities.
 - 4. Hand trim excavations. Remove loose matter.
- C. Notify General Contractor of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.

- D. Slope banks of excavations deeper than 4 feet to angle of repose or less until shored. Properly bench all excavations, or provide temporary shoring or other protective means as may be required by good trade practices, job/work safety regulations, and OSHA requirements.
- E. Do not interfere with 45 degree bearing splay of adjacent foundations and slabs.
- F. Cut utility trenches wide enough to allow inspection of installed utilities.
- G. Hand trim excavations. Remove loose matter.
- H. Remove lumped subsoil, boulders, and rock up to 1/3 cu yd measured by volume.
- I. Correct areas that are over-excavated and load-bearing surfaces that are disturbed; see Section 31 2323.
- J. Deliver to on-site storage area designated by owner excavated material that is unsuitable for re-use from site.
- K. Stockpile excavated material to be re-used in area designated on site.
- L. Deliver to on-site storage area designated by owner excess excavated material from site. Do not use excavated material as fill.
- M. Excavate subsoil from areas required for building foundations, floor areas, construction operations, and other areas as indicated on the Drawings.
- N. Maintain all excavations free of water. In deep excavations where water ponding may occur, provide, pay for and maintain pumping equipment, if necessary.
- O. Properly level off bottom of all excavations. Slope to drain water.

3.05 SUBGRADE PREPARATION

- A. See Section 31 2323 for subgrade preparation at general excavations.

3.06 FILLING AND BACKFILLING

- A. Do not fill or backfill until all debris, water, unsatisfactory soil materials, obstructions, and deleterious materials have been removed from excavation.
- B. See Section 31 2323 for fill, backfill, and compaction requirements at general excavations.

3.07 SLAB EXCAVATION

- A. If unfavorable conditions are found, a determination will be made jointly by the Geotechnical Engineer and Architect on the required additional work. Unit prices shall be used to perform required additional work as an add to the contract.

3.08 FIELD QUALITY CONTROL

- A. Provide for visual inspection of load-bearing excavated surfaces and of each lift of fill before placement of slabs.

3.09 CLEANING

- A. Remove excavated material from site.

3.10 PROTECTION

- A. Divert surface flow from rains or water discharges from the excavation.
- B. Prevent displacement of banks and keep loose soil from falling into excavation; maintain soil stability.
- C. Protect open excavations from rainfall, runoff, freezing groundwater, or excessive drying so as to maintain subgrade in satisfactory, undisturbed condition.
- D. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.
- E. Keep excavations free of standing water and completely free of water during concrete placement.

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SECTION 31 2323
FILL

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Filling, backfilling, and compacting for paving.
- B. Backfilling and compacting for utilities outside the building to utility main connections.

1.02 RELATED REQUIREMENTS

- A. Section 31 2316 - Excavation: Removal and handling of soil to be re-used.

1.03 REFERENCE STANDARDS

- A. AASHTO M 147 - Standard Specification for Materials for Aggregate and Soil-Aggregate Subbase, Base, and Surface Courses; 2017 (Reapproved 2021).
- B. By virtue of reference to the following standards, all work provided under this Section shall comply with the standards, including but not limited to materials, fabrication and installation.
- C. AASHTO T 180 - Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop; 2026.
- D. ASTM C136/C136M - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates; 2014.
- E. ASTM C150/C150M - Standard Specification for Portland Cement; 2015.
- F. ASTM C796/C796M - Standard Test Method for Foaming Agents for Use in Producing Cellular Concrete Using Preformed Foam; 2012.
- G. ASTM C1602/C1602M - Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete; 2012.
- H. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)); 2012 (Reapproved 2021).
- I. ASTM D1556/D1556M - Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method; 2024.
- J. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN m/m³)); 2012.
- K. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method; 2015.
- L. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System); 2011.
- M. ASTM D4318 - Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils; 2017, with Editorial Revision (2018).
- N. ASTM D6817/D6817M - Standard Specification for Rigid Cellular Polystyrene Geofoam; 2017 (Reapproved 2025).
- O. ASTM D6938 - Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth); 2023.
- P. ASTM D7557/D7557M - Standard Practice for Sampling of Expanded Geofoam Specimens; 2009 (Reapproved 2013e1).
- Q. ICC-ES AC239 - Acceptance Criteria for Termite-Resistant Foam Plastic; 2008.

1.04 QUALITY ASSURANCE

- A. Geotechnical Engineer testing requirements provided and paid for by the Owner.

- B. Written approval from Geotechnical Engineer that the fill is suitable for use.

1.05 SUBMITTALS

- A. Graduation reports for granular fill.
- B. Materials Sources: Submit name of imported materials source.
- C. Fill Composition Test Reports: Results of laboratory tests on proposed and actual materials used.
- D. Compaction Density Test Reports.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. When necessary, store materials on site in advance of need.
- B. When fill materials need to be stored on site, locate stockpiles in owner approved location.
 - 1. Separate differing materials with dividers or stockpile separately to prevent intermixing.
 - 2. Prevent contamination.
 - 3. Protect stockpiles from erosion and deterioration of materials.

PART 2 PRODUCTS

2.01 FILL MATERIALS

- A. Granular Fill: Crushed rock or gravel, free from dust, clay, or debris, in conformance with IDOT 4121, gradation number 12a. Compact granular fill to 98 percent maximum dry density per ASTM D698.
 - 1. 1-1/2" sieve, 100 percent passing.
 - 2. 1/2" sieve, 40 to 80 percent passing.
 - 3. No. 8 sieve, 5 to 25 percent passing.
 - 4. No. 200 sieve, 0 to 6 percent passing.
- B. Drainable fill: Complying with SUDAS 4040 Section 2.04.

2.02 SOURCE QUALITY CONTROL

- A. Where fill materials are specified by reference to a specific standard, test and analyze samples for compliance before delivery to site.
- B. Where fill materials are specified by reference to a specific standard, testing of samples for compliance will be provided before delivery to site.
- C. If tests indicate materials do not meet specified requirements, change material and retest.
- D. Provide materials of each type from same source throughout the Work.

2.03 DUST CONTROL

- A. Provide dust control throughout excavation and fill procedures to eliminate dust on the site. Comply with SUDAS Section 9040. Provide measures to prevent dust mitigation in the existing building.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Identify required lines, levels, contours, and datum locations.
- B. Verify structural ability of unsupported walls to support imposed loads by the fill.
- C. Verify areas to be filled are not compromised with surface or ground water.

3.02 PREPARATION

- A. Cut out soft areas of subgrade not capable of compaction in place. Backfill with structural fill.
- B. Compact subgrade to density equal to or greater than requirements for subsequent fill material.
- C. Until ready to fill, maintain excavations and prevent loose soil from falling into excavation.

3.03 GENERAL REQUIREMENTS

- A. Each lift of fill shall be tested above prior to the next layer of fill being placed.

3.04 FILLING

- A. Fill to contours and elevations indicated using at proper moisture content materials.
- B. Fill up to subgrade elevations unless otherwise indicated.
- C. Employ a placement method that does not disturb or damage other work.
- D. Maintain optimum moisture content of fill materials to attain required compaction density.
- E. Soil Fill: Place and compact material in equal continuous layers not exceeding 8 inches compacted depth, or as directed by the Geotechnical Engineer.
- F. Correct areas that are over-excavated.
 - 1. Use structural fill, flush to required elevation, compacted to minimum 95 percent of maximum dry density.
- G. Compaction Density Unless Otherwise Specified or Indicated:
 - 1. Under exterior paving, slabs-on-grade, and similar construction: 95 percent of maximum dry density.
- H. Reshape and re-compact fills subjected to vehicular traffic.
- I. Maintain temporary means and methods, as required, to remove all water while fill is being placed as required, or until directed by the Architect. Remove and replace soils deemed unsuitable by classification and which are excessively moist due to lack of dewatering or surface water control.
- J. Eliminate any depressions which pond water.
- K. Lifts which do not pass compaction tests shall be reworked as required at Contractor's expense, and then retested until the lift passes.
- L. Adjust moisture content to achieve required compaction density.

3.05 FILL AT SPECIFIC LOCATIONS

- A. Under Slabs-On-Grade:
 - 1. Use granular fill.
 - 2. Depth: As indicated in the drawings.
 - 3. Compact to 95 percent of maximum dry density.
- B. Drainable fill around tile.
 - 1. Fill up to subgrade elevation.

3.06 FILLING AND BACKFILLING - SITE PAVING

- A. Areas exposed by excavation, paving removal or stripping are to be scarified to minimum depth of 8 inches and recompact to minimum of 95% of optimum density, in accordance with ASTM D 698 and with a moisture content of not less than 1% below and not more than 3% above the optimum moisture content.
- B. Proceed with placing fill materials in lifts or layers not to exceed 8 inches loose measure and compacted to a minimum density of 95% of optimum density, in accordance with ASTM D 698.
- C. Backfill areas to contours and elevations. Use dry, friable, nonspongy materials.

3.07 TOLERANCES

- A. Top Surface of General Filling: Plus or minus 1 inch from required elevations.

3.08 FIELD QUALITY CONTROL

- A. Frequency of Tests: As directed and required by the Architect and Geotechnical Engineer.

3.09 CLEANING

- A. Leave unused materials in a neat, compact stockpile.
- B. Remove unused stockpiled materials, leave area in a clean and neat condition. Grade stockpile area to prevent standing surface water.

**SECTION 33 4100
SUBDRAINAGE**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Building Perimeter Drainage Systems.
- B. Subdrain accessories.

1.02 REFERENCE STANDARDS

- A. ASTM D2729 - Standard Specification for Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings; 2011.

1.03 SUBMITTALS

- A. See Section 01 3300 - for submittal procedures.
- B. Product Data: Provide data on pipe drainage products and pipe accessories.

PART 2 PRODUCTS

2.01 PIPE MATERIALS

- A. Polyvinyl Chloride Pipe: ASTM D2729; plain end, 6" and 8" inside diameter; with required fittings to tie into existing 6" and 8" pipe.

2.02 ACCESSORIES

- A. Pipe Couplings: Solid plastic.
- B. Intake Area Drain:
 - 1. Zurn
 - 2. Wade
 - 3. Watts
 - 4. Jay R. Smith
 - 5. Substitutions: See Section 01 6000-Product Requirements.
 - a. Frame and Grate Loading:
 - 1) ASTM A536 ductile iron construction.
 - 2) Heavy-duty traffic-rated, minimum H-20/HS-20 loading where exposed to vehicle traffic.
 - 3) Open-area grate suitable for collection of surface water while preventing entry of large debris.
 - 4) Contractor shall verify existing drain size, depth, condition, material, and invert elevations prior to commencing work. Any discrepancies affecting the work shall be reported to the Architect before proceeding.

PART 3 EXECUTION

3.01 PREPARATION

- A. Hand trim excavations to required elevations. Correct over-excavation with aggregate.
- B. Remove large stones or other hard matter that could damage drainage piping or impede consistent backfilling or compaction.

3.02 INSTALLATION

- A. Install and join pipe and pipe fittings in accordance with pipe manufacturer's instructions.
- B. Lay pipe to slope gradients noted on Drawings; with maximum variation from true slope of 1/4" inch in 10 feet.
- C. Provide all labor, materials, and equipment necessary to modify the existing 8-inch area drain as indicated on the drawings.

1. Protect and maintain the existing drain body and outlet piping to remain unless damaged or determined unsuitable for continued service.
- D. Remove existing drain grate, frame, collar, and associated components as required to connect new 8-inch subdrain piping to the existing drainage structure.
- E. Core, cut, and patch existing drainage structure as required to provide a watertight connection of new 8-inch HDPE pipe.
- F. Furnish and install a new heavy-duty ductile iron frame and vandal-resistant debris grate suitable for paved applications.
- G. Set frame and grate flush with adjacent finished pavement elevation.
- H. Adjust drain top elevation as necessary to match final paving grades.
- I. Seal all pipe penetrations and reconstruction work watertight with non-shrink grout and approved waterproof sealant.
- J. Verify existing pipe invert elevations and drain condition prior to construction. Notify Architect of conditions preventing proper connection before proceeding.
- K. Completed installation shall provide positive drainage and be capable of supporting anticipated vehicular loading in paved areas.

3.03 PROTECTION

- A. Protect pipe and aggregate cover from damage or displacement until backfilling operation begins.